U.S. DEPARTMENT OF THE INTERIOR

OFFICE OF MANAGING RISK AND PUBLIC SAFETY

OCCUPATIONAL MEDICINE PROGRAM

HANDBOOK

July 2000

This *Occupational Medicine Program Handbook* was prepared by the U.S. Department of the Interior, Office of Managing Risk and Public Safety, in consultation with the U.S. Office of Personnel Management and the U.S. Public Health Service, Division of Federal Occupational Health. The *Handbook* represents a culmination of efforts to improve occupational health services for DOI employees, and addresses the findings, concerns, and recommendations summarized in the final report of a program review conducted by representatives of the Uniformed Services University of the Health Sciences. The report, entitled "A Review of the Occupational Health Program of the United States Department of the Interior," was prepared by Margaret A.K. Ryan, M.D., M.P.H., Gail Gullickson, M.D., M.P.H., W. Garry Rudolph, M.D., M.P.H., and Elizabeth Odell, and was completed in August, 1994. This report led to the establishment of the Department's Occupational Health Reinvention Working Group, composed of representatives from the DOI bureaus and operating divisions. The recommendations from the Reinvention Working Group final report, published in May of 1996 are also reflected in this *Handbook*.

The *Handbook* was revised in July, 2000 to incorporate updates and enhancements in DOI policies and occupational medicine practice. A listing of the updates to this version of the *Handbook* are identified in Tab 2.

OCCUPATIONAL MEDICINE PROGRAM HANDBOOK

CONTENTS

Attachments and References (continued)

Mandatory Medical Examination Program Guide
- General Pre-Placement Medical Evaluations
- General Medical Surveillance Guidance
- DOI Medical History and Examination Form
- Privacy Act Notification Form
- Authorization for Disclosure of Information
- Law Enforcement Officers
- Wildland Firefighters
- Divers
- Inspectors
- Hazardous Waste Workers
- Pilots/Aviators
- Tower Climbers
- Crane Operators

Other Guidance
(Based on Position Requirements or Work Place Stressors)
- Medical Clearance for Respirator Use
- Hearing Conservation
- Physical Stressors
- Biological Stressors (e.g., Lyme Disease, Vaccine-Preventable Diseases, Rabies, Hantavirus)
- DOT Vehicle Operators (i.e., Medical Clearance for Holders of a Commercial Driver's License)
- Recordable Injuries and Illnesses
- Automatic External Defibrillators

OCCUPATIONAL MEDICINE PROGRAM HANDBOOK

Introduction and Scope of the Handbook — Tab 1

This *Handbook* represents a culmination of efforts to improve occupational health services for the employees of the Department of the Interior (DOI). As a prelude to the *Handbook*'s development, the Department established an Occupational Health Reinvention Work Group, composed of representatives from DOI bureaus and operating divisions. In a series of meetings in 1995 and 1996, the Reinvention Work Group developed and articulated a direction for DOI occupational health programs and services that has been presented in a vision statement. Further guidance has been provided by the mission statement and a strategic plan for the DOI Office of Occupational Safety and Health (now the Occupational Safety and Health Group of the Office of Managing Risk and Public Safety). These important directions for the program are as follows:

VISION STATEMENT
Occupational Health Reinvention

All Department of Interior employees, volunteers, contractors, and visitors are provided a work or recreation environment free of health hazards that may cause injury or illness. Further, occupational health hazards are identified and evaluated using professional industrial hygiene concepts. Measures are then instituted to eliminate or minimize potential adverse effects by means of appropriate training, protective equipment and medical services.

MISSION STATEMENT

The Office of Occupational Safety and Health provides program direction, develops policy, and facilitates the decision-making process to achieve a safe and healthful occupational and recreating environment. In addition, the Office:

- *provides consultative services to facilitate program improvement;*
- *provides information services, in depth studies, and analysis;*
- *provides professional and career development opportunities;*
- *conducts evaluations to aid program compliance and continuous improvement; and*
- *represents the Department to assure that interests and needs are addressed in outside venues.*

GOALS

The goals of the Occupational Safety and Health Team are to:

- *Create, circulate, and promote effective approaches, processes, and guidance for organizations to achieve safe and healthful work and recreation environments;*
- *Be responsive, reliable, informative, and professional in meeting customer needs;*
- *Develop customer service standards, by listening and responding to their program needs;*
- *Promote and advocate the benefits of embracing the Departmental occupational safety and health (OSH) Program; and*
- *Define the program elements and document how and why we do them.*

With the above direction established, the program guidelines presented in this *Handbook* were prepared by the DOI's Office of Managing Risk and Public Safety (MRPS), in consultation with the U.S. Office of Personnel Management (OPM) and the U.S. Public Health Service, Division of Federal Occupational Health (FOH). The guidelines were developed as part of the Department's efforts to improve and standardize the provision of occupational health services throughout its many bureaus, offices, and agencies, and to meet its articulated vision, mission, and goals for occupational health. The *Handbook* is intended to be specific enough to provide easily understood guidance, procedures, and forms that may be used by managers in establishing a program through which occupational health services meet the needs of the Department, the individual agencies, DOI employees, and the public we serve. The *Handbook* also is intended to be generic enough to allow for local flexibility in utilizing available resources and creativity to meet these needs.

The guidelines, and the programs they support, should be viewed as an integral part of overall program management, reflecting responsibilities of every DOI supervisor and manager. It is expected that programs and services carried out under these guidelines will demonstrate ongoing coordination and cooperation with local Federal Executive Boards and other interagency committees and organizations, as appropriate.

All occupational health programs established or provided for DOI employees should be consistent with the provisions of this *Handbook*. Assistance with program development and implementation may be requested from OMRPS who, in turn, will consult with the

U.S. Public Health Service (PHS) regarding the adequacy and appropriateness of the health program, as specified in 5 U.S.C. 7901. In most cases, the review function is carried out for PHS by FOH, which also can provide comprehensive occupational health services under interagency agreements, when so requested. Additionally, the OMRPS will provide a central point of contact with the Office of Personnel Management to assure that medical programs instituted under this guide are consistent with 5 U.S.C. 239 and other applicable statutes.

For assistance in the use of this *Handbook*, setting up a local occupational health program, reviewing an existing program, or securing further guidance or consultation on occupational medicine or safety matters, please contact:

Occupational Health Programs Manager
Office of Managing Risk and Public Safety
U.S. Department of the Interior
755 Parfet, Suite 364
Lakewood, Colorado 80215

(303) 236-7112

Handbook Administration Tab 2

Distribution

This *Handbook*, and all updates, revisions, and additions, will be distributed by the Office of MRPS to DOI bureaus and agencies. A listing of all *Handbook* recipients will be maintained by the Occupational Health Programs Manager to facilitate the distribution of new or revised materials as they become ready for incorporation as part of this *Handbook*.

Additional copies of the *Handbook* may be obtained upon request from the Office of MRPS (see Tab 1, *Introduction and Scope of the Handbook*).

The Office of Managing Risk and Public Safety also maintains an Internet Home Page on occupational health which contains this *Handbook* and other resources and links of interest. This Home Page can be accessed at URL **http://medical.smis.doi.gov**.

Maintenance

The Occupational Health Programs Manager (or designee) will have primary responsibility for maintaining this *Handbook*, including an annual review for accuracy, consistency with current DOI policies and organizational structure, appropriateness of content, and completeness. Updates, revisions, and additions that are identified as necessary will be made following this review, and copies of any changed pages will be distributed to those on the current *Handbook* distribution list, along with instructions for incorporating the new material.

Any DOI employee may submit requests for changes, additions, or corrections to the Handbook.

All DOI employees are encouraged to work with their local supervisors and managers to have their occupational health questions and concerns addressed. Issues that require further clarification of occupational health information or existing policy may be directed to the Occupational Health Programs Manager (see Tab 1, *Introduction and Scope of the Handbook*) to initiate appropriate action.

Summary of Updates to this Version

Footer dates reflect the date of the most recent revision of that section of the *Handbook*. Significant changes in the *Handbook* in this most recent version (October 1999) are listed below:

Section	Title	Dated
Contents	Contents	7/2000
Tab 1	Introduction and Scope of the Handbook	7/2000
Tab 2	Handbook Administration	7/2000
Tab 3	Responsibilities	7/2000
Tab 7	General Medical Program Guidance	7/2000
Tab 8	Specific Medical Program Guidance	7/2000
Tab 9	Special Emphasis Program guides	7/2000
Tab 10	Agency Continuous Quality Improvement Program for Medical Services	7/2000
Tab 12	Specific Program Criteria, Attachments and References	7/2000
Tab 12 – Attach. A	Medical Reference Guide for Human Resource Management	7/2000
Tab 12 – Attach. C 1	Discretionary Medical Services – Periodic Health Exams	7/2000
Tab 12 – Attach. D 1	General Pre-Placement Medical Evaluations	7/2000
Tab 12 – Attach. D 3	DOI Standard Medical History and Examination Form	7/2000
Tab 12 – Attach. D 3 (a)	Privacy Act Notification Form	7/2000
Tab 12 – Attach. D 4	Law Enforcement Officers	7/2000
Tab 12 – Attach. D 5	Wildland Firefighters	7/2000
Tab 12 – Attach. D 7	Inspectors	7/2000
Tab 12 – Attach. D 9	Pilots/Aviators	7/2000
Tab 12 – Attach. D 10	Tower Climbers	7/2000
Tab 12 – Attach. D 11	Crane Operators	7/2000
Tab 12 – Attach. E 1	Medical Clearance for Respirator Use	7/2000
Tab 12 – Attach. E 4 (a)	Lyme Disease	7/2000
Tab 12 – Attach. E 4 (c)	Rabies	7/2000
Tab 12 – Attach. E 4 (d)	Hantavirus	7/2000
Tab 12 – Attach. E 7	Automatic External Defibrillators	7/2000

Responsibilities Tab 3

DOI Office of Managing Risk and Public Safety (MRPS)

The Office of MRPS provides up-to-date guidance on all aspects of the Occupational Health Program in keeping pace with federal regulation and the advancement of science in Occupational Medicine and Industrial Hygiene. The Occupational Health Programs Manager provides much of the professional guidance and support for this occupational health program. The Office of MRPS will:

- publish, via this *Handbook* and/or other methods, DOI policy in the occupational health program area;
- assist the bureaus in establishing their occupational health programs, evaluating these programs, and resolving issues that are of common bureau interest or involve outside agencies;
- serve as the primary DOI occupational health liaison with outside agencies, including the Office of Personnel Management, the Public Health Service, and the Occupational Safety and Health Administration; and
- serve as the lead for maintenance of the *Occupational Medicine Program Handbook* (see Tab 2, *Maintenance*).

More information regarding occupational health program safety officer responsibilities of the Office of MRPS are presented in Tab 4 (*Roles*).

DOI Office of Personnel

As a support function for the occupational health program, the DOI Office of Personnel provides up-to-date guidance on all aspects of the Personnel Management program in keeping pace with federal regulation. Specifically, the DOI Office of Personnel will:

- Provide up to date guidance on the administrative aspects of personnel medical programs.

More specific information regarding occupational health program responsibilities of the various offices of personnel is presented in Tab 4 (*Roles*).

DOI National Business Center

The DOI National Business Center (NBC) provides a "one stop shopping" source of operational support for occupational health programs. In conjunction with a series of external medical service contracts and interagency agreements, the NBC can help meet the medical program operations needs of bureaus on a direct fee-for-service basis.

Available occupational health services from the NBC include:

- Agency Medical Officer services;
- OWCP medical cost containment services;
- occupational health program contract services; and
- drug and alcohol testing programs and oversight.

To obtain services, for assistance in arranging for services, or for further information on the kinds of services available from the NBC, contact:

Specialized Employee Services
National Business Center
Department of the Interior
(202) 208-6632

U.S. Public Health Service

The U.S. Public Health Service Federal Occupational Health (FOH) program, under an interagency agreement with the DOI Office of Managing Risk and Public Safety, provides a physician consultant who serves as the Departmental Medical Officer (MO). As indicated in Tab 4 of the *Handbook*, this MO serves under the administrative and program guidance of the OMRPS.

FOH, which has provided occupational health services for Federal agencies and their employees for over 50 years, is authorized to do so under Public Law 79-658 (5 U.S.C. 7901) and Section 403 of the Government Management Reform Act (P.L. 103-356). FOH provides occupational medical services on a cost reimbursable basis through a national network of clinic and area program offices. These services include:

- Medical surveillance examination and review services;
- Other occupational exams and preventive health services;

- Medical reviews and consultation for DOI managers on OWCP cases;
- Walk-in occupational health center services;
- Occupational health consultation;
- Drug and alcohol testing programs and oversight;
- Ergonomics;
- Industrial hygiene and environmental health;
- Employee Assistance Programs;
- Organizational development.

Bureau Senior Management

Executive Order 12196, *Occupational Safety and Health Programs for Federal Employees*, makes each Federal agency head responsible for establishing and maintaining an effective and comprehensive occupational safety and health program. Within DOI, bureau senior management is responsible for the implementation of occupational health programs within their respective bureaus that meet all applicable federal laws and regulations. This *Handbook* provides certain guidance and describes services that are available from the NBC, the Office of MRPS, and other DOI and non-DOI agencies, but the individual bureaus and area/regional programs have programmatic and financial responsibility for the services provided to their employees.

Centered on the Bureau Designated Safety and Health Official (DASHO) and involving senior line management throughout the organization, management assures that top priority is given to the "zero-loss" safety and health culture within their organization. "*Safety First, Every Job, Every Time*," the DOI safety motto, includes a commitment to having all employee's in arduous or hazardous occupations medically fit and physically capable of performing their duties without undue risk of harming themselves or others. Bureau senior management will:

- assure that all personnel in arduous and hazardous occupations are medically qualified for their positions; and

- assure that all office-funded medical practices meet or exceed the guidelines set out in this *Handbook* and/or applicable federal regulation.

Bureau Area/Regional Management

Bureau senior management at the area or regional level is responsible for the implementation of occupational health programs within their respective bureaus that meet all applicable federal laws and regulations. The guidance and service descriptions covered for Bureau Senior Management, above, apply similarly to area/regional managers, within their own programmatic purview.

Local Offices

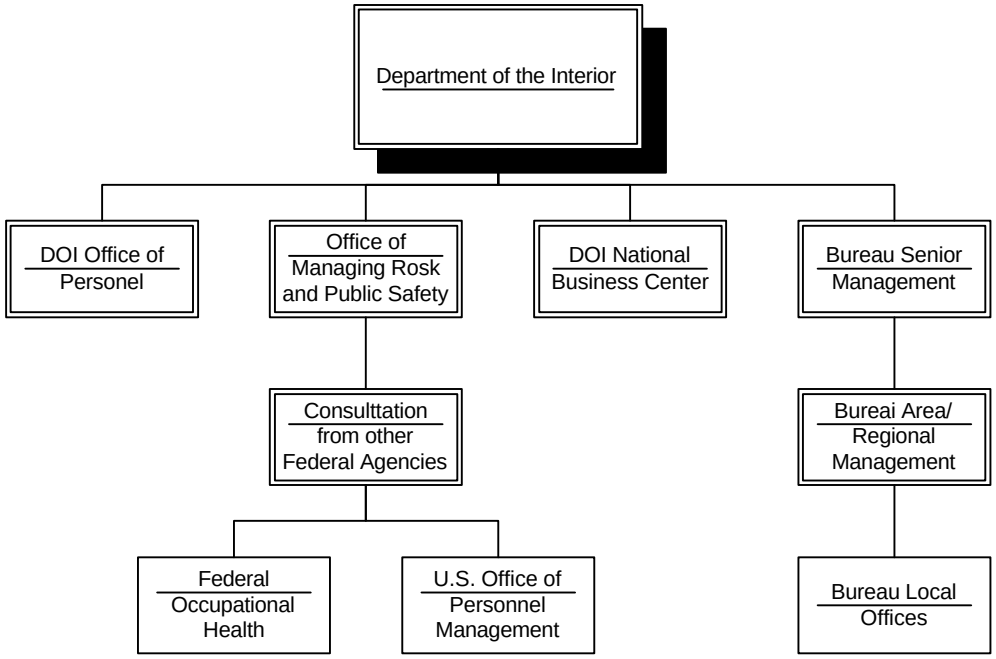
Local DOI field offices generally have the "point of application" responsibility for employee health and safety. These local offices must assure that all employees in arduous and/or hazardous occupations are medical fit and physically capable of performing their duties without undue risk to themselves or others. In addition, depending on the financial management arrangements within individual bureaus, local offices may have responsibility for financing and arranging for services for its employees. In general, local offices will:

- coordinate with local Federal Executive Boards and other federal committees and organizations, as appropriate, in arranging for and securing occupational health services for eligible DOI employees;

- assure that all office personnel in arduous and hazardous occupations are medically qualified for their positions; and

- assure that all office-funded medical practices meet or exceed the guidelines set out in this *Handbook* and/or applicable federal regulation.

Occupational Health and the Department of the Interior



Occupational Health Programs Manager

The Occupational Health Programs Manager will serve as the focal point for all aspects of the DOI occupational health program. Specifically, the manager will serve as the central authority for all program and policy determinations; the central point of contact for all external agency issues; and as the central clearinghouse for the occupational health program.

DOI Medical Officer

The DOI has arranged with the U.S. Public Health Service for a Medical Officer (MO) to serve under the programmatic guidance of the Occupational Health Programs Manager. The DOI MO shall be a licensed doctor of medicine (M.D.) or osteopathy (D.O.). At a minimum, the DOI MO should be board certified or board eligible in the field of occupational medicine. The MO shall be qualified to provide professional expertise in the areas of occupational safety and health as it relates to the program and policies established under this program.

Arrangements for the DOI MO will be made through the Occupational Health Programs Manager. The DOI MO is charged with the oversight responsibility for the Department's entire occupational medicine program. In fulfilling this oversight responsibility, the DOI MO's role insures individual accountability and provides a mechanism for a uniform and consistent application of medical decisions and policies. Specific operational functions and services of the MO can be arranged individually by a bureau, or regional or local agency management if such services are beyond the scope of the Departmental program. The DOI MO will provide or oversee the following advisory and consultative services:

- up-to-date and complete medical and technical information regarding specific medical and physical conditions or medical examination procedures relevant to existing or proposed physical requirements or health related personnel management programs for federal employees;

- review and approval of results and conclusions derived from medical examinations conducted by non-DOI or DOI contract physicians;

- technical assistance (including advisory opinions in medical and occupational health areas, e.g., worker's compensation, disability retirement, medical standards, civil lawsuits, MSPB challenges, EEOC cases. etc.) to ensure compliance with agency policy;

- expert review and analysis of medical documentation and other materials submitted in support of:

  - o medical physical disqualifications of applicants
  - o an employee's restoration rights under 5 U.S.C. 8151 following full or partial recovery from a compensable on-the-job injury
  - o requests for job accommodations or other special benefits to health conditions

- written reports on medical standards, medical policy issues, or individual medical documentation reviews as requested;
- guidance in resolving complex medical/personnel management issues where there are no established guidelines or precedents;
- advisory opinions clarifying medical/psychiatric issues on the suitability of federal employees who hold top security clearances;
- guidance regarding new and experimental procedures (i.e., refractive eye surgery, surgical implants, prosthetic devices) as a means of satisfying medical, vision, hearing requirements, etc.;
- preparation of reports summarizing findings, analysis, conclusions, and recommendations for use in fulfilling complex managerial responsibilities related to the medical evaluation and clearance process;
- research and analysis of complex legal and medical issues through coordination with the Office of the Solicitor;
- research and analysis of technical, scientific and medical data in support of policy development and program management;
- assistance in the development and implementation of a comprehensive and cost-effective Occupational Medical Evaluation and Clearance Program for candidates and incumbents, including such services and topics as:

  - o Interim medical evaluations
  - o Periodic medical evaluations
  - o Return-to-duty medical evaluations

- Preventive medicine counseling
- Hearing Conservation Programs
- Blood Borne Pathogens Program
- Air Borne Pathogens Program

- and participation as a member of the Occupational Health Advisory Committee of the Office of MRPS.

Agency and/or Program Medical Officer (AMO)

Once the technical and policy issues relating to a specific occupational medical program have been resolved, the services of an Agency/Program MO can be arranged for individually by a bureau, or by regional or local agency management. An AMO secured in this fashion will function in a similar manner on the local or bureau level as that summarized above for the DOI MO, with the exception of those functions related to national program and policy roles. If an agency or local program obtains the services of a medical officer for a specific occupational medical program, the Occupational Health Programs Manager should be notified.

Whether arranged for locally, or through the NBC, the AMO shall be a licensed doctor of medicine (M.D.) or osteopathy (D.O.). At a minimum, it is recommended that any AMO be board certified or board eligible in the field of occupational medicine, or have at least five years experience in the full-time practice of occupational medicine and be board certified or board eligible in another medical specialty. The AMO shall be qualified to provide professional expertise in the areas of occupational safety and health as they relate to the specific positions covered under the mandatory medical examination portions of this program. For the purpose of conducting medical evaluations, the AMO shall understand the physiological and psychological demands placed on DOI employees and shall understand the stressful and hazardous and possible life threatening conditions under which employees must perform.

Information regarding the identification and selection of qualified candidates to serve as AMO is presented in Tab 5 (*Medical Service Providers*).

Personnel Officer(s)

The Director of Personnel for DOI will be responsible for keeping the Occupational Health Programs Manager informed of new or revised Government-wide or DOI personnel policies and procedures such as drug testing, hazardous work site qualifications, motor vehicle operator qualifications that might impact the safety or health of DOI employees or the public.

The occupational health-related functions of the Chief of the Office of Personnel, as well as those of the various bureau or area/regional program personnel officers, involve close coordination with the Occupational Health Programs Manager and the DOI MO and, at the area/regional level, with the local safety officers and the local AMO. A listing of specific references and guidances on this topic is presented in the *Medical Reference Guide for Human Resource Management*, found in Tab 12 of this *Handbook*. A complete copy of the Reference Guide will be made available to all offices of personnel and local program offices within DOI.

The personnel office is charged in many cases with maintaining employee occupational health records, including audiograms, physical examination results, exposure records, and physician reports, recommendations, and summaries as they relate to occupational exposures, injuries, illnesses, return to duty, and physical qualifications. The day-to-day maintenance or custodianship of these records may be contractually delegated to another appropriate agency when that agency provides the occupational health services for DOI. Further information on the topic of employee occupational health records may be found in this *Handbook* at Tab 6 (*Medical Records - Employee Medical File System*).

In the case of work related injuries or illnesses, the office of personnel in many cases is responsible for administering the provisions of law and regulation related to record keeping, and assuring that appropriate workers compensation forms have been completed and processed in coordination with the safety office. Further information on this topic may be found in this *Handbook* at Tab 7 (*Office of Worker Compensation Programs*), as well as the listing of applicable references at Tab 12 (*Medical Reference Guide for Human Resource Management*).

Safety Officer(s)

The lead safety official for the Department in the medical program area is the Occupational Health Programs Manager, and additional specific information regarding the role of the Director, MRPS is provided in Tabs 2 (*Maintenance*) and 3 (*DOI Office of Managing Risk and Public Safety*). A safety officer also is assigned or designated for each operating division or program within the Department. These safety officers are responsible for advising management regarding matters of occupational safety and health. They are responsible for developing and/or managing the safety program within their jurisdiction, and coordinating safety activities. They keep management informed of findings and recommendations that relate to the safety and health of DOI employees and members of the public who are impacted directly by DOI programs. Studies are conducted, or arranged for, to evaluate the effectiveness of safety and health programs, and safety and health information is forwarded to the safety and health counterparts at more central levels of the DOI.

Health Care Providers

The role of the health care provider in this occupational medicine program is that of primary provider of clinical services (including both routine and emergency services) and consultant to employees receiving services and to the Agency/Program medical officer and/or national DOI MO. In addition, the health care provider serves as a "first-line" observer for health effects of work place exposures and the health status of DOI employees. Health care providers may include professionals from a variety of professional backgrounds, including physicians, nurses, nurse practitioners, audiologists, audiometricians, laboratory technologists, and others in the health care arena. All health care providers, including individual or corporate entities, who provide services for DOI employees are expected to do so in a manner consistent with this *Handbook*, the specified terms of their contracts or agreements with DOI, and local standards for health care services.

Information regarding securing the assistance of health care providers for the occupational medicine program may be found in Tab 3 (*DOI National Business Center* and *U.S. Public Health Service*) and in Tab 5 (*Medical Service Providers*).

Medical Services Providers Tab 5

Acquiring or Accessing Services

The participation of medical service providers may be secured either on an agency-to-physician or agency-to-clinic basis, or as part of a multi-agency arrangement that may minimize costs and make the overall program more efficient. Please see Tab 7 (*General Medical Program Guidance - Establishing and Providing Services*) for further information regarding organizational aspects of securing services.

Examining Health Care Provider Qualification Standards/Credentials

Many of the DOI positions for which employees will receive medical examinations involve some aspect of exposure to chemical substances, or arduous and/or hazardous duties. The clinical examination services provided must be performed by or under the supervision of a licensed physician, or by other health care professionals licensed to perform independent medical examinations. Preferably, the examiner will be knowledgeable in occupational medicine. The examining health care providers, whether serving as individual contractors, or through a larger clinic or multi-agency arrangement, should demonstrate that they:

- Possess necessary credentials, including:
  - Current medical licensure in the state where services will be provided; and
  - Current certification, or eligibility for certification, by the national board for an appropriate medical field, e.g., occupational medicine, preventive medicine, internal medicine, family practice; (certification in occupational medicine is highly preferred, though certification in another specialty, and additional training in occupational medicine, is acceptable);
- Possess current medical practice liability insurance (minimum coverages of $1 million per occurrence and $3 million in aggregate are recommended) or, if a federal employee, the services they plan to provide for DOI are covered by their current position description and/or personnel orders (the Federal Tort Claims Act provides liability protection for federal employees while performing official duties, including carrying out medical services);
- Are available to meet the specified examination needs of the covered employees, and are available to respond to urgent consultation or health care needs following exposure incidents (Note: see Tab 7, *General Medical Program Guidance - Emergency Medical Care*; as with any emergency situation, emergency care for

injuries or exposures that result in acute symptoms should be provided by the closest available provider of emergency health care services);

- Have access directly, or via contract, to certified laboratory services for blood and urine testing (including testing for agents, or the biological effects of agents, such as heavy metals, pesticides, and polychlorinated bi-phenyls); in turn, these laboratories should be able to demonstrate current certification of program quality, such as by accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry;

- Have access directly, or via contract, to radiology services, including over-reads by board certified radiologists and, for any asbestos exposure, individuals certified to perform "b-readings";

- Use certified, regularly calibrated equipment for pulmonary function testing, audiometry, and electrocardiography;

- Have mechanisms to avoid conflict of interest, such as self referral, in the services they provide (DOI employees requiring follow up care should be referred only to their own physician, or to other specialists with the concurrence of the employee's own physician);

- Offer competitive prices for services;

- Are able to provide local access, or easy access arrangements, to services for the employees; this may involve having physicians visit the DOI work site to provide services (e.g., when a sufficient number examinations are to be conducted), or having employees travel distances that are deemed reasonable by the employees and DOI management;

- Are available on an ongoing, timely basis to provide local clinical and occupational medicine consultation and guidance for DOI management and employees; and

- Have a system of medical records that assures security and confidentiality, with release of any information from an employee's record, or about an employee's health status or clearances, only upon prior written consent from that employee (see Tab 6, *Medical Records - Employee Medical File System*).

Records MUST either be maintained by the physician or his/her clinic for the time periods required by regulation (e.g., the period of employment plus 30 years for services

related to occupational exposures) and available for access by DOI using normal release of information procedures, or forwarded to DOI for incorporation into the employees formal personnel folder.

For most established clinical programs, such as a federal occupational health clinic, the above requirements will have been fully addressed and only need to be confirmed for the DOI manager seeking to enter into a contractual arrangement. In settings where the option of joining an existing program does not exist, the proposed physician or clinic should be willing to supply information that confirms their compliance with these basic expectations. Where questions arise about local options for clinical services, consultation may be sought with other nearby federal agencies for their experience in securing services, or the local medical society may be contacted for guidance on options. Before arrangements are finalized for local contract services, the DOI MO may be consulted to confirm the appropriateness of the proposed clinical arrangements (see Tab 4, *Roles - DOI Medical Officer*).

Certification of Other Clinical Staff

Other clinical staff performing services with or for the examining physician must also be able to demonstrate their qualifications if services are not performed under immediate supervision by the physician. Such services specifically include audiometry and spirometry.

> Consistent with 29 CFR 1910.95, audiometry is to be conducted either with a microprocessor audiometer, or by an individual who meets one of the following qualifications: 1) a licensed or certified audiologist, otolaryngologist, or physician; or 2) a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation and is responsible to an audiologist, otolaryngologist, or physician.
>
> Consistent with applicable sections of 29 CFR 1910 related to pulmonary function testing for occupational exposures to identified agents, persons providing such testing are to have successfully taken a NIOSH-approved course in spirometry.

Certification of Laboratories

As covered above under *Physician Qualification Standards/Credentials*, any laboratory providing services for DOI should be able to demonstrate current certification of program quality, such as by accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry.

Certification of Clinical Equipment

As covered above under *Physician Qualification Standards/Credentials*, only certified, regularly calibrated equipment is to be used for pulmonary function testing, audiometry, electrocardiography, or other machine-assisted clinical procedures.

Referrals to Sub-Specialists

As covered above under *Examining Physician Qualification Standards/Credentials*, mechanisms must be in place so that clinical providers for DOI employees avoid conflict of interest, such as self referral. DOI employees requiring follow up care for personal health problems or preventive health services should be referred only to their own physician, or to other specialists with the concurrence of the employee's own physician. Referrals for conditions that relate to job performance or safety issues are to be managed or approved by the Agency/Program medical officer.

Data Systems

As covered above under *Physician Qualification Standards/Credentials*, any provider of clinical services for DOI employees must have a system of medical records in place that assures security and confidentiality, with release of any information from an employee's record, or about an employee's health status or clearances, only upon prior written consent from that employee (see also Tab 6, *Medical Records - Employee Medical File System*). This consent should be obtained at the time of initial patient appointment.

Medical Records - Employee Medical File System Tab 6

Management and Records Maintenance

All information in the employee medical file (whether stored in paper, electronic, photographic, or other means) must be considered medically confidential, and must be maintained in a manner that strictly controls access to the information, and assures the safety and integrity of those records. These confidential records may be found in several places, complicating this task of assuring confidentiality and security. Records may be found in medical, personnel, dispensary, safety, or other designated DOI offices, or in DOI, other federal, or private health clinics where services have been provided.

The employee medical file (EMF) is to be maintained for the period of the employee's services with DOI, and then is to be transferred to the National Personnel Records Center for storage or, as appropriate, transferred to the next employing federal agency. Some records (e.g., certain medical surveillance or exposure records) must be maintained for extended periods of time (e.g., employment plus 30 years); others must be stored, but for lesser periods. Managers and interested parties are encouraged to refer to documents identified in Tab 12, *Medical Reference Guide for Human Resource Management* and to specific OSHA guidances regarding exposure and medical surveillance record storage requirements.

When medical services are provided by non-DOI personnel or programs (and commonly in non-DOI facilities), information should be maintained in the employees' personnel folder that indicates the providers' name, address, and phone number to facilitate locating and obtaining copies of records at a later date.

Confidentiality/Release of Records

This section covers the issue of releasing confidential client/patient information, including conclusions or opinions directly derived from such confidential information, to any person other than the employee covered by those records. Applicable references include the Privacy Act of 1974; 29 CFR 1910.20 (Access To Employee Exposure and Medical Records); and OPM/OVT-10 Employee Medical File System Records.

Employees must be offered access to their exposure and medical records. This access must be prompt (generally within 15 working days) and present no unreasonable barriers for the employee. If a physician representing the employee believes that direct employee access to certain sensitive information could be detrimental to the employee, the records are to be released to another health professional acceptable to the employee.

It is the policy of DOI that all medical confidential information will be handled in accordance with the Privacy Act of 1974 and subsequent amendments. At the time of their first DOI occupational health clinical service, all employees are to receive a Privacy Act Notice Form (an example of which may be found in Attachment D 3(a)) which outlines the specific conditions under which information may be disclosed. Employees who already have received clinical services, but who have not yet had the opportunity to complete a Privacy Act form, should be offered the form at the time of their next clinical service.

Without a signed consent from the subject employee, no confidential information will be released to or shared with individuals other than: 1) authorized OSHA officials; 2) health professionals within the DOI-arranged system of care who have a justified, programmatic "need to know"; and 3) other individuals in the Department with a specific, official "need to know," as summarized in the published Departmental Manual (370 DM 293.4) or the System of Records notice for the custodian of the confidential records. The DOI system of care may include federal employees or contracted health professionals who work as representatives of DOI.

It is important to note that a general consent form to release medical records DOES NOT include the release of records dealing with HIV and/or AIDS, or substance abuse diagnosis and/or treatment, unless those subject areas are explicitly included in the signed consent by the subject individual.

All individuals who are to receive medical examinations or other non-emergency services (for which *any* medical or summary information is to be forwarded to recipients other than the employee him/herself) will be required first to sign *and date* an Authorization for Disclosure of Information form (a "consent form") before any services are provided. The nature and scope of the information to be released to the agency must be specifically authorized by the employee on the Disclosure of Information form before the information is released. No medical information, including summary information derived from medical records, may be released to DOI management, or to others, without this signed consent form. A copy of an example of this form is provided in Tab 12, Attachment D 3(b).

If an employee chooses not to sign a consent form (which is their right to do), clinical services and clearances will be withheld (e.g., to use a respirator, or to perform specified jobs, such as law enforcement, where a clearance is required) and the employee's supervisor will be informed so that any necessary and appropriate personnel action may be initiated.

For some DOI agencies or job categories (e.g., Law Enforcement), a release to the agency of the entire medical record may be necessary. This must be noted on the

consent form for the release of the information (signed prior to the provision of clinical services) so the employee understands that this release will take place. In most cases, however, the release will be more limited. For these limited releases, it is suggested that the statement of the intent and nature of information to be disclosed include the following language:

> "Summary of the occupational health-related findings from the [specify type of] exam, including the resulting clearances, recommendations, and suggested follow up."

The Occupational Safety and Health Administration (OSHA) has provided guidance regarding the content of this limited information that may be appropriate to release to an employer regarding the results of a medical evaluation. The physician's written opinion to the employer should include:

- whether [or not] the employee has any medical condition that would place the employee at increased risk from occupational exposure;

- limitations to assigned work or use of protective equipment;

- a statement that the employee has been informed of the results of the medical examination; and, if exposures warrant,

- a statement that the employee has been informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

With this limited release, the physician's written opinion to the employer should NOT reveal specific findings, test results, or diagnoses unrelated to occupational exposures. For other releases (such as a copy of the entire record, or clinical data regarding a specific diagnosis), the Disclosure form similarly should describe the specific nature of the information to be released, so the employee is able to grant (or withhold) informed consent to the release of information.

If a request for copies of records is received from the surviving spouse of a deceased employee, the request, and a copy of the requested information, must be sent to a departmental Freedom of Information Act (FOIA) coordinator for review. The FOIA coordinator will release the copy of the records after masking any information that is not pertinent to the employee's occupational or medical health.

If a request for copies of records is received from any individual who has been granted power of attorney by the employee, the information may be released if the power of attorney is unrestricted (general power of attorney), or if it specifically covers

confidential information. A request for information release under this circumstance must be accompanied by a signed copy of the power of attorney, a copy of which must remain in the medical record along with a summary of which documents were released.

Establishing and Providing Services

Executive Order 12196, *Occupational Safety and Health Programs for Federal Employees*, makes each federal agency head responsible for establishing and maintaining an effective and comprehensive occupational safety and health program. Further, as specified in 5 U.S.C. 7901, the U.S. Public Health Service is to be consulted regarding the adequacy and appropriateness of health programs established for federal workers. In determining what occupational health services are to be provided, and how they are to be secured and offered to employees in each area, several factors must be considered, including:

- the nature of the job requirements of employees to be covered by the services, including the potential for exposure to hazardous materials or activities;
- the past history or experience with work-related claims for injuries or illnesses, and established "past practices" for employees;
- the number of employees to be provided services within an identified geographic or programmatic area;
- national and local DOI management decisions regarding the provision of only mandatory, versus mandatory and certain discretionary services;
- the availability of co-located DOI programs or other federal agencies with which services may be coordinated and costs shared;
- the availability of service providers capable of meeting specified occupational health service and program needs, as presented in this *Handbook*;
- the availability of funds and administrative support at the level of the proposed program to support its establishment and ongoing maintenance;
- guidance from the U.S. Public Health Service on the adequacy and appropriateness of the proposed program of services to be provided; and
- concurrence with the proposed program by the Occupational Health Programs Manager.

In geographic settings where existing federal occupational health programs are in operation, it may be possible simply to enroll the agency and its employees as

"members" of that health program, and receive the benefits and services offered there. It remains the responsibility of the DOI manager, however, to assure that services provided in this manner are consistent with the provisions of this *Handbook*. The manager is encouraged to contact both the prospective health program and the Occupational Health Programs Manager for further guidance.

In settings where there are sufficient DOI employees to justify the action, it may be appropriate to establish an occupational health facility specifically for that employee group. In general, the number of participating employees necessary to make such a facility worthwhile is 300, though this figure may be adjusted higher or lower depending on local factors, as noted in the bulleted items listed above in this section of the *Handbook*. Where space, funding, and personnel ceilings permit, the facility may be staffed and operated as a DOI clinical program with DOI employees or contractors. Alternatively, it may be operated on behalf of DOI by a federal or private organization capable of offering services meeting DOI needs. The DOI manager considering these options is encouraged to contact the Occupational Health Programs Manager for further guidance.

In more isolated settings, arrangements for occupational health services may be arranged through contracts or agreements with local private health care providers. Selection of qualified providers, and determination of appropriate services, poses more of a challenge for the DOI manager under this alternative. This *Handbook* provides an overview of the types of services to be considered (see specific Tabs), as well as how to select a health care provider if local contracts for services are necessary or advantageous (see Tab 5, *Medical Service Providers*).

Medical Review Program - Overview

Tab 4 (*Agency Medical Officer(s)*) offers specific information regarding the role of the AMO in providing consultation and programmatic assistance to DOI managers regarding occupational medical issues. Whether arranged for locally, or by accessing the services of the DOI MO, the medical review function is an important part of a successful and effective occupational health program. All personnel and program decisions of an occupational health nature are to reflect the input of the Occupational Health Programs Manager and the DOI MO, whether by their direct involvement or through the appropriate use of forms and guidances they have provided.

Basic Requirements for Examination Procedures

The examination components and the standards that are applied for each of the job categories covered in this *Handbook* are based on an expectation that the specified tests and procedures will be conducted in a standard, consistent, and professional manner,

regardless of the examined employee's specific bureau, or job title, or geographic location. The specific medical history, physical exam, and laboratory tests to be conducted will vary by job title or other specified requirements. The methods used to carry out these activities should be consistent. This requires the services of qualified health care providers and equipment (see the applicable sections within Tab 5, *Medical Service Providers*), as well as appropriate methods and technique in carrying out the tests, procedures, and examinations, to assure accuracy and consistency in the assessment of each employee. The following expectations shall apply when these examination components are provided to DOI employees.

Forms -- Where DOI forms are available for recording the results of examinations and procedures (e.g., the DOI Standard Medical History and Examination Form; see Attachment D 3), these are to be used by all health care providers serving within the DOI occupational health program. If, for a specific service, a DOI form is not available, other forms may be used as long as all of the required data elements are obtained and recorded in a clear and complete fashion.

General Physical Examination – Please refer to the section entitled "Periodic Health Exams" in this tab for a discussion of the appropriateness of focused versus comprehensive screening exams for healthy individuals. General physical exams usually will be limited to those employees whose positions require medical clearances, or where potentially harmful workplace exposures may be present. Other factors, such as union contracts, may impact decisions regarding the type of examinations to be provided. If it is decided that general physical exams are to be provided, they should address all of the major body systems. Employees will be asked to disrobe for parts of the exam to allow the physician to fully observe and examine them. The examiner will pay particular attention to specified body systems, organs, or physical signs that must be assessed for clearance purposes, or that may indicate harmful effects of exposures identified in the occupational history. All findings are to be recorded, including notation of "Normal" findings, as well as written descriptions of all abnormal findings or distinguishing features. In most cases, the general physical examination will address at least the following:

- Vital signs: pulse, respiration, and blood pressure
- Height, weight, body mass index
- Dermatological system
- Ears, eyes, nose, mouth, throat
- Cardiovascular system
- Peripheral vascular system
- Respiratory system
- Gastrointestinal system
- Genitourinary system

- o Endocrine and metabolic system
- o Musculoskeletal system
- o Neurological system, peripheral and central
- o Mental status

A brief or limited exam may be carried out in certain circumstances (e.g., when only a hearing test is needed for a noise-exposed). The tests or procedures described below may be done as part of a brief or comprehensive exam, depending on individual program or employee requirements.

Vision and Eye Tests (Color; Corrected and Uncorrected Near and Far Visual Acuity; Depth Perception; Peripheral Vision; and Tonometry) -- Color vision must indicate the type of test used, and the number correctly identified compared to the number tested. For many examinations, such as those for Department of Transportation / Commercial Drivers License purposes, the ability to distinguish red, green, and amber must be recorded specifically whenever an employee has less than a perfect score on a panel of color vision tests. In other cases, such as for law enforcement examinations, the Farnsworth Dichotomous Test for Color may be required. Both corrected and uncorrected vision are to be checked if the employee has corrective lenses (i.e., glasses, contacts), and if such lenses are used for any part of the employee's job. If contacts are worn, the employee must bring and use his/her own supplies for removing, cleaning, and replacing them when uncorrected vision is tested. Visual acuity is to be recorded in Snellen units (e.g., 20/20). Depth perception is to be recorded in seconds of arc, with the type of test specified. Peripheral vision is to be recorded in degrees (nasal and temporal) for each eye. Tonometry, measured in mmHg, is recommended for applicants for employment, and is a mandatory part of the exam for law enforcement officers over the age of 40.

Audiogram -- Baseline and periodic audiograms are to be carried out using equipment and test locations that meet the criteria established by the Council for Accreditation in Occupational Hearing Conservation (CAOHC). Audiograms are to be conducted by personnel certified by CAOHC, or by using a microprocessor audiometer and persons trained in its use. Audiograms ideally should be performed in an ANSI-approved "soundproof" booth (ANSI S3.1-1977) with equipment calibrated to ANSI standards (ANSI S3.6-1973). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the federal OSHA noise regulations (29 CFR 1910.95) for specified frequencies (500, 1000, 2000, 3000, 4000, 6000, 8000 Hz). Employee hearing thresholds for each ear are to be recorded for each of those frequencies. The test is to be done with and without hearing aids, if the employee uses them. Their use during a test must be noted on the report form.

Chest Radiograph (or other required radiographs) -- Scheduled (e.g., non-medical emergency) radiographs (X-rays) are to be done only if indicated in this *Handbook*, or requested by the AMO, or if required by regulation (e.g., for asbestos exposure, using the schedule established by regulation). When included as part of the exam, they must be conducted by a radiologist or a qualified radiographic technician, and must be read by a radiologist. Radiographs taken to evaluate possible effects of exposure to asbestos or silica also must be read by a certified "B-reader." If the radiologist is certified as a "B-reader," the standard reading of the radiograph and the B-reading may be done concurrently. A written interpretation is to be provided and entered into the employee's DOI medical file.

Pulmonary Function Test (or Spirometry) -- A pulmonary function test (PFT) should be conducted when an employee has known or potential exposures above the action level to regulated agents that effect the respiratory system (e.g., asbestos, benzene, coke oven emissions, cotton dust, ethylene oxide, or formaldehyde). Some health professionals also use the PFT to evaluate the effects of exposure to agents that can cause asthma and other lung disorders, as well as to evaluate employees' ability to work safely while using a respirator (see Tab 12, *Medical Clearance for Respirator Use* for guidance on appropriate inclusion/non-inclusion of this test). The test should be administered only by individuals who have successfully completed a NIOSH-approved course in spirometry. Only a spirogram that is technically acceptable and demonstrates the best efforts by an applicant should be used as part of the examination. Automatic spirometers, providing an environmentally-adjusted analysis and printout of results, should be used when available. These will measure Forced Vital Capacity (FVC), Forced Expiratory Volume in 1 sec (FEV1), FEV1 as percent of FVC (FEV1/FVC), Forced Expiratory Flow between 25% and 75% of the Vital Capacity (FEF 25-75), and Peak Expiratory Flow (PEF). These machines also calculate the percent of expected levels (for age and height), providing important standards for comparison and the tracking of trends for the individual employee. Although the spirometric test results may not allow a specific diagnosis, they can help to distinguish the difference between restrictive and obstructive pulmonary disorders, and allows an interpretation of the severity of the condition.

Electrocardiogram -- Electrocardiograms should be standard 12-lead studies, and may be automated or manual. A written evaluation of the electrocardiogram by a physician trained in their interpretation must be included in the employee's record. Electrocardiograms are of limited value as a screening tool for asymptomatic individuals, but may be useful as part of an occupational health exam, particularly in establishing an employee's baseline health status.

Exercise Stress Test -- This test should only be done if it is specified as part of an identified examination protocol in this *Handbook* as a mandatory test, or if it has been cleared with the AMO to assure that it is necessary, and that the arrangements are appropriate. It must be conducted by a physician with demonstrated training in carrying out stress tests, and must be interpreted by a cardiologist. The test conducted is to be a maximal, symptom-limited graded exercise test using the Bruce protocol.

Laboratory Tests -- Standard blood tests should be obtained following a 12 hour fast by the employee. Special (e.g., post-exposure) testing may be conducted on non-fasting samples. Urine tests may include a standard urinalysis, a spot (or random) urine collection, or a 24-hour collection for purposes of detecting over-exposures to certain toxic materials (e.g., heavy metals). While samples may be obtained from employees by any health care provider meeting the qualifications presented in Tab 5 (*Medical Service Providers*), laboratories utilized must be able to demonstrate their qualifications, such as by accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry. The laboratory tests to be conducted are specified under the individual examination protocols found in Tab 12.

Discretionary Services

Some occupational health services are provided as a result of specific federal regulations, union/management-negotiated contract provisions, or DOI policies and directives. Other services, however, may be provided as a result of local management's discretionary use of available operating funds, reflecting a concern for improved productivity, employee morale, or general program benefit. Discretionary services may include, for example, periodic health exams, routine occupational health center services, and health promotion. When a decision is made to provide discretionary services, they must be in addition to those services that are considered mandatory, according to regulation, contract, or DOI policy. The services may be provided through any of the clinical service arrangements that may exist or be established in a given area (see *Establishing and Providing Services*, Tab 7, page 1).

Further, in order to assure appropriate use of public funds, these discretionary services should be limited to those known to have established, demonstrated health benefits. The *Guide to Clinical Preventive Services* (Second Edition, 1996), which is the report of the U.S. Preventive Services Task Force, serves as the best current summary of preventive services that have been shown through scientific study to have beneficial effects for healthy and apparently-healthy individuals. The *Guide to Clinical Preventive Services*

will therefore serve as the basis for consideration of discretionary preventive health services within the Department.

Periodic Health Exams

Annual medical examinations for asymptomatic members of the general public are no longer recommended by national health professional organizations. Focused annual medical examinations may be appropriate, however, for employees in certain arduous or hazardous jobs (e.g., law enforcement officers), or whose work involves possible exposure to known toxic agents (e.g., lead, or loud noise). Periodic health exams that focus on services of proven value also are appropriate, and may be offered as a discretionary service for DOI employees. These exams are intended to identify those who have occult disease and may benefit from early intervention, and to provide a basis for counseling and referral to the employee's primary care provider. See Tab 12, Attachment C 1 (*Discretionary Medical Services - Periodic Health Exams*) for recommendations for specific services. Especially for services arranged outside of an established occupational health center, care must be taken to assure that the resulting health records are maintained in a confidential and secure manner (see Tab 6, *Medical Records - Employee Medical File System*).

Routine Occupational Health Center Services

If arrangements are made to provide day-to-day occupational health services for employees through an occupational health center, clinic, or program, those services generally should be directed at minimizing employees' time away from work, and assuring that a timely medical response is provided in the case of emergencies. This should be done regardless of whether or not these services are obtained from private sources, a DOI-specific facility, or collaboration with other local federal agencies. See Tab 12, Attachment C 2 (*Discretionary Medical Services - Routine Occupational Health Center Services*) for recommendations for specific services. Care must be taken to assure that all health records related to these services are maintained in a confidential and secure manner (see Tab 6, *Medical Records - Employee Medical File System*).

Health Promotion

Health promotion services may be provided as part of routine occupational health center services, if that discretionary program is being provided, or the services may be arranged and offered through separate contracts or agreements with other federal or private agencies. These services are intended to address health concerns and interests expressed by employees, or that have been identified by management.

Services may consist of regularly scheduled formal educational sessions, informal "brown-bag" lunch programs, or clinical projects directed at specific health issues (e.g., blood pressure screenings, tick removal, back injury prevention). Services should be provided by knowledgeable health professionals (see Tab 5, *Medical Service Providers*), and in a setting that allows for questions and appropriate educational interaction.

Emergency Medical Care

As specified in 29 CFR 1910.151, employers must "ensure the ready availability of medical personnel for advice and consultation on matters of plant [workplace] health." The regulations also require that people trained in first aid be available. This training should include basic life support (e.g., cardiopulmonary resuscitation, or CPR). Also, first aid supplies must be readily available if there are no facilities nearby to provide immediate treatment for acute illnesses or injuries. The first aid supplies to be included should be reviewed for completeness and appropriateness by a consulting physician (such as the DOI local AMO, or the national MO). Further, eye and body wash facilities must be provided in the work area if employees may be exposed to "injurious corrosive materials."

Employees requesting treatment for job-related injuries are to be treated immediately, either by personnel from the agency's occupational health clinic (if available) or the nearest government medical facility or qualified private physician. An employee injured by an accident while in the performance of official duties has the right to select a qualified physician of her or her choice to provide the necessary treatment. Generally, up to 25 miles from the place of injury, employing agency, or the employee's home is considered a reasonable distance to travel for medical care. However, other pertinent factors must also be considered (e.g., specialty services that may be necessary, or weather and road conditions). A qualified physician for this purpose includes doctors of medicine and osteopathy, podiatrists, dentists, clinical psychologists, and chiropractors.

In the case of an on-the-job injury or illness, management, the employee, and the health care provider all have important roles to play in providing necessary, timely services, getting the employee back to work, and avoiding future injury incidents. These issues are addressed in Tab 9 (*Special Emphasis Program Guides - Office of Worker Compensation Programs*). See also Tab 4 (*Roles - Personnel Officer(s)*).

How to Establish or Change Physical Qualification Standards for Hazardous and/or Arduous Positions

The standards presented in this *Handbook* reflect the best information that was available or could be assembled for the current edition. It is anticipated that the content and specific information of the *Handbook* will change as further needs are identified by employees and managers within DOI programs, and as the science and art of occupational health evolve. When a reader or user finds discrepancies in the information presented, or becomes aware of topics that have not been addressed, or has comments and suggestions for improvements that can be made in subsequent editions, he or she is encouraged to convey this information to the Occupational Health Program Manager either directly, or through the safety officer or manager for the employee's agency, as covered in Tab 2 (*Handbook Administration - Maintenance*). The job-specific standards presented in Tab 8 (*Specific Medical Program Guidance*) and Tab 12 (*Specific Program Criteria, Attachments and References*) were developed wherever possible using current regulations or on-site assessments of work tasks and job requirements. When site visits were not possible prior to this edition of the *Handbook*, and specific regulations were not in place, other sources of occupational health guidance and consultation were used. As covered in Tab 2, and unless prescribed by regulation or DOI policy, these standards may be modified as experience is gained in their use.

Under existing OPM regulations and guidance (5 C.F.R. 339.202), DOI can establish medical standards for a position under its own authority when the Department has 50% or more of the positions in that series. OPM can establish or approve medical standards for positions that are government-wide.

DOI has established a formal protocol for establishing new medical standards for positions that are not currently covered under existing OPM-approved medical qualifications, or for evaluating existing OPM-approved medical standards for potential improvement. This protocol involves assembling a team of subject matter experts representing the Department and the bureau or bureaus with an interest in the position to be evaluated. The team is then provided in-depth, first-hand experience and knowledge of the conditions under which essential elements of the position are performed. While the process is flexible, the minimum team usually includes departmental medical, safety, and personnel representatives along with bureau(s) management, safety, personnel, field-level supervisory, and field-level employee representatives. Additional team members are added as needed or appropriate. Bureaus or offices interested in establishing or modifying medical standards are encouraged to contact the Occupational Health Program Manger (see Tab 2) for further information.

Required Services - General

DOI is committed to ensuring that candidates or incumbents for DOI positions are not discriminated against because of a medical or physical condition that would otherwise not affect their ability to perform the duties of the position. This commitment extends to the privacy and confidentiality of medical and personnel records. Certain job categories within DOI have minimal physical qualifications that are required for these jobs to be performed safely and efficiently. These physical qualifications are measured using standard medical examination criteria, and/or in a series of physical fitness tests. These job categories and the applicable examination requirements, including the periodicity of those exams, are covered below, and in Tab 12 (*Specific Program Criteria, Attachments and References*). The medical clearance process used by the DOI to arrive at a medical fitness determination ensures a comprehensive objective assessment of an individual's ability to perform the full range of duties required for the position.

DOI medical exams differ from what most people regard as a "check up." The information collected during the exam will take into account the specific medical standards, the essential functions of the position, and the unique needs of the employee and the employee's health status. The objectives of occupational medical exams are, after all, intended for very specific purposes.

The basis for this portion of the *Handbook* is to ensure that employees and applicants for positions covered by specific physical qualification standards meet those medical standards and physical requirements, are physically and medically fit, and are able to perform the hazardous, complex, varied and demanding duties of the position. The program is designed to do the following:

- determine whether an individual is physically and mentally able to perform essential DOI job duties without undue risk of harm to him/herself or others;
- monitor and determine the effects of exposure to specific physical, environmental or other occupational hazards;
- detect changes in an individual's health status that may be caused by harmful working conditions;
- detect any patterns of disease or injury in the DOI that might indicate an underlying work-related problem;
- provide the individual with information about his/her occupational hazards and present health;

- o provide preventive medical health assessments and recommendations on a voluntary basis; and

- o comply with the provisions of the Rehabilitation Act of 1973 and Amendments of 1992, the Equal Employment Opportunity Commission's ("EEOC") implementing regulations, and 5 CFR 339, Medical Qualification Determinations.

It should be noted that the objectives listed above do not include providing routine preventive medical services. Preventive medicine services are important and worthwhile, but should be considered complementary to, rather than a substitute for, job-related medical examinations.

The DOI medical examination program for mandatory medical services, such as periodic qualification exams for law enforcement officers or fire fighters, uses a two tiered approach to the medical process. The first tier is the medical examination, where an incumbent or applicant for a position receives a DOI-sponsored medical examination by a qualified medical provider according to a specific preset examination protocol. The *DOI Standard Medical History and Examination Form*, or a similar form approved by DOI, is to be used for this purpose. The SF-78 (*Certificate of Medical Examination*, revised 10/69) and SF-88 (*Report of Medical Examination*, revised 3/89) are obsolete and are not recommended for use in DOI medical examination programs. In the second tier, the results of this medical examination are forwarded to a *Agency Medical Officer* (AMO) who then renders a recommendation relating to findings, and the medical fitness of the applicant or incumbent for the position. Sufficient information is provided to the AMO to allow meaningful recommendations to be made, such as the medical history, a description of critical job duties, potential exposures, and any information about known exposures. In addition, the physician will be told of any occupational illnesses known to the DOI which could affect the screening of individual workers.

The most important characteristic of the two tiered medical approach is that the examining physician concentrates on the patient examination, and the AMO concentrates on the relationship between the medical data provided by the examining physician and the known characteristics of the job. While the examining physician may see one or few candidates or incumbents for a specific position, the AMO will see and render a consistent medical recommendation on a large group of applicants or incumbents for a specific position.

The DOI policies and procedures allow for a case-by-case higher level of review when an applicant or current employee requests a reconsideration or disagrees with the results or recommendations of a medical examination. DOI procedures also allow for a medical "second opinion" when the AMO is uncertain about the limitations or prognosis of the individual's condition. If there is still a disagreement about the condition or placement

recommendation, a third physician (acceptable to both the DOI and the applicant or employee) will be consulted.

Employee/Applicant Responsibilities

The DOI medical evaluation program includes pre-placement and baseline medical evaluations, interim, periodic, and exit medical evaluations, and return to duty medical evaluations. Each applicant or current employee will be required to cooperate, participate, and comply with the portions of the medical evaluation program that apply to the employee's position or known exposures, providing complete and accurate information to the DOI reviewing physician.

Using the *DOI Standard Medical History and Examination Form*, or a similar form as approved by DOI, each applicant or current employee shall report to the DOI reviewing physician any significant exposure (i.e., chemicals, infectious or biological, etc.) or medical condition that may interfere with his or her ability to perform the full range of duties required for the position. If the applicant or current employee develops an acute medical problem or newly acquired chronic medical condition, the medical evaluation (or selected portions) may be postponed until that person has recovered from the condition and is rescheduled for an exam or further testing and/or procedures.

Pre-placement

After an offer of employment has been made to a new applicant, a pre-placement examination may be necessary to assure that the applicant is medically qualified for certain positions. The Rehabilitation Act of 1973 prohibits employment discrimination against any individual in hiring, compensation, and firing actions. The Act requires employers to hire workers with disabilities if the worker is otherwise the best qualified individual for the job. A qualified individual is considered to be one who can perform the essential functions of a job either without any special accommodation, or with "reasonable accommodation." Further, employers must modify the stated job requirements or the physical surroundings of the work environment to allow the disabled employee to perform the essential functions of a job, as long at these accommodations do not present an undue hardship for the employer (e.g., they are not excessively expensive or create a significant difficulty for the employer).

Pre-placement examinations also are to be conducted for all applicants prior to entering into a training program or performing in an emergency or operational environment (i.e., inspections, investigation, rescue duties, etc.), and shall be certified by the AMO as meeting applicable medical standards. Each applicant will be evaluated according to DOI medical standards to assess the effect of any medical conditions on the applicant's ability to perform in a work capacity.

An applicant will not be certified as meeting the medical requirements if the AMO determines that the applicant has a medical condition that is incompatible with the established standards for the position. The AMO also may be asked by management to offer opinions on accommodations that may be proposed by the applicant or his/her physician. See *General Pre-Placement Medical Evaluations* in Tab 12 for specific guidance on these examinations.

Union-Mandated

Specific health services related provisions of local or national employee union contracts must be adhered to by managers at the organizational levels indicated in those contracts. Periodicity of exams and other services, employee groups covered, work place hazard exposure considerations, and other factors may need to be addressed in setting up and providing services. In general, all the required services under such contracts may be successfully provided with the assistance of this *Handbook*. Please see the applicable portions (e.g., Tab 7, *General Medical Program Guidance*) for further information.

Medical Surveillance

In a single individual, a physical examination may be conducted for purposes of both medical *surveillance* (looking for possible health effects of occupational exposures) and medical *clearance* (determining if an individual meets job-specific medical requirements). It must be understood that these purposes are quite different, and the actions taken in response to an exam that is done for both purposes must keep this distinction clear. An individual may not meet the medical requirements for his position, but demonstrate no ill effects of current job exposures. That individual also may meet all medical requirements to be cleared for a given job, but have evidence of harmful effects of job exposures.

For example, an individual's exam may demonstrate a standard threshold shift (a hearing loss due to noise exposure), but still meet the minimum hearing requirements for a position. Or, the individual may not meet the requirements for a medical clearance as a result of diabetes that requires insulin for control, but not show any adverse effects or elevated blood test results from exposure to environmental lead. For a more complete discussion of a medical surveillance and its components, please see *General Medical Surveillance Guidance*, in Tab 12.

Determination of Need for Employee Enrollment

Enrollment of an employee, or a group of employees, in a medical surveillance program ultimately is a management decision. There are regulations that specify

who must be included, but the activities taken to determine actual or presumed exposure to harmful agents and, as a result, which regulations apply, vary considerably from agency to agency. As steps are taken within DOI to standardize the assessment and determination of exposures and work place hazards, decisions regarding the inclusion of employees within medical surveillance programs will become more standardized. This is consistent with the stated goals of the DOI Office of Managing Risk and Public Safety.

Until all DOI positions and work places can be studied and work place hazards characterized by actual measurements and environmental sampling, it will be necessary to consider employees for inclusion in a medical surveillance program based on the limited data that is known, and the exposures that are believed to be present and to pose potential threats to the employee's health and well-being. This may be done by management and safety officer reviews of positions descriptions, or with interviews (see Attachment D 2 (b)) or employee questionnaires (see Attachment D 2 (c)). Once a decision has been made to enroll an employee in the medical surveillance program, the services to be provided are based on the specified exposures and work hazards (see specific topics within this Tab, and within Tab 12 -- *Specific Program Criteria, Attachments and References*).

OSHA-Mandated Medical Surveillance

The Occupational Safety and Health Administration (OSHA) has established medical surveillance requirements for several occupational hazards. Employees exposed to these hazards (with or without personal protective equipment) above the Permissible Exposure Level (PEL) must be provided examination services to determine if the employee has suffered any adverse effects from the exposure. The reader is encouraged to review the provisions of the specific federal regulation for any actual or potential exposures to these substances above the PEL. These hazards, summarized in 29 CFR 1910 Subpart Z - Toxic and Hazardous Substances, along with their locations in the CFR, include:

- 1910.1000 Air contaminants
- 1910.1001 Asbestos tremolite, anthophyllite, and actinolite
- 1910.1002 Coat tar pitch volatiles
- 1910.1003 4-Nitrobiphenyl
- 1910.1004 alpha-Naphthylamine
- 1910.1005 4,4'-Methylene bis(2-chloroaniline)
- 1910.1006 Methyl chloromethyl ether
- 1910.1007 3,3'-Dichlorobenzidine (and its salts)
- 1910.1008 bis-Chloromethyl ether
- 1910.1009 beta-Naphthylamine

o	1910.1010	Benzidine
o	1910.1011	4-Aminodiphenyl
o	1910.1012	Ethyleneimine
o	1910.1013	beta-Propiolactone
o	1910.1014	2-Acetylaminofluorene
o	1910.1015	4-Dimethylaminoazobenzene
o	1910.1016	N-Nitrosodimethylamine
o	1910.1017	Vinyl Chloride
o	1910.1018	Inorganic arsenic
o	1910.1025	Lead
o	1910.1027	Cadmium
o	1910.1028	Benzene
o	1910.1029	Coke Oven Emissions
o	1910.1043	Cotton dust
o	1910.1044	1,2-dibromo-3-chloropropane
o	1910.1045	Acrylonitrile
o	1910.1047	Ethylene Oxide
o	1910.1048	Formaldehyde
o	1910.1051*	1,3-Butadiene (*new Final Rule, Federal Register 62:26; 2/7/97, p. 5853)
o	1910.1052*	Methylene chloride (*new Final Rule, FR 62:7; 1/10/97, p.1493+)
o	1910.1101	Non-asbestiform tremolite, anthophyllite and actinolite

Other Medical Surveillance

Other exposures or work task requirements (e.g., heat, lifting) also may place the employee at increased risk of harm. This *Handbook* provides guidance regarding an appropriate focus for medical examinations related to these work conditions. These may be found below in this Tab, and in Tab 12 (*Specific Program Criteria, Attachments and References*). Because of difficulty in assessing actual work requirements and levels of exposure under individual work situations, the examining physician and the AMO must use individual judgement in evaluating cases.

Fitness for Duty (Medical Employability Determinations)

The *Medical Employability Determinations Guide*, found in Tab 12, Attachment B-2, provides specific guidance and step-by-step actions for the manager in this often difficult area. The *Medical Reference Guide for Human Resources Management*, found in Tab 12, Attachment A, provides a listing of references on medical issues.

Law Enforcement Officers

The job requirements for law enforcement employees of the DOI are by their nature arduous and hazardous. These job requirements are performed under variable and unpredictable working conditions. Due to their job requirements and working conditions, the DOI has developed an occupational safety and health program that includes medical standards for law enforcement positions. The specific examination topics, the periodicity of evaluations and medical examinations, and the required results for considering an individual medically and physically qualified, are presented in Tab 12, Attachment D 4.

Wildland Firefighters

The Wildland Firefighter Medical Standards Team, as chartered by the National Interagency Fire Center Leadership Council, is currently developing specific, validated medical standards for wildland firefighters. As currently drafted, medical evaluations are required on a pre-placement and an annual basis for DOI employees assigned to positions that require wildland fire fighting. The specific examination topics, the periodicity of evaluations and medical examinations, and the expected results when considering an individual medically and physically qualified, are presented as draft documents in Tab 12, Attachment D 5.

Divers

Due to the physical demands placed on the individual, medical examinations are required on a pre-placement and an annual basis for DOI employees assigned to positions that require diving. The specific examination topics, and the required results, are presented in Tab 12, Attachment D 6.

Inspectors

The job categories encompassing inspectors include those for law enforcement, criminal investigations, and correctional officers, as well as those related to environmental or program site inspection work. Common factors among the categories include physical demands of the respective jobs and the medical requirements for applicants and incumbents in order to carry out their jobs safely and efficiently. Specific requirements for law enforcement officers are covered above, and in Attachment D 4 of this *Handbook*. As currently drafted, the specific examination topics, the periodicity of evaluations and medical examinations, and the expected results for considering an individual medically and physically qualified for other inspector categories are presented in Tab 12, Attachment D 7.

Hazardous Waste Workers

The regulations presented in 29 CFR 1910.120(f) specify that medical examinations for members of a HAZMAT team "shall include a medical and work history (or updated history if one is in the employee's file) with special emphasis on symptoms related to the handling of hazardous substances and health hazards, and to fitness for duty including the ability to wear any required PPE under conditions (i.e., temperature extremes) that may be expected at the work site." Attachment D 8 in Tab 12 provides more specific information regarding the content and scheduling of examinations for hazardous waste workers. In general, examinations are required on a pre-placement and a periodic basis, as well as at other times depending on exposures and possible exposure-related illnesses.

Pilots/Aviators

Individuals whose functions include piloting aircraft must meet the Medical Standards and Certification requirements of the Federal Aviation Regulations, as presented in 14CFR67. These regulations, with amendments effective September 16, 1996, are contained in this *Handbook* in Tab 12, Attachment D 9. Arranging for clinical services to address the requirements contained in these regulations is addressed in other sections of the *Handbook*.

Tower Climbers

Draft medical standards have been developed for individuals whose jobs include climbing and working on telecommunications towers. Such towers often are located in remote locations, and may be of variable heights and configurations. While most climbs may be carried out in a scheduled and unhurried manner, climbers are expected to be able to climb towers quickly in an emergency when the rescue of a fellow climber is necessary. The standards, as currently drafted, are contained in this *Handbook* in Tab 12, Attachment D 10.

Crane Operators

Draft medical standards have been developed for individuals whose jobs include operation of cranes for lifting or moving supplies and personnel. At this time, no DOI-based field validation has been done for these standards, which have been based on standards used by the U.S. Navy, and the State of Washington. The standards, as currently drafted, are contained in this *Handbook* in Tab 12, Attachment D 11.

Other Guidance, Based on Position Requirements or Work Place Stressors

Respiratory Protection

A respirator medical clearance is necessary (as specified in 29 CFR 1910.134(b)(10)) prior to use and on a periodic basis for all employees whose job duties call for them to use a respirator. This clearance may be provided as a distinct examination and clearance process, or as part of an examination and review carried out for other purposes (e.g., a comprehensive medical surveillance program). *Medical Clearance for Respirator Use*, contained as part of Tab 12, Attachment E 1, presents a detailed summary of types of respirators, clinical considerations, and a listing of suggested services to be provided as part of a respirator medical clearance examination. The actual services provided depend on the judgement of the examining physician and the regulations applicable to certain known or anticipated exposures (e.g., significant asbestos and formaldehyde exposures require the regular performance of pulmonary function testing). A determination of services also involves a consideration of a current medical history, known medical conditions, the type of respirator to be used, and the circumstances of its use. As part of the clearance to use respirators, fit testing is necessary to assure a proper seal of the respirator and its effective use by the employee.

Fit testing of respirators for those employees who must wear them is addressed in Appendix C of 29 CFR 1910.1001, "Qualitative and Quantitative Fit Testing Procedures - Mandatory."

Hearing Conservation

Occupational Noise Exposure is addressed in 29 CFR 1910.95, emphasizing the requirements for employers to implement feasible administrative or engineering controls if employees would otherwise exceed the permissible noise exposure levels specified in the regulation (e.g., 90 dB for 8 hours, or 92 dB for 6 hours). If these levels cannot be obtained, employees are to receive and use personal protective equipment to reduce sound exposure. For employees exposed to an 8-hour time weighted average (TWA) sound level of 85 dB or greater, a hearing conservation program must be implemented. Further, employees who serve in law enforcement and use firearms are automatically placed in a hearing conservation program. Under these programs, employers must monitor noise exposures, notify employees of the results of the monitoring, allow employees or their representatives to monitor the monitoring, and provide an audiometric testing program. The testing must be at no cost to the employee, performed by an appropriately licensed or certified health professional (or a technician using a microprocessor), and include a baseline and annual audiograms, with evaluation

and follow up of the results. Other provisions of the hearing conservation program, including re-testing, employee notification, response to a standard threshold shift, hearing protectors, and other points are addressed in the regulation, and should be referenced for more details. Hearing conservation programs should be reviewed to assure that they are complete, meet the requirements of the regulations, and are reasonable for the employees and work place managers.

Chemical Stressors

Chemicals and other agents identified by OSHA as requiring specific medical evaluation when exposures exceed the PEL are listed on pages 6 and 7 in this Tab. The regulation citation for each chemical also is listed, and may be referenced for specific guidance on testing or other services that must be offered to the exposed employee. For medical surveillance on chemical stressors not covered by these specific OSHA standards, please call you local AMO, the DOI MO, or the Occupational Health Program manager (see Tab 2). Another source of medical surveillance examination information is the Navy Environmental Health Center which has published the Medical Matrix as a general clinical guide for a variety of occupational medical exams. This Matrix can be found on the DOI Occupational Medicine Web Page (**http://medical.smis.doi.gov**).

Physical Stressors

Examining physicians, the AMO, and the DOI MO may make recommendations for individual employees regarding exertion and heat stress. These recommendations are based on information gathered in the medical history, the physical examination, and other tests that may suggest an increased risk for health problems when engaging in certain physically stressful activities. It should be noted that, because of variations in individual responses to medical conditions and work tasks, the reviewing physician intentionally may err on the side of caution.

Some factors that need to be considered regarding the effects of exertion and heat stress include: 1) physical demands of the job or tasks (both maximal exertion and endurance); 2) the total length of time an employee is engaged in the activity; 3) the temperature and humidity of the work environment; 4) type of personal protective equipment and clothing used (e.g., cartridge respirators, SCBA, Tyvek suits, etc.); 5) other hazards associated with the task (besides exertion and heat stress); 6) the ergonomics of the task (e.g., how much reaching or bending is necessary); 7) other tasks that are being conducted concurrently with the listed task; 8) the skill and training of the employee in carrying out the task in an energy-efficient manner; and 9) the availability of assistance from co-workers or

mechanical devices to reduce the effort necessary to carry out the tasks, or if reserve capacity may be needed in emergencies.

Finally, the employee's own perception of how much strain or effort is necessary to carry out a task is also very important. If an employee feels that a task requires too much of a physical strain, or causes symptoms such as shortness of breath, rapid pulse, light-headedness, or pain or discomfort in the chest, that work activity (or the conditions under which the work is carried out) likely is too much for that employee. In these situations, the employee may need work restrictions or job modifications related to these tasks.

Physical Exertion

Following a medical evaluation, employees with certain medical conditions may be given a recommendation to limit their level of exertion to reduce the risk of serious health problems. The employees' level of physical fitness also impacts their ability to perform at various levels of exertion. Physical fitness may be measured in terms of oxygen consumed, or tasks that may be accomplished in a specified period of time. The examples presented in Tab 12, Attachment E 3, are intended to provide a general overview of the types of work activities that would be expected to fall within the listed levels of exertion. It is necessary to use reasonable judgement in interpreting or applying examples such as these to specific work settings.

Heat

Following a medical evaluation, employees with certain medical conditions may be given a recommendation to limit their levels of heat stress to reduce the risk of serious health problems. It is important to remember when considering the affects of heat that humidity has a major impact on the ability of the body to cool itself. In periods of high humidity, or in work settings in which humidity cannot be lowered below approximately 60%, the length of time spent at given levels of exertion, or the level of exertion required, must be reduced to avoid potentially dangerous heat stress. This is particularly important for workers who have medical conditions that tend to reduce their ability to tolerate heat and exertion safely. Other important factors that will affect safe working times include the amount of occlusive or protective clothing that is worn (e.g., Tyvek, rubber, or other chemical-protective clothing), air movement over and around the worker, and the availability of assistance from co-workers or mechanical devices to reduce the effort necessary to carry out the tasks. These factors may increase or

decrease the amount of time that can be worked safely, depending on their presence or absence and the relative impact of each factor. Please see Tab 12, Attachment E 3, for further guidance on this topic.

Ultraviolet Light

Many DOI jobs require extensive periods out of doors, with the potential for significant exposure to sunlight. Because of the ultraviolet radiation in sunlight, this exposure poses the potential for complications such as skin cancer, cataracts, immune suppression, and premature aging of the skin unless appropriate protection is used on a regular and effective basis. The wavelengths are referred to as UV-A (315-400 nm), UV-B (280-315 nm), and UV-C (below 280 nm), with UV-A and UV-B having the greatest health effects. While UV-C is blocked by the atmospheric ozone layer, UV-A and UV-B can penetrate the ozone layer and clouds, so protection is important even on cloudy days. Comprehensive occupational sun protection includes: 1) wearing sunglasses that provide at least 99% UV-A and UV-B protection; 2) wearing a hat with a wide brim; 3) wearing tightly woven, loose-fitting clothing, including long sleeves and pants; 4) use of a sunscreen with a Sun Protection Factor (SPF) rating of at least 30, reapplying the sunscreen every two hours if the exposure continues; and 5) limiting exposure or being especially vigilant about the use of barrier methods during the middle of the day (i.e., 10 AM until 4 PM).

Biological Stressors

Lyme Disease

Lyme Disease is diagnosed in over 11,000 people per year, mostly in the summer months when outdoor work and recreation activities are more common. Preventing Lyme Disease is possible through mechanical, chemical, and vaccine measures that the employee can use. See Tab 12, Attachment E 4 (b) (*Lyme Disease*) for a draft MRPS Policy Bulletin that provides more information.

Vaccine-Preventable Diseases

Because DOI employees may on occasion find themselves exposed to vaccine-preventable diseases as a result of their official duties, the directive, MRPS Policy Bulletin 96-01, was issued and provides background information and current recommendations on the subject. The topics covered include: 1) tetanus; 2) hepatitis A; 3) hepatitis B; 4) polio; 5)

typhoid; 6) cholera; 7) yellow fever; 8) pneumococcal pneumonia; and 9) rubella. See Tab 12, Attachment E 4 (a) (*Vaccine-Preventable Diseases*) for further information.

Bloodborne Pathogens

This topic is beyond the scope of the *Handbook*. For further information, the reader is referred to other publications, such as those of the U.S. Public Health Service Centers for Disease Control and Prevention. Internet sites that are particularly valuable on this subject include http://wonder.cdc.gov/wonder/prevguid/p0000255/entire.htm (*Universal Precautions for Prevention of Transmission of HIV Summary*) and http://www.cdc.gov/ncidod/diseases/hepatitis/index.htm, the web site for the National Center for Infectious Diseases Viral Hepatitis program. Also, a draft DOI model for an agency bloodborne pathogen plan is available from Federal Occupational Health (contact the DOI MO).

Tuberculosis

This topic is beyond the scope of the *Handbook*. For further information, the reader is referred to other publications, such as those of the U.S. Public Health Service Centers for Disease Control and Prevention. A very good Internet web site on this subject is http://www.cdc.gov/nchstp/tb/faqs/qa.htm, which is for the National Center for HIV, STD and TB Prevention, Division of Tuberculosis Elimination.

Rabies

In the course of their work, some DOI employees may risk exposure to rabid animals. To help avoid such exposures, and to provide information to employees who may be exposed, MRPS has drafted a Policy Bulletin that addresses pertinent facts about the virus, the disease, and preventive measures that may be taken. The draft bulletin may be found in Tab 12, Attachment E 4 (c) (*Rabies*).

Hantavirus

Hantavirus has emerged as an occupational health threat only over the last decade. In recognition of the risk that some DOI employees may have to exposure to infected rodents, a draft Policy Bulletin has been developed by MRPS to provide information to employees that will help them avoid

exposure to rodents and their potentially-infectious waste. The draft bulletin may be found in Tab 12, Attachment E 4 (d) (*Hantavirus*).

DOT Vehicle Operators (i.e., Medical Clearance for Holders of a Commercial Driver's License)

The Department of Transportation has established regulations (49 CFR 391.41 (b)(1) through (b)(13)) governing the medical examination requirements for individuals who need a Commercial Driver's License to operate trucks, buses, or other heavy equipment on public highways. In order to drive such a vehicle, a driver must: 1) have the technical skills to operate the equipment (this subject is not covered further in this *Handbook*); 2) meet the requirements of the physical examination; and 3) comply with drug and alcohol testing requirements. Drug and alcohol testing is covered in Tab 9 (*Special Emphasis Program Guides*). The physical examination requirements are presented in Tab 12, Attachment E 5.

Driving for Work Purposes (Where CDL is not required)

Many DOI employees are in positions which require them to drive government vehicles to carry out their duties. As representatives of the federal government, and in the interest of the public safety, these drivers are expected to be able to drive safely and to carry out their duties with a minimum of risk to themselves and to others. The provisions of the Department of Transportation (DOT) regarding medical standards for a Commercial Driver's License may be used at agency discretion in clearing employees to drive non-commercial vehicles (i.e., vehicles used on public roads, but which are not governed by the DOT provisions for a CDL).

Automatic External Defibrillators

With the advent of lightweight portable automatic external defibrillating machines, there has been an increased interest in this technology to help prevent deaths due to cardiac arrest. MRPS has drafted a Policy Bulletin on cardiac arrest and the possible role of automatic external defibrillators in DOI work settings. The draft may be found in Tab 12, Attachment E 7.

Special Emphasis Program Guides Tab 9

Mandatory Health Education/Training

Certain health education and training activities are mandated by federal regulation, due to their seriousness and potential for having an impact on federal employees. Included at this time are blood borne pathogens, and tuberculosis. Specific OSHA regulations govern who is to receive this training, what the training must cover, how frequent it must be held, and the documents or records that must be available and maintained relative to the training and the health threats covered. All DOI managers must assure that employees for whom they are responsible receive and are current in the required training, and that the necessary manuals and training records are in place for use and inspection. Further discussion of these topics is beyond the scope of the *Handbook*. For further information, the reader is referred to other publications, such as those of the U.S. Public Health Service Centers for Disease Control and Prevention, and draft DOI models for agency plans, which are available from the OMRPS.

Reasonable Accommodation

The Rehabilitation Act of 1973, Federal Regulations at 29 CFR 1614.203, and the Americans with Disabilities Act prohibits employment discrimination against people with disabilities, and requires employers to hire (and retain) employees who, without the disability, would otherwise be qualified for the job. In doing so, the employer is required to offer "reasonable accommodation." This means that the employer must modify the job's requirements, or the work place, to allow the employee to perform the essential functions of the job, unless this accommodation requires excessive expense or difficulty for the employer. How much is "excessive," or too much "difficulty," is not fully described, requiring considerable care and attention on the part of the employer to assure that the employee is being dealt with fairly, and the law is adhered to.

In cases where an employee has physical limitations or medical findings that indicate he or she may be unable to fulfill all of the assigned duties in a safe and efficient manner, the supervisor must evaluate the job requirements and determine whether adjustments in duties, or the way duties are accomplished, can be arranged. Federal civil rights laws require employees, who due to a disability are unable to perform essential functions of a position even with reasonable accommodations, be offered reassignment to a vacant position for which the employee is qualified with or without accommodation at the same grade or level, in the same commuting area, and serviced by the same appointing authority unless it is demonstrated that the reassignment would result in an undue hardship on the program. The supervisor is encouraged to consult with the local personnel office for assistance in this regard. Before any adverse personnel action is taken with an employee for medical or physical reasons, the supervisor also should

consult the AMO (local or national). An ad hoc Reasonable Accommodation Committee may be assembled, involving the supervisor, local management, the local personnel office, the local Office for Civil Rights, and persons with disabilities and, if deemed appropriate, representatives from the Office of Managing Risk and Public Safety, the AMO, and the U.S. Office of Personnel Management to review the case and consider alternatives to termination or other adverse action. Additional guidance is available by contacting the Departmental Committee on Accessibility, and in Tab 12, Attachment A (*Medical Reference Guide for Human Resource Management*).

Time and Attendance/Conduct of Performance

It is an employee's responsibility to carry out the requirements of his or her job in a professional, efficient, and timely manner. Failure to perform the duties of the job may result in adverse action, including termination. If an employee contends that the reasons for non-performance of duties are due to medical reasons, it is the responsibility of that employee to offer information from a valid and reputable medical source to substantiate the medical claim that is presented. The *Medical Employability Determinations Guide*, found in Tab 12, Attachment B 2, provides further, specific guidance and step-by-step actions for the manager in this often difficult area. Please see also the sections on Psychological Fitness-for-Duty/Removals, Employee Assistance Program Services, and Recordable Injuries and Illnesses, below.

Psychological Fitness-for-Duty/Removals

Under the authority of 5CFR339.301 & 302, an agency may order a psychiatric examination or psychological assessment when:

> (1) the results of a current general medical examination which the agency has the authority to order under the regulations show no physical basis to explain actions or behavior which may affect the safe and efficient performance of the individual or others, or
>
> (2) a psychiatric examination is specifically required by medical standards or a medical evaluation program established under this chapter.

The psychiatric examination (or psychological assessment) must be carried out in accordance with accepted professional standards, by a physician or licensed practitioner authorized to conduct such examinations. Agencies must ensure that a psychiatric evaluation is used only to make legitimate inquiries into a person's mental status where that status has a direct bearing on the individual's ability to successfully perform the duties of his or her position without undue hazard to the individual or others.

At its option, an agency also may offer an employee a psychiatric evaluation, or it may ask the employee to submit medical documentation, in any situation where it is in the interest of the Government to obtain medical information relevant to an individual's ability to perform safely and efficiently, or where the employee has requested, for medical reasons, a change in duty status, working conditions, or any other benefit or special treatment (including reasonable accommodation or re-employment on the basis of full or partial recovery from a medical condition). If the individual refuses to be examined or to submit medical documentation, the agency should act on the basis of the information it has available. For example, the agency may refuse a benefit requested by the employee not supported by adequate medical documentation, or the agency may take action based on the employee's performance or conduct in the light of current medical knowledge.

Assistance with the documentation and procedures in support of these assessments and personnel actions may be found in Tab 8 (*Fitness for Duty*), and in Tab 12 (Attachment A, *Medical Reference Guide for Human Resource Management*, and Attachment B 2, *Medical Employability Determinations Guide*).

For information on reasonable accommodation for employees with emotional and psychiatric disorders, please see Reasonable Accommodation, above in this Tab, and Attachment B 1 in Tab 12 of this *Handbook*.

Drug and Alcohol Testing

The Department of Transportation has established in 49 CFR 382, 391, and 395 (Controlled Substances &Alcohol Use and Testing) the rules that apply to the use of controlled substances and alcohol by workers engaged in certain jobs that may pose a particular risk to the public's health. The workers included under this law are those who perform sensitive safety-related functions (e.g., drive trucks) on U.S. public inter- or intra-state highways. Employers of such workers are required to establish a testing program to assure that workers do not carry out the sensitive functions while impaired. The testing program must include pre-employment, post-accident, random, and reasonable suspicion testing. A copy of the regulations, with the specific requirements related to testing, the employer's response to findings of positive tests, and record keeping is included in Tab 12 (Attachment E 5, *DOT Vehicle Operators*). See also Attachment A, *Medical Reference Guide for Human Resource Management.*

Employee Assistance Program Services

The Rehabilitation Act of 1973, as amended in 1992 to incorporate provisions of the Americans with Disabilities Act (ADA), prohibits discrimination against an employee on the basis of disability or handicap. Substance abuse and mental health problems may be

considered disabilities under the ADA, and responding to employee needs in these areas is not only required by law, it is appropriate and reasonable in the interest of maximizing productivity and protecting the government's primary assets-- its employees. Every DOI office/program is to make available to its employees an employee assistance program (EAP) oriented towards assisting troubled employees to address personal problems, including substance abuse and mental health problems, that have an impact on their ability to carry out the functions of their jobs. Possible indicators that an employee may be having such difficulties include excessive absences, poor work decisions, and high accident rates. Extensive guidance on this subject is provided in Tab 12, Attachments B 1 and B 2.

The nature of the individual EAP, and the services that should be available to employees within a given office/program, depend on the identified needs of that office/program's employees, managers, and mission. The in-house program may vary from simply establishing a referral mechanism for employees with substance abuse problems to the formation of a full in-house and federally-staffed unit providing comprehensive employee assistance services. Whether provided directly as an in-house program, or indirectly as a contract program, the EAP at a minimum should provide counseling to address short term problem solving, crisis counseling, critical incident stress debriefing, and substance abuse counseling or referral. Within this *Handbook*, Tab 5 and Tab 7 provide guidance for an office/program that wishes to secure services through outside sources.

Regardless of the source of EAP services, there must be policies in place that govern the nature and function of the program, including a confidentiality statement guaranteeing that employees participating in the EAP will not jeopardize their jobs or promotion potential by doing so. There must be provision for full confidentiality of the records established and maintained for all employees, following the principles for confidentiality covered in Tab 6 of this *Handbook*. There also must be a clearly established mission statement for the EAP, along with goals, objectives, and procedures for providing services. It must be understood, however, that participation in an EAP does not exempt an employee from complying with the requirements of his/her job, as noted in the sections on Reasonable Accommodation, Time and Attendance/Conduct of Performance, as Psychological Fitness-for-Duty/Removals, as presented above.

Recordable Injuries and Illnesses

As specified by the Occupational Safety and Health Administration on its **Log and Summary of Occupational Injuries and Illnesses** (form OSHA No. 200), the following definitions apply:

> *Occupational Injury*-- "...any injury such as a cut, fracture, sprain, amputation, etc., which results from a work accident or from an exposure involving a single

incident in the work environment." Also, "conditions resulting from animal bites, such as insect or snake bites or from one time exposure to chemicals, or [are otherwise] considered to be injuries."

Occupational Illness-- "...any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment." This "includes acute and chronic illnesses or diseases which may be caused by inhalation, absorption, ingestion, or direct contact."

A recordable illness or injury is one that results from an accident or exposure in the work environment and results in death, an illness, or an injury that involves the requirement for medical treatment (beyond first aid), loss of consciousness, restriction of work or body motion, or transfer to another job. The guidelines for recording injuries and illnesses, and some of the pertinent regulations that govern the rights and responsibilities of employees and employers in the case of work-related illness or injury are presented on the Department of Labor forms CA-1 (for injuries) and CA-2 (for illnesses).

Agency Continuous Quality Improvement Program for Medical Services — Tab 10

In order to assure that the occupational health program actually covers the services intended, and in a manner that meets management and employee requirements and expectations, a continuous quality improvement program (CQIP) will be implemented. The CQIP will include all aspects of the occupational health program, from the Office of Managing Risk and Public Safety to the local office/program level where referrals and basic services are provided.

On a national level, and as covered in Tab 2 of this *Handbook*, the Occupational Health Programs Manager (or designee) will have primary responsibility for maintaining the quality of the occupational health program. This *Handbook* will undergo an annual review for accuracy, consistency with current DOI policies and organizational structure, appropriateness of content, and completeness. The Occupational Health Programs Manager (or designee) also will be available to assist local programs/offices in setting up a CQIP and maintaining it as a positive influence on the DOI mission. DOI data systems (see Tab 11) will be used by the OMRPS to assess program services and trends, and present findings and recommendations to managers, as part of this CQIP activity.

Locally, CQIP activities should be oriented towards the actual delivery of services that address local employee and management needs. Whether as a separate committee and meeting function, or as part of previously-established meetings and conferences, employees and managers need to meet on a regular, periodic basis to review their occupational health program, identify weaknesses and program needs, develop plans to adjust the CQIP and or the occupational health program, carry out needed changes, and re-evaluate those changes to assure that the health program is meeting agency needs. Some CQIP activities are to be conducted by DOI personnel; other activities are to be conducted by the provider of occupational health services. In the latter case, DOI management personnel must assure that a quality assurance program is being carried out by the health service provider(s).

A list of components* for consideration by the CQIP at the local program level is as follows, along with some suggested indicators for actual measurement of compliance. Additional review components should be established as needs are identified and as programs develop. The notation of "*X%*" or "*X cases*" refers to a local CQIP-determined level of compliance that is expected for specific indicators. As a starting point, a level of 90% should be considered for those currently-undesignated indicators for which a high level of compliance is desired, with the figure adjusted up or down as deemed realistic and appropriate for the indicator. The components should be measured at least annually, with follow up and reassessment more frequent than that, depending on the nature of problems found and the complexity of the program being evaluated. The

list should not be considered mandatory or complete, serving only as a starting point for consideration by the CQIP members in assessing the effectiveness of the occupational health program.

*The Process and Outcome Components and Indicators are adapted from an editorial by Linda Rudolph, M.D., M.P.H.; Journal of Occupational and Environmental Medicine, volume 38, number 4, April 1996; pp. 343-4; used by permission of the publisher

STRUCTURAL COMPONENTS AND INDICATORS

On an annual basis, all health care providers should demonstrate that they:

1. Possess necessary credentials, including
    a. Current, active professional license in the state where services will be provided: *100%*
    b. Current certification, or eligibility for certification, by the national board for the appropriate health care field, e.g., occupational medicine, preventive medicine, internal medicine, family practice; occupational health nursing, nursing; counseling; (Note: for occupational health medical consultants, current certification in occupational medicine is highly preferred, though certification in another specialty, and additional training in occupational medicine, is acceptable): *100%*

2. Possess current medical practice liability insurance (minimum coverages of $1 million per occurrence and $3 million in aggregate are recommended for physicians): *100%*

3. Are available to meet the specified examination and counseling needs of employees, and are available to respond to urgent consultation or health care needs following exposure incidents: *X%* of requests for services provided within agency-acceptable time frames

4. For medical services providers:
    a. Have access directly, or via contract, to certified laboratory services for blood and urine testing (including testing for agents, or the biological effects of agents, such as heavy metals, pesticides, and polychlorinated bi-phenyls); laboratories should be able to demonstrate certification of quality, such as by accreditation by the College of American Pathologists, certification as a Medicare provider, or active participation in the Clinical Laboratory Improvement Program of the Centers for Disease Control and Prevention or the American Association for Clinical Chemistry: *100%*

b. Have access directly, or via contract, to radiology services, including over-reads by board certified radiologists and, for any asbestos exposure, individuals certified to do "b-readings": *100%*

c. Use certified, regularly calibrated equipment for pulmonary function testing, audiometry, and electrocardiography: *100%*

5. Have mechanisms in place to avoid conflict of interest, such as self referral, in the services they provide: *100%*

6. Have a system of health care records that assures security and confidentiality, with release of any information from an employee's record, or about an employee's health status or clearances, only upon prior written consent from that employee: *100%*

7. Offer competitive prices for services: *100%*

PROCESS AND OUTCOME COMPONENTS AND INDICATORS

1. ACCESS TO CARE:
   a. Initial (non-emergency) treatment of employees within 24 hours after an injury is reported, as determined by review of charts or the administrative data base: *X%* of all reported cases

   b. Workers with occupational illness obtain care within the workers' compensation system; data to be available in agency health data base: *X%* of all reported cases

2. PRIMARY PREVENTION:
   a. Employer notified of occupational sentinel health events: chart documentation of notice to employer in *X%* of all cases with specified occupational sentinel health events (so measures can be taken to avoid further cases)

   b. Work site risk assessment conducted by appropriately trained individuals in work sites: record of work site risk assessment in *X%* of work sites for which the local CQIP is responsible

   c. At risk employees receive hepatitis B and other immunizations: hepatitis B immunization given or offered to *X%* of workers at risk

d. Incidence of occupational injury/illness decreasing: trend of injuries per 100 workers, by occupational category, is lower in succeeding years

3. RECOGNITION AND DIAGNOSIS OF WORK-RELATED ILLNESS

a. Blood lead level measurements in lead-exposed workers: documentation of blood lead level in *X%* of lead exposed workers

b. Occupational history taken as part of medical evaluation: documented in *X%* of charts of all cases with occupational injury

c. Diagnosis techniques appropriate: *X* cases with any diagnosis of low back pain in which thermography is performed (*X* should be a low figure)

d. Number of cases of sentinel occupational illness (e.g., an illness that provides an indication of a lapse of preventive efforts, such as a standard threshold shift in hearing, or an uncommon event) per 1000 people obtaining care (sentinel cases may be defined at the local or national level)

4. CLINICAL QUALITY OF CARE

a. Patients receive education about low back symptom control: chart documentation of patient education in *X%* of patients with any diagnosis of low back pain

b. Appropriate utilization of surgical procedures: delayed median nerve conduction velocity documented in *X%* of all patients receiving carpal tunnel release surgery

c. Clinical follow up is appropriate: follow up blood lead level is documented within 1 month in *X%* of patients with reports of blood lead levels >60ug/dL

5. PATIENT SATISFACTION

a. Complaint response: documented response within 14 days to *X%* of all complaints logged

b. Patient satisfaction survey: response rate of >*X%* of those surveyed; *X%* of respondents report high satisfaction with care received

6. OUTCOMES
   a. Re-injury rates: *X%* of patients with lost work time >3 days who experience additional lost work time after initial release to return to work

   b. Sustained return-to-work: *X%* of patients with lost work time >3 days who are at pre-injury job or modified job at 90 days after release to return to work

Data Systems and Analysis — Tab 11

The data systems in support of the DOI occupational health program are evolving rapidly, and efforts are being made to accommodate currently-available technology in distributing program information, gathering pertinent program data, and conducting reviews of program statistics and progress with addressing the DOI mission. The data elements for the occupational health program are specified, or indicated, throughout this *Handbook*.

One data system currently under development is the Safety Management Information System (SMIS), an Internet accessible accident reporting system of the OMRPS. This system allows the local manager immediate access to accident reports that are stored in an electronic data base. Information in the reports can be changed or corrected, as appropriate, and then entered into the permanent accident report data base for tracking and report generation. This system will be coordinated with other on-line data bases under development by OMRPS, and will contribute to the program management and quality assurance functions of the national and local occupational health programs, as presented in other sections of this *Handbook*.

The content of this Tab will be developed further as the specific data systems are implemented.

Specific Program Criteria, Attachments and References **Tab 12**

SUMMARY OF ATTACHMENTS

Medical Reference Guide for
Human Resource Management **Attachment - A**

What follows is a Medical Reference Guide for Human Resource Management, prepared by the Staffing Management Services Division of the U.S. Office of Personnel Management. The Guide provides pertinent references to the law, regulations and general information that will assist the manager and employee alike to better understand the subject of personnel management as it relates to the health of the federal workforce.

For further information or questions on these subjects, please contact the Office of Managing Risk and Public Safety, or:

U.S. Office of Personnel Management
Career Entry Group
Staffing Management Services Division
Pre-Employment Medical Section
1900 E Street, NW, Room 6305
Washington, D.C. 20415

202-606-1389

MEDICAL REFERENCE GUIDE
FOR
HUMAN RESOURCE MANAGEMENT

July 2000

INTRODUCTION

This "one stop shopping" medical reference guide was developed as part of our effort to educate agencies and remind them of their statutory obligations and responsibilities as they relate to medical personnel management issues.

This guide is a consolidation of regulatory, personnel and legislative references that form the foundation of various federal programs that have a medical personnel management component.

This guide provides reference information on:

- ***Developing an agency's medical evaluation and clearance programs for applicants and incumbents.***
- ***Developing medical standards for positions considered arduous and hazardous.***
- ***Requiring mandatory medical examinations under limited situations.***
- ***Work related injuries and restoration rights following on-the-job Injuries or Illnesses.***
- ***Medical passovers of preference eligibles.***
- ***Developing specific medical programs for safety sensitive positions (medical programs such as drug and alcohol testing, bloodborne and airborne pathogen control programs, hearing conservation programs, etc.)***
- ***Disability retirement.***

Relevant Points of Contact are provided below:

Points of Contact

U.S. OFFICE OF PERSONNEL MANAGEMENT
1900 E STREET NW
WASHINGTON, DC 20415

1. STAFFING REINVENTION OFFICE, EMPLOYMENT SERVICE

- ***A. OFFICE NUMBER: 202-606-0830***
- ***B. OFFICE FAX NUMBER: 202-606-0390***
- ***C. PHIL SPOTTSWOOD'S NUMBER: 202-606-1389***

II. OFFICE OF DIVERSITY, EMPLOYMENT SERVICE

- ***A. OFFICE NUMBER: 202-606-1016***
- ***B. OFFICE FAX NUMBER: 202-606-0927***

III. OFFICE OF EMPLOYEE RELATIONS AND WORKFORCE PERFORMANCE, HUMAN RESOURCES SYSTEMS SERVICE

- ***A. OFFICE NUMBER: 202-606-2920***
- ***B. OFFICE FAX NUMBER: 202-606-0967***

IV. DISABILITY DIVISION, RETIREMENT AND INSURANCE SERVICE

- ***A. OFFICE NUMBER: 202-606-0270***
- ***B. OFFICE FAX NUMBER: 202-606-4895***

V. OFFICE OF WORKFORCE INFORMATION, HUMAN RESOURCES SYSTEMS SERVICE

- ***A. OFFICE NUMBER: 202-606-1977***
- ***B. OFFICE FAX NUMBER: 202-606-1719***

VI. EMPLOYEE RELATIONS POLICY CENTER

- ***A. OFFICE NUMBER: 202-606-1259***

U.S. DEPARTMENT OF INTERIOR

1. ***OCCUPATIONAL HEALTH PROGRAMS OFFICE, MANAGING RISK AND PUBLIC SAFETY***
   - *A. OFFICE NUMBER: 303-236-7128*
   - *B. OFFICE FAX NUMBER: 303-236-7336*
   - *C. BOB GARBE'S NUMBER: 303-236-7112*

2. ***SPECIALIZED EMPLOYEE SERVICES, INTERIOR SERVICE CENTER***
   - *A. OFFICE NUMBER: 202-208-6642*

3. ***OFFICE OF PERSONNEL, EMPLOYEE ASSISTANCE PROGRAM***
   - *A. OFFICE NUMBER: 202-208-2154*

U.S. PUBLIC HEALTH SERVICE

1. ***FEDERAL OCCUPATIONAL HEALTH***
   - *A. OFFICE NUMBER: 301-549-0260 (FOH, HQ, BETHESDA*
   - *B. JAY PAULSEN'S NUMBER: 206-615-2514 (FOH, SEATTLE)*
   - *C. JAY PAULSEN'S FAX 206-615-2446*
   - *D. RICHARD MILLER'S NUMBER 404-562-7950 ex 107 (FOH, LAW ENFORCEMENT CENTER)*

2. ***NATIONAL PARK SERVICE PHS PROGRAM (DOI DETAIL OFFICE)***
   - *A. OFFICE NUMBER: 303-236-7128*
   - *B. TIM RADTKE'S NUMBER: 303-236-7128 ex 226*

TABLE OF CONTENTS

REFERENCES

I. GENERAL MEDICAL PERSONNEL GUIDANCE

Law:

A. The Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12111 et seq.

B. The Rehabilitation Act of 1973, as amended, 29 U.S.C. § 791, et seq.

C. The Family and Medical Leave Act of 1993, 5 U.S.C. § 6381, et seq.

Regulation:

A. 5 CFR 339, Medical Qualification Determinations, March 8, 1989

B. 29 CFR 1613.71, Equal Employment Opportunity Commission, Subpart G, Prohibition Against Discrimination Because of a Physical or Mental Handicap

C. 5 CFR 630, Family and Medical Leave, May 8, 2000

Information:

A. OPM - Questions and Answers Addressing Medical Documentation, January, 1998, prepared by OPM's Employee Relations and Health Services Center

B. OPM - Selected Cases dealing with Medical Documentation, May, 2000, prepared by OPM's Employee Relations Division

C. OPM - The Role of the Agency Medical Review Officer (MRO), March, 1996, prepared by OPM's Staffing Reinvention Office

D. OPM - Family Friendly Leave - Selected Questions and Answers, June 2000

II. GOVERNMENT-WIDE EXCEPTED SERVICE APPOINTING AUTHORITIES FOR PERSONS WITH DISABILITIES

Schedule A:

A. 5 CFR 213.3102(II) - This hiring authority applies to readers, interpreters and other personal assistants for other employees with a severe disability(ies).

B. 5 CFR 213.3102(t) - This hiring authority applies to persons with mental retardation.

C. 5 CFR 213.3102(u) - This hiring authority applies to persons with severe physical disabilities.

Schedule B:

A. 5 CFR 213.3202(k) - This hiring authority applies to persons who are mentally restored.

Information:

A. OPM - An Overview of People with Disabilities in the Federal Government - A Statistical Profile, October, 1995, prepared by OPM's Office of Diversity

III. MEDICAL DISQUALIFICATIONS OF PREFERENCE ELIGIBLES (TP, CP, CPS, XP)

Law:

A. 5 U.S.C., Sections 3312 and 3318

Regulation:

A. 5 CFR 339.306 Medical Qualification Determinations

B. 5 CFR 351.702(d) Reduction in Force

Information:

A. IAG Letter dated August 20, 1995, "OPM Adjudication of Medical Disqualifications to Preference Eligibles"

B. OPM - Procedures Guide in Processing Medical Objections to Preference Eligibles, March, 1996, prepared by OPM's Staffing Reinvention Office

C. OPM - Typical Reasons for Not Sustaining Agency Medical Passover Requests, March, 1996, prepared by OPM's Staffing Reinvention Office

IV. OWCP ISSUES INVOLVING EMPLOYEE RELATIONS

Law:

A. 5 U.S.C. 8101 et seq. The Federal Employees Compensation Act, as amended

Regulation:

A. 20 CFR Parts 1 to 25, Federal Employees Compensation Act

B. 5 CFR Parts 353, 870, and 890, Restoration to Duty from Uniform Service or Compensable Injury (Interim Regulations, September 1, 1995)

Information:

A. OPM - Questions and Answers on Employee Relations Issues Involving OWCP, February, 1993, prepared by OPM's Office of Employee Relations

B. OPM - Pamphlet "Restoration Rights of Federal Employees Who Sustain Job-Related Injuries or Illnesses", January, 1992, prepared by OPM's Staffing Reinvention Office

C. OPM - An Overview of Significant Cases Concerning Employees Receiving Workers' Compensation Benefits, February, 1993, prepared by OPM's Office of Employee Relations

D. U.S. Department of Labor - Injury Compensation for Federal Employees (A Handbook for Employing Agency Personnel), February, 1994

E. U.S. Department of Labor, Questions and Answers About the Federal Employees' Compensation Act, September, 1988

F. U.S. Department of Labor, Resource Book - Training for Federal Employing Agency Compensation Specialists, 1994

V. DRUG AND ALCOHOL TESTING *

Executive Order:

A. Drug-Free Federal Workplace, Executive Order 12564, 51 Federal Register 32,889 (1986) (E.O. 12564: requires that the Head of each Executive Agency establish a program to test for the use of illegal drugs by employees in safety or security-sensitive positions)

Law:

A. Section 503 of the Supplemental Appropriations Act of 1987, Pub. L. 100-71, 101 Stat. 391, 468-471, codified at 5 U.S.C. § 7301 note (1987)

B. The Omnibus Transportation Employee Testing Act of 1991, Pub. L. No. 102-143, Title V, 105 Stat. 952 (1991) (The Act requires that a program be established to test for the use of alcohol or controlled substances. This program is mandated for Federal Aviation Administration (FAA) employees whose duties include responsibility for safety-sensitive functions and for any other Federal employee whose position requires a Commercial Drivers License (CDL) under Federal Highway Administration (FHWA) regulations)

C. Drug Abuse Prevention, Treatment and Rehabilitation Act of 1972, 42 U.S.C. § 290ee-1 et seq., as amended by the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act, 42 U.S.C. § 290dd et seq., Pub. L. 102-321, 106 Stat. 323 (1992) (codified at 42 U.S.C. § 201 note)

D. Federal Employees' Substance Abuse Education and Treatment Act of 1986, Pub. L. 99-570, Title VI, 100 Stat. 3207-157 (1986). (This Act requires agency programs to provide prevention, treatment, rehabilitation, and education services to Federal civilian employees with respect to drug and alcohol abuse)

Regulation:

A. 5 CFR Part 792, Federal Employees' Health and Counseling Programs

B. 49 CFR Part 382, Controlled Substances and Alcohol Use and Testing (This regulation is issued by the Federal Highway Administration (FHWA) and contains the requirements applicable to positions requiring Commercial Drivers' License (CDL))

C. **49 CFR Part 40, Procedures For Transportation Workplace Drug and Alcohol Testing Programs (This regulation is issued by the U.S. Department of Transportation (DOT) and contains the technical procedures designed for use when testing is required pursuant to 49 CFR Part 382)**

Mandatory Guidelines:

A. **Department of Health and Human Services - Mandatory Guidelines for Federal Workplace Drug Testing Programs, Federal Register Vol. 59, No. 110, June 9, 1994 (This establishes mandatory scientific and technical guidelines for Federal civilian drug testing programs pursuant to Executive Order 12564)**

Information:

A. **National Institute on Drug Abuse - Model Plan for a Comprehensive Drug-Free Workplace Program, 1990**

B. **U.S. Department of Transportation - Alcohol & Drug Rules - An Overview, February, 1994**

C. **U.S. Department of Health and Human Services - Substance Abuse and Mental Health Services Administration - Basic Information on Breath Alcohol Testing for Implementation of the D.O.T. Rules, February, 1995**

D. **U.S. Department of Health and Human Services - An Overview of HHS Division of Workplace Programs (Federal Drug and Alcohol Program Oversight Responsibility)**

E. **U.S. Department of Health and Human Services - Substance Abuse and Mental Health Services Administration - Medical Review Officer (MRO) Source List, March 3, 1996**

***** **See Section III(A) for information regarding the role of OPM in the adjudication of medical objections to preference eligibles who test positive on a pre-employment drug screen.**

VI. DISABILITY RETIREMENT (CSRS and FERS)

Regulation:

A. CSRS - 5 CFR Part 831, Civil Service Retirement System, Disability Retirement, September 22, 1993

Information:

A. CSRS - Documentation in Support of Disability Retirement Application, July, 1984

B. CSRS - OPM Pamphlet "Information for Disability Annuitants", March, 1995

C. CSRS - Application for Immediate Retirement, January, 1990

Regulation:

A. FERS - 5 CFR Part 844, Federal Employees Retirement System - Disability Retirement, 1995

Information:

A. FERS - Documentation in Support of Disability Retirement Application, August, 1987

B. FERS - OPM Pamphlet "Information for FERS Disability Annuitants", October, 1995

C. FERS - Application for Immediate Retirement, March, 1988

VII. MENTAL HEALTH ISSUES *

Information:

A. OPM - Cases Involving Selected Medical Conditions, January, 1996 prepared by OPM's Office of Employee Relations

*** See Section I "Questions and Answers Addressing Medical Documentation for" specific information regarding an Agency's right to order/offer a medical or psychiatric examination.**

VIII. MEDICAL RECORDS

Law:

A. Privacy Act of 1974, 5 U.S.C. 552a

Regulation:

A. 5 CFR Part 293, Subpart D, Employee Medical File System Records, prepared by OPM's Office of Workforce Information

B. 5 CFR Part 297, Privacy Procedures for Personnel Records, prepared by OPM's Office of Workforce Information

C. 29 CFR 1910.20(d)(i) (1990) Access to Employee Exposure and Medical Records, U.S. Department of Labor, Occupational Safety and Health Administration

D. 29 CFR 1904 (June 1986), A Brief Guide to Recordkeeping Requirements for Occupational Injuries and Illnesses, U.S. Department of Labor, Bureau of Labor Statistics

E. 42 CFR Part 2, Confidentiality of Alcohol and Drug Abuse Patient's Records * (This regulation applies only to Employee Assistance Program (EAP) records)

Information:

A. OPM/GOVT-10 "Employee Medical File System Records", 57 Federal Register, 35,722, (August 10, 1992), prepared by OPM's Office of Workforce Information

B. OPM Medical Record Procedures, (covered in OPM's Operating Manual) The Guide to Personnel Recordkeeping, prepared by OPM's Office of Workforce Information

REASONABLE ACCOMMODATION FOR EMOTIONAL AND PSYCHIATRIC DISORDERS

[The following information is based on material prepared by John Rogers, Department of the Interior Coordinator for Employee Assistance Programs, November, 1996.}

This guide is intended to provide information and ideas regarding psychiatric and emotional disorders that might be encountered in the workplace, methods of evaluating information about an employee and ways of providing accommodation for these types of disabilities. It is not all-inclusive in terms of the range of conditions that might show up so other resources should be included. This guide should not be interpreted as government wide policy, it is intended only as guidance for human resource and employee assistance personnel in dealing with reasonable accommodation issues. Agencies or individuals should feel free to use or copy anything in this guide. Attribution would be appreciated.

Cases requiring a review of medical information relating to emotional or psychiatric disorders can be a difficult situation for an agency. Quite often, the information submitted is incomplete or bears little relationship to the job itself. In addition, agencies are often given information which does not rise to the level of true diagnostic information (e.g. "Employee is suffering from stress").

Reviewing information relating to psychiatric and emotional disorders is much the same as reviewing any other medical information. There should be a diagnosis, a prognosis, a description of how the particular condition affects the employee's ability to the work, and recommendations for how the particular condition can be accommodated. This information might come from the employee's physician, or other mental health practitioner such as a psychiatrist, psychologist, social worker, or counselor.

Agencies will need to have appropriate personnel review the psychiatric information. In addition to a review and general case coordination or consultation by the DOI MO or agency medical officer or contract physician, agencies might also consider utilizing their EAP or other psychological services. Even if the final review is done by the medical officer, the EAP can be very helpful in helping managers and human resources personnel understand the practical implications of the various conditions and assist in designing appropriate accommodations.

ACCOMMODATING SPECIFIC CONDITIONS

There are hundreds of diagnosable conditions that fall under the category of psychiatric and emotional disorders. Some are quite common while others are quite unusual. The definitions and criteria for conditions are spelled out in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV),* American Psychiatric Association. This guide is used as the official diagnostic criteria universally by practitioners, insurance companies, the courts, and anyone else dealing with the treatment, diagnosis, classification, and evaluation of mental disorders and programs.

An agency's obligation to accommodate a medical or psychiatric condition rests on the premise that there is indeed a disabling condition which requires accommodation and that there is a connection between the disabling condition and a workplace situation that needs addressing such as a performance or conduct problem. It is important that an agency have information which establishes the existence of a condition. For example, an employee might come in with information and a request for reasonable accommodation because s/he reports feeling stressed because of his/her particular relationship with a supervisor. Given this, an agency would not be required to provide this accommodation because there is not an identified disabling condition. An agency might choose to accommodate the employee for other management reasons, however it would not be reasonable accommodation for a disability. This distinction is important, not just from a legal obligation but also because it is difficult to accommodate a condition that is not easily defined.

The following is a list of some mental disorders that might be encountered in the workplace. Included in the list are specific information on the disorder, how it may be manifested in the workplace, and suggestions for possible accommodations. These suggestions are merely a guidepost, not a required list. Accommodations ought to be specific to the situation so trying to use anything in this guide as legal basis or as evidence in a third party hearing should be avoided like the plague.

DEPRESSIVE DISORDERS

Overview

This category includes all the various types of disorders labeled depression. They are also called mood disorders. As a group, they include symptoms such as sad or depressed mood for possibly extended periods, diminished interest in many pleasurable activities, sleep disturbances including both insomnia or too much sleep, fatigue and energy loss, feelings of worthlessness, diminished ability to concentrate, possible suicidal thoughts, feelings of hopelessness, and weight and appetite changes. Depression may be severe or mild and may be long-term or cyclical. Some depression may be due to substance abuse or other medical conditions. Depression may also coexist with other disorders such as personality disorders or adjustment disorders.

Some depressions occur only once or may only be connected with certain life-changing events such as loss of a loved one or job loss. Other depressions can be recurrent or may be chronic. The causes of depression are not always clear, however there is some evidence that the illness runs in families.

Workplace Implications
Depression is a relatively common disorder. Nearly 18 million people are estimated to be affected by depression in the U.S. The impact at work can show up in many ways including:

- decreased productivity
- safety issues due to the employee being distracted
- absenteeism
- employee may feel tired frequently
- lack of concentration, memory, and inability to make decisions
- motivation may be lacking
- substance abuse
- feeling overwhelmed
- unexplained aches and pains
- decreased energy
- moodiness or irritably
- feelings of hopelessness, guilt, or worthlessness

At times the employee suffering from depression may just appear to be performing poorly, not much different from an employee you might think is malingering.

Treatment
Treatment for depression includes psychotherapy, medication such as anti-depressants, or both. Some individuals need long-term treatment and medication, others can benefit from shorter-term and one-time treatment. In some cases, electroconvulsive therapy is used. While severe depression may require hospitalization, most people can be treated in an outpatient basis. People don't just "snap out of it", they usually need treatment. Treatment is often successful, allowing individuals to resume normal functioning.

Workplace Accommodations
The types of accommodations required vary greatly with the particular symptoms, job requirements, availability of health care, and type of depression. However, because of the all-consuming nature of depression, a simple accommodation of one aspect of an employee's job is not likely to have a great impact on the course of the disease. It is more likely that the accommodation is a way for the employee to deal with some stressors at work while they are in treatment for the disease. These might include:

- temporary change to less demanding or deadline-sensitive duties
- closer review to help employee catch errors
- changes in travel requirements
- work schedule changes to allow for medical appointments
- temporary assignment away from safety-sensitive duties

In addition, there could be some other specific accommodations such as:

- assisting an employee with medication regimen by involving health unit personnel
- giving an employee a better lighted office, especially effective for an individual whose depression is related to seasonal changes
- allowing frequent visits to the EAP

Areas of Concern

As with many other emotional and mental conditions, the employer needs to be careful to make sure that the accommodations given are truly related to a documented condition and will have an effect on alleviating situations caused, or exacerbated, by the condition. Depression affects how an employee views his/her life situation and moods. It is not likely that a mere reassignment will alleviate the situation such that an employee's symptoms go away. Changing an employee's supervisor is an accommodation that you need to be very careful about making. While an employee may benefit from moving to a different supervisor in the case of a particular bad relationship, it is more likely that an employee suffering from depression is going to have problems in most work situations. The overwhelming nature of the disease is such that any accommodations made should be seen as supporting other efforts by the employee to get treatment.

BIPOLAR DISORDER

Overview

Bipolar disorder, otherwise known as manic depressive disorder, is considered a form of depression. It does, however, have a different component in that the person suffers from manic phases in addition to depressive phases. These manic phases involve times when the person may feel elated, euphoric, omnipotent, and may likely engage in habits that could be destructive such over-spending, engaging in risk-taking activities, displaying excessive energy, sleeping very little, and becoming extremely involved in an activity. They may appear to be able to take on incredible amounts of work. However, at some point the individual will slip, or crash, back into a depressive phase. There will also be phases where the person feels relatively normal and stable. A major problem with the manic phases is that the individual may do a fair amount of damage to him/herself, either physically and emotionally, or to his/her career, reputation, or finances.

Workplace Implications
Individuals suffering from this disease may eventually have many problems at work. During the depressive states, the symptoms may look like any other depression. However, manic states will likely be very noticeable to others at work. There may be complaints about the individual's behavior and intensity of communications. The individual may have very grand plans for projects that will not be realized or may end up alienating or angering coworkers or other supervisors with their behavior. The individual may have racing thoughts and speech and may have difficulty following instructions. Distractibility and irritability are also likely.

Treatment
The treatment for bipolar disorder usually involves medication (a combination of mood-stabilizers and anti-depressants) and psychotherapy. Many individuals will need to take medication for their entire lives. With proper case management, it can be treated and managed.

Workplace Accommodations
Accommodations for depressive symptoms will be similar to those for any other kind of depression. The challenge here is dealing with the manic phases. While a person is in a manic phase, there are not a great deal of interventions available. It would be best to avoid assigning new projects during this time. The best course for the employee is to try to manage the disease by regular medication and therapy. In some cases, it might be possible to enlist health unit personnel if there is a problem with compliance with medication.

Some individuals have reported that it has been helpful for them to have a friend or relative let them know when they are exhibiting manic symptoms. This might allow them a chance to seek treatment and have their physician adjust medication levels. Something to keep in mind in dealing with an employee with bipolar disorder is that, once it is known that the employee suffers from this disorder, it could be very useful to work on the issues as a team with the employee, the EAP, ER, health unit personnel, and the family to help the employee manage his/her symptoms and get treatment early.

Areas of Concern
It is important to keep in mind that the accommodations made need to be related to the disorder and be reasonable. As with other disorders, simply reassigning the employee will not likely have much impact as an accommodation.

ANXIETY AND PANIC DISORDERS

Overview

Anxiety disorders are marked by tension and apprehension which may have both physiological or psychological components. They may be precipitated by a fear of actual events or situations or may be rather generalized. An element of this type of disorder may include panic attacks which might include rather intense symptoms such as shortness of breath, heart palpitations, excessive sweating, feeling very hot or cold, nausea, feeling dizzy, chest pains or discomfort, and feelings of unreality or being detached from oneself. Sometimes these disorders involve phobias which can be very disabling and may range from slight discomfort and impairment to severe symptoms which can keep someone from being able to leave the home, drive a car, fly in an airplane, speak in public, be in a high place or any number of other situations.

Workplace Implications

An employee suffering from such a disorder may only find mildly disabling conditions such as feeling tense and nervous in situations such as public speaking which may limit their effectiveness. An individual who is feeling this tension and apprehension will likely have problems in performance which will inhibit their ability to start a project or perform effectively simply due to the anxiety. More likely than not, this individual will not be able to clearly state what the problem is because they don't always know themselves the source of the anxiety or what to do about it.

An individual suffering from panic attacks may face quite severe problems at work. The intense fear of public speaking may be very problematic for certain individuals whose jobs require speaking before groups, although such individuals will often seek out jobs without such a requirement. In addition, travel could be a problem for individuals with specific phobias about things such as flying or driving.

Treatment

Depending on the severity and type of the disorder, many people can receive successful treatment. The treatment may consist of various types of individual and group psychotherapy and may include medication. It would normally be done on outpatient basis.

Workplace Accommodations

Accommodating specific phobias may prove to be either relatively easy and straight forward or could be quite difficult to do. For example, an employee with a phobia about flying could find other ways to travel. An employee with a fear of public speaking might be in a more difficult situation in that the job may simply require a great deal of public speaking and might not be prone to restructuring. Accommodating more generalized anxiety may prove more difficult to do, especially if it is not clear what particulars stressors exist or if they are related to the worksite.

Areas of Concern
The more specific the information is as to the particular type of anxiety or phobia, it will be easier for the agency to determine if accommodation is possible. Again, a request for no supervision or removal from a particular supervisor is not likely to be a reasonable alternative.

ATTENTION DEFICIT /HYPERACTIVITY DISORDER (AD/HD)

Overview
These types of disorders normally are diagnosed in childhood or adolescence. There is some controversy over how often it is diagnosed and how the diagnosis may be used by some to excuse what might otherwise be considered as either bad behavior, lack of ambition, or inability to perform certain functions. The attention deficit symptoms include many of the following:

- inattention to detail
- inability to follow through
- lack of concentration
- avoidance of certain activities
- appearance of daydreaming
- lack of production
- frequent distraction by outside stimuli
- forgetfulness
- general sloppiness of work materials

The types of symptoms one might see relating to hyperactivity might include:

- inability to stay seated
- apparent wandering
- speaking out of turn or interrupting others
- impulsivity and impatience
- excessive talking
- restlessness
- squirming and fidgeting

Certainly any number of the above symptoms might be present in many people, the issue of whether a disorder exists has a great deal to do with whether or not the collection of symptoms cause a fair amount of occupational, personal, or educational impairment. There are an increasing number of adults who were not diagnosed as children who now have a diagnosis of AD/HD. For many people, this diagnosis has been a blessing in that it can help explain many problems they have encountered in work that may have been attributed to laziness or lack of ability or intelligence. The symptoms may appear different in adults or be hidden in that people have had to find ways to compensate.

Workplace Implications
For some individuals with AD/HD, there may not be much in the way of noticeable impairment at work, however, it is likely that they are not performing to peak and may not even be aware of how the disorder affects them, only knowing that work is rather hard for them. For others, you might see any number of the following types of problems:

- missed deadlines
- incomplete assignments
- failure to completely follow instructions
- need for closer review and supervision
- not being at the desk
- excessive time being spent on certain assignments
- interruptions and intrusions that appear rude
- forgetfulness
- lack of concentration and many mistakes
- problems with planning large tasks
- apparent anxiety over assignments
- inability to just get started on assignments

Someone with this disorder, but undiagnosed, may be fairly miserable at work as they are aware of their failings and their supervisor is simply frustrated with an employee who appears to either not be very able or may border on malingering. Others may indeed have the disorder to some extent but, in a minority of case, be misusing the diagnosis to explain other unrelated problems.

Treatment
Individuals with this type of disorder are usually treated with medication which may also be accompanied by behavioral therapy. It is invariably treated in an outpatient setting.

Reasonable Accommodation
Many of the methods of treating this disorder were developed for children in a school setting and many can be adapted to adult occupational needs. Basically, the task is to help the individual find adaptations to the work or the workplace that will enable him/her to function well. The following are some examples:

- providing closer supervision and instruction
- breaking down assignments into smaller, more manageable segments
- altering the mix of work to give more short-term assignments, within classification guidelines
- setting up office space to eliminate, or reduce disruptions, visitors, etc.
- giving instructions both orally and in writing
- flexiplace work options

An option for finding ways to accommodate this disorder is to utilize professionals who deal with it a great deal, such as child psychologists, as consultants.

Areas of Concern

This can be a controversial area. For adults who have recently been diagnosed with AD/HD, there is almost a feeling of "finally, I know that I'm not just lazy". Some people are suspicious of the diagnosis, feeling that it is just an excuse. However, it is a legitimate diagnosis and the real test is to get back to the basics of accommodation, i.e. there is a disability that is causing or contributing to a work deficiency and there are reasonable accommodations that can be made. Again, merely changing supervisors is probably not the answer nor is a reduction in workload or in difficulty the answer, unless that is accompanied by the appropriate job classification, i.e. a change in duties may result in a lower grade. It is important to try to delineate which problems are due to AD/HD and which may be due to other factors such the employee's personality structure.

OTHER DISORDERS

There are many other types of psychiatric and emotional disorders that my not be quite as common as those described above. The following are some brief descriptions of such conditions along with considerations for accommodation or potential areas of concern.

Schizophrenia and Psychotic Disorders

These disorders are marked by delusions, paranoia, hallucinations, grossly disorganized behavior, and other manifestations. People suffering from these conditions usually need combinations of inpatient or outpatient psychotherapy and medication. Workplace accommodations may be very difficult to do in that there may be rather unpredictable aspects of the disorder and the difficulty in making a connection between the delusional behavior and specific accommodations. The documentation submitted in the employee's behalf would need to show what specific accommodations could be made and how they might alleviate the particular workplace and behavioral problems, something agencies have probably not had a great deal of success with. This doesn't mean that a person who suffers from such a disorder is unable to work, only that the behaviors arising out of psychotic episodes can be extremely difficult to work with. The problems arise more when the person displays behavior that is very disturbing to coworkers. Medication management is very important and the assistance of the health unit may be essential. Additionally, enlisting the support of family members and treating professionals can be helpful in finding ways to cope with symptoms that show up at work. An example would be to have a family member come to work to pick up worker who is displaying bizarre behavior so that they could be able to leave the building with some dignity and little fanfare.

Personality Disorders
Personality disorders are patterns of behavior and experience that are noticeably different than the cultural norm which will end up being very problematic for the individual. Imagine a personality trait that is very exaggerated to the point that the individual suffers in his/her social interactions, work situation, and family life. Treatment may consist of rather long-term psychotherapy, along with medication which might be prescribed for other symptoms that may develop such as depression. There doesn't seem to be a great deal that can be done in the way of accommodation for these disorders themselves. There may be other symptoms, such as depression, that could be accommodated, however the basic personality structure issues do not lend themselves to easy accommodations. Examples of these disorders are Borderline Personality Disorder, Dependent Personality Disorder, Histrionic Personality Disorder, and Obsessive-Compulsive Personality Disorder. See the DSM-IV for further information.

COMMON TERMS - NOT DISORDERS

The following are categories of kinds of coping or behaviors, or generally adopted terms that are really not disorders and would probably not rise to the level that they need to be accommodated. This list is not meant to downplay the feelings or suffering individuals who use them to describe their situations, it is only meant to indicate that more clinical information is probably needed. When presented with these types of terms, a clinician would probe further to determine what actual symptoms are so that a proper diagnosis can be made. People often use terms such as the following in day to day conversation as a way to describe how they feel or what they think is not working in their lives.

Co-dependent
This is not a diagnosis. It is a term used to describe ways of behaving and relating to others which involve the individual taking responsibility for others, to an excessive extent. Family members often describe themselves in this way.

Enabler
This term is often used to describe the family members, co-workers, and friends of a substance abuser who seem to allow them, or enable them, to continue using. An example is a supervisor who covers up for an employee.

Addictive Personality
There is no diagnostic category for this. While someone's personality structure may involve substance abuse, it is not a diagnosis.

Food Addict
There are eating disorders, however, this is not a recognized category.

Sex Addict
There are disorders involving sexual dysfunction and compulsive behaviors, however, this particular term is not one of them. Also workplace accommodation may be somewhat problematic.

Low self-esteem
Many individuals have, as a symptom, low self-esteem, however this is not a disorder in and of itself.

Stress
Many employees will say they are stressed out or under stress. While this may be true, it is not a diagnosis and, in fact, is a rather vague description of symptoms.

Dysfunctional Family
Sometimes individuals may describe themselves as being part of a dysfunctional family. Again, this is not a diagnosis but rather a term often used (and overused) to describes less than satisfactory family dynamics.

Adult Child of an Alcoholic (ACOA)
This is a term used to describe a situation where and individual has developed certain ways of adapting and behaving after growing up with an alcoholic parent(s).

Nervous Breakdown
This term is often used when describing a situation where relatively severe symptoms, such as a major depression or psychotic episode, take place. Quite often, it is used when an individual is hospitalized.

GENERAL RECOMMENDATIONS

Regardless of the particular diagnosis, there are some general recommendations that may be helpful in evaluating psychiatric information. These are not meant to be all-inclusive.

Even if you are using outside physicians to review information, using your EAP to help with evaluating information, designing accommodations, and educating managers about disorders (within boundaries of confidentiality) can be very effective.

It is not necessary to have information come only from a physician. Other credentialed professionals such as Licensed Clinical Social Workers, Clinical Psychologists, Licensed Professional Counselors, and Clinical Nurse Specialists or Psychiatric Nurse Clinicians can provide the necessary diagnostic information for an employee.

It is perfectly fine to ask for clarification on information submitted to you. In fact, it is often necessary and, when doing so, it may be beneficial to use your agency physician or EAP counselor to do so. This doesn't mean that you don't believe the employee, it is simply a fact that employee's physicians don't necessarily speak the same language as human resources people and additional information is often needed.

Many attempts at accommodation, especially for relatively severe disorders, will probably be more effective if they are done collaboratively. For example, an employee with Bipolar Disorder may have problems managing their medication. Having the employee, their representative, the EAP, Their physician, and the health unit nursing staff work together to come up with a plan for helping the employee take medication on a consistent basis.

Education, especially for managers, can be very helpful. Once an employee has been granted accommodation, it can be very useful to educate the supervisor about the situation, within the employee's rights to confidentiality. The EAP can be very helpful in this situation.

I. OVERVIEW

When an employee raises a medical condition as a defense against alleged performance or conduct deficiencies, the burden is on the employee to provide the agency with medical documentation (within time limits set by agency) which establishes that:

a) the employee has a medical condition/handicap which needs to be taken into account; and

b) the medical condition/handicap is causally related to the performance or conduct deficiency; and

c) (where appropriate) accommodation is necessary.

Documentation Acceptable

If the employee provides documented evidence acceptable to the agency (including the Agency Medical Officer, if necessary) which demonstrates that:

a) a medical condition exists; and

b) the condition is causing or exacerbating the performance or conduct deficiency, THEN,

The agency is responsible for determining:

a) whether any accommodation is necessary, and, if so,

b) whether any "reasonable accommodation" can be made (this is a management determination, not a medical one.)

If reasonable accommodation can be made either within the position, or by reassigning the employee, the agency must do so.

If the agency determines that no accommodation can be made or is reasonable, then the agency proceeds with appropriate corrective action. (The employee must also be counseled regarding disability retirement if appropriate.)

Documentation Not Acceptable

If the employee provides medical documentation, but the agency medical officer considers it to be "unacceptable" (e.g., incomplete, not pertinent), the agency may either:

a) require the employee to provide additional documentation, or

b) offer the employee a medical exam by an agency-selected physician, at agency expense.

If the individual refuses to be examined or to submit medical documentation, the agency should act on the basis of the information it has available. For example, the agency may refuse a benefit requested by the employee but not supported by

adequate medical documentation, or the agency may take action based on the employee's performance or conduct in the light of current medical knowledge.

II. COMPREHENSIVE GUIDE

On the following pages you will find a copy of the *Medical Employability Determinations* guide. It may be modified to meet individual agency or office requirements, and is intended to provide practical assistance to managers as they process requests for special personnel action based on medical factors.

Department of the Interior Medical Employability Determination Guide

TABLE OF CONTENTS

Background

An important function of the DOI *Occupational Medicine Program Manual and Handbook* is to assist managers with medically-based absences. The need for this assistance may arise when a manager faces medical employability issues concerning employees. Managers may find decision making in this area difficult and frustrating.

Purpose

The DOI Office of Managing Risk and Public Safety has developed the following guidelines to assist managers in returning employees to work safely and appropriately to their current job or a suitable alternative, in accordance with generally accepted principles and practice of medicine and the skills and abilities of the employee. In this role, DOI medical officers will review the medical data for its probative value to substantiate that an individual can travel to and from work, be at work, and do assigned duties and tasks of the job. Medical review officers will advise managers of the existence of such medical information as it pertains to job capabilities and limitations; and of appropriate job modifications to offer the employee and his/her attending physician, on a temporary or permanent basis, in order to return the employee to work as expeditiously and safely as possible. This document is intended to serve as a guide to facilitate the understanding of how medical employability determinations should be handled. It is not intended to replace the agency's policy manual(s), OWCP, or other federal regulations, etc.

This guide describes the responsibilities of the respective parties, and how the agency medical officer can:

a. assist manager's by reviewing the medical documentation;
b. interact with the employee's attending physician to better clarify the limitations of the employee in the current job;
c. appropriately convey non-medical information to management on when an employee can return to work and under what circumstances; and
d. provide other medical consultation assistance for managers, as described in elsewhere in this handbook.

What Managers Should Do:

In accordance with FPM Chapter 810 - Injury Compensation - 810-43: Subchapter 9. **Agency Management of Compensation Claims**: 9-1 **MANAGEMENT**, agencies are encouraged to develop comprehensive plans for managing their programs in order to provide good service to employees while containing costs. The following is a summary of the most important actions agencies can take:

a. **Training** of those personnel who will routinely handle compensation claims and assure that resource materials are available to those who handle them infrequently.

b. **Administration**. Establish a record keeping system which will enable the agency to maintain copies of claim forms, medical reports, correspondence with OWCP, and other materials related to each compensation claim in an orderly fashion.

d. **Documentation**. Insure that the facts surrounding each injury are adequately investigated and documented from the time of injury forward.

e. **Medical**. Obtain medical information from injured employees as often as necessary within the regulations in order to assess the possibility of return to regular or light duty. Advise physicians of any light duty assignments available and their specific requirements in order to provide the best possible chance for re-employment. This step will also allow the agency to monitor the medical information provided and notify OWCP if it believes action should be taken in this regard.

f. **Re-employment**. Maintain employees on the employment rolls as long as possible in order to afford them the opportunity for re employment, and maintain contact with the employees while they are receiving compensation. Identify jobs suitable for the disabled and initiate efforts to re-employ recovered or recovering employees as soon as the medical evidence indicates that this is possible.

g. **Financial**. Conscientious application of the above principles will result in savings to the agency and better service to injured employees. Agencies should also pay special attention to "charge back" billings and arrange to charge costs to the lowest organizational level practicable in order to make managers more aware of costs.

POLICIES AND PROCEDURE GUIDELINES

TOPICS COVERED

A. Medical Absence (i.e.: Sick Leave (excessive and non-excessive), Non-OWCP, etc.)
B. Workers' Compensation Claims
C. Long-Term Disability Claims
D. Workplace Accommodation
E. Fitness For Duty Examination

Introduction.

In order for a Medical Consultant to assist managers with absences due to medical reasons (i.e.: Sick Leave, Workers' Compensation Cases, etc.), provide advice regarding workplace accommodations, and assist in pre-placement and fitness for duty medical examinations, it frequently is necessary to review the medical documentation for its probative value to substantiate that an individual can or cannot travel to and from work, be at work, and safely and efficiently carry out the assigned duties and tasks for which management is willing to pay. The guidelines suggested in this document make frequent reference to the acquisition and use of an employee's medical records and other medical documentation to facilitate in the decision-making process of the probative value of medical information to substantiate the employee's claim. Several people have responsibilities under these guidelines, if employees expect that agency action will reflect their needs and requests and if managers expect to be successful in handling these personnel actions.

A. Medical Absence (i.e.: Sick Leave (excessive and non-excessive), Non-OWCP, etc.)

1. Employee Actions:

a. Notify management of any anticipated absence(s) according to agency policy.

b. Upon receipt of a Notification Letter to the Employee from management for an absence of more than three consecutive workdays (the Agency may choose a different number of days or use other criteria for determining when medical documentation is required), the employee will be offered the opportunity to provide medical documentation to support a request for approval of the medical absence from the workplace (see Sample Letters #1 and #4, a Privacy Act notice, a Consent for Release of Confidential Medical Information form, and the Standards for Review of Medical Documentation, in this guide).

c. If the request for authorized absence is denied by management and reconsideration is requested by the employee, s/he must:

(1) Request from management (in writing) within 48 hours of the receipt of the decision, a reconsideration. If management has reason to believe additional medical documentation exists, it may approve the employee's request for a reconsideration. Management may provide copies of additional documents to the employee as needed (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation).

(2) Within 5 days of the receipt of the decision, ensure that his/her health care providers have submitted the medical documentation or other information not previously provided that would warrant further consideration to the agency's medical officer.

2. Management Actions:

a. Assure personnel office is notified when an employee has been out for more than the maximum number of days that trigger management to require medical documentation.

b. Assure personnel office is notified in the event of an employee's anticipated medical absence from the workplace for more than the maximum number of days that trigger management requiring medical documentation

c. Prepare and issue a Notification Letter to the Employee (see Sample Letters #1 and #4, in this guide), in accordance with the procedures set forth in these guidelines, to require the employee to submit medical documentation to the agency medical officer and to remind the employee that the absence will be approved only if:

(1) The medical documentation is received in accordance with the request by the due date, and

(2) Upon review by the agency medical officer, the criteria for a medically-based absence are met. (Utilizing the Standards for the Review of Medical Documentation and the Position Description.)

d. Forward to the agency medical officer:

(1) A signed copy (received by the employee) of the Notification Letter to the Employee (see Sample Letter #1).

(2) A copy of the employee's Position Description/Physical Requirements of the Job and any other relevant information on what the employee is required to do as a part of the job.

(3) The Agency's Light, Limited or Modified Duty Policy.

(4) The name and phone number of the agency's representative who may be contacted by the agency medical officer for more information on the potential for Light, Limited or Modified Duty for the employee.

e. Assess the agency medical officer's report of the review of the medical documentation (or notice that medical documentation was not received by the due date) to determine whether or not there is medical justification to approve the absence;

f. If the absence <u>is approved</u>, determine the appropriate pay and benefit status and inform employee accordingly (see Sample Letter #3);

g. If the absence is <u>not approved</u>, issue a decision in writing to notify the employee:

(1) Of the determination and the reasons for which the determination was made and institute appropriate administrative action; and

(2) If <u>reconsideration</u> is requested by the employee:

(a) If management has reason to believe additional medical documentation exists, they may approve the employee's request for a reconsideration. Management may provide copies of additional documents to the employee as needed (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation).

(3) If of a request for reconsideration is approved, management

will forward a copy of the authorizing letter and the due date of the medical information to the agency medical officer.

h. Notify the agency medical officer of the final administrative disposition for tracking purposes.

3. Agency Medical Officer Actions:

a Review the medical documentation for its probative value to substantiate the employee's claim for a medically-based absence;

b. Inform designated management contact, in writing, if medical documentation was not received by the due date (see Sample Letter # 2);

c. At the request of management:

(1) Confer with the supervisor/department head;

(2) Contact the employee's physician(s).

d. Utilize the position description/physical requirements of the job, received medical documentation, the Standards of Review of the Medical Documentation and other relevant publications in determining the probative value of the information to substantiate that the individual can or cannot travel to and from work, be at work, and safely and efficiently carry out the assigned duties and tasks of the job.

e. Provide written review and analysis stating whether or not there is a medical basis upon which to recommend approval of the absence to PO.

f. In cases that are requested and approved for reconsideration by management, review all documentation of the case that has been received for its probative value to substantiate the employee's claim.

g. Maintain a log on the status of receipt of medical documentation on each case for review . (See Sample Form).

4. Return to Work After Approved Medically Based Absence

a. An employee's eligibility to return to the same or another position must be consistent with both generally accepted principles and practice of medicine and the position description of the job.

b. When an employee's qualifications or suitability for employment have changed as a result of illness or injury on a permanent basis, the procedures for accommodation set forth in this document will apply.

B. Workers' Compensation Claims - The following guidelines are intended to follow the FECA, as amended, and not to supplant or replace any of OWCP's purview, the agency's and the employee's responsibilities under FECA; where and when appropriate, managers should reference these agencies' pertinent literature. The following guidelines are intended to assist federal managers in utilizing the available FECA, OWCP and other pertinent Federal regulations and guidelines in the performance of their responsibilities in complying with the above statutes and regulations as they apply to the performance of the agency's mission, duties and responsibilities. As such, Federal managers may request assistance in the review of the medical documentation of a workers' compensation case prior to offering a medical examination. See FPM Chapter 810 - Injury Compensation - 810-30 : Subchapter 6-4-c. Medical Treatment and Evaluation; which refers Agency requests for medical examinations to 5 CFR 339.301 et seq.; which is:

> **"Medical Determinations Related to Employability,"** which states under 339.301 (b) "An agency may require an employee receiving Workers' Compensation benefits or assigned to limited duties as a result of an on-the-job injury to report for medical evaluation when the agency has identified an assignment or position (including the employee's regular position) which it reasonably believes the employee can perform consistent with the medical limitations of his/her condition. If the medical information (consistent with generally accepted medical principles and practice) indicates that the employee is capable of performing the duties identified, the agency will promptly return the employee to corresponding duty and pay status."

Inherent in this statement is the assumption that the agency (or agency medical officer) is aware of the medical documentation of the case and how to match the individual's abilities in light of his/her medical condition to his/her current position, to a light/limited/modified position or potential accommodations that may be needed. The employee should be aware of the following:

(i) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.110 (a) - Burden of Proof - "A claimant has the burden of establishing by the weight of reliable, probative and substantial evidence that the claimed condition and the disability, if any, was caused, aggravated, or adversely affected by the claimant's Federal employment. As a part of this burden, the claimant must specify the employment incident or the factors or conditions of employment to which the injury, disease or disability is attributed and must

submit rationalized medical opinion evidence, based upon a complete and accurate factual and medical background, showing causal relationship between the claimed condition and the Federal employment. The fact that a condition or disease manifests itself during a period of Federal employment by itself does not raise an inference that there is causal relationship between the two. Neither the fact that the condition or disease became manifest during a period of Federal employment, nor the belief of the claimant that the condition or disease was caused or aggravated by employment conditions or factors, is sufficient in itself to establish causal relationship."

(ii) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.123 - Employing agency's responsibilities in returning the employee to work. - "the employing agency is responsible for monitoring the employee's medical progress and duty status by obtaining periodic medical reports, in order to facilitate the "return to work" of the employee. "

(iii) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (a) Employee's obligation to return to work or to seek work when able. - "An employee whose disability has ceased and who is able to resume regular Federal employment has the obligation to do so."

(iv) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (b) Employee's obligation to return to work or to seek work when able. - "Where an agency has advised the employee of its willingness to accommodate, where possible, the employee's work limitations and restrictions, the employee shall so advise the attending physician and request the physician to specify the limitations and restrictions imposed by the injury. The employee has the responsibility to advise the employing agency immediately of the limitations and restrictions."

(v) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (c) Employee's obligation to return to work or to seek work when able. - "An employee who refuses or neglects to work after suitable work has been offered or secured for the employee has the burden of showing that such refusal or failure to work was reasonable or justified, and shall be provided with the opportunity to make such showing before a determination is made with respect to termination of entitlement to compensation as provided by 5 U.S.C. 8106 (c) (2) and paragraph (e) of this section."

(vi) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (e) Employee's obligation to return to work or to seek work when able - "A partially disabled employee who, without showing sufficient reason or justification, refuses to seek suitable work or refuses or neglects to work after suitable work has been offered to, procured by, or secured for the employee, is not entitled to further compensation for total

disability, partial disability, or permanent impairment as provided by sections 8105, 8106 and 8107 of the Act, but may remain entitled to medical benefits as provided by section 8103 of the Act."

1. Employee Actions:

a. Notify his/her supervisor as soon as possible of an on-the-job injury/illness and file the appropriate OWCP Forms with his/her supervisor and OWCP in accordance with published OWCP Guidelines. (For further information refer to FECA/OWCP Publications.)

b. Upon receipt of a "Notification Letter to the Employee" (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation) from his/her supervisor, the employee will provide medical documentation to the Agency's medical officer for review, by the due date (this is in addition to documentation that may be required by OWCP in support of the employee's claim).

c. Keep his/her supervisor (and their Agency) informed as to when s/he can return to his/her regular job or light/limited/modified duty, as soon as possible.

d. Provide his/her health care providers with a copy of his/her job description and requirements and the "Standard for Review of Medical Documentation" document advising health care providers of the medical documentation required and how it will be analyzed. The employee will advise his/her health care provider that his/her employer has an obligation to return the employee to work as soon as possible to a regular or modified job, as indicated by and in the medical documentation, in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.123 described above.

e. Keep his/her health care providers informed of the fact that their employer is willing to modify the individual's work environment by the substantive value of the medical documentation in accordance with generally accepted principles and practice of medicine, and in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 described above.

2. Management Actions:

a. When an employee notifies his/her supervisor of an on-the-job injury/illness, insure that appropriate care has been provided as indicated and advise the employee of the need to file the appropriate OWCP Forms with their supervisor and OWCP in accordance with published OWCP Guidelines, and forward the claim form to the PO (for further information, also refer to FECA/OWCP Publications).

b. When an employee has notified his/her supervisor of an anticipated medical absence connected to an OWCP claim, ensure other designated management personnel are informed of the absence.

c. Insure that OWCP claims are forwarded in accordance with appropriate FECA/OWCP guidelines. Upon notification by the supervisor and/or the employee of an OWCP claim, prepare and issue a Notification Letter to the Employee (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation). The procedures set forth in these guidelines require the employee to submit medical documentation to the agency medical officer (this is in addition to documentation that may be required by OWCP in support of the employee's claim) and to advise the employee that the absence will be approved only if:

(1) The medical documentation is received in accordance with the request by the due date, and

(2) Upon review by the agency medical officer, the criteria for a medically-based absence is met. (Utilizing the Standards for the Review of Medical Documentation and the Position Description).

(3) That in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 described above, the employee is obligated to advise the attending physician and request the physician to specify the limitations and restrictions imposed by the injury. The employee has the responsibility to advise the employing agency immediately of the limitations and restrictions. As such, the employee has an obligation to accept work that s/he is capable of performing.

(4) That in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 described above, the employing agency is responsible for monitoring the employee's medical progress and

duty status by obtaining periodic medical reports, in order to facilitate the "return to work" of the employee. As such the employer has an obligation to light/limited/modified duty where and when appropriate.

d. Forward to the agency medical officer:

(1) A signed copy (showing it was received by the employee) of the Notification Letter to the Employee (see Sample Letter #1).

(2) A copy of the employee's Position Description/ Physical Requirements of the Job and any other relevant information on what the employee is required to do as a part of the job.

(3) The Agency's Light, Limited or Modified Duty Policy.

(4) The name and phone number of the agency's representative that may be contacted by the agency medical officer for more information on the potential for Light, Limited or Modified Duty for the employee.

e. Assess the agency medical officer's report of the review of the medical documentation (or notice that medical documentation was not received by the due date) to determine whether or not there is medical justification to approve the absence.

f. If the absence <u>is approved</u>, determine the appropriate pay and benefit status and notify the supervisor and employee accordingly (see Sample Letter #3).

g. If the absence is <u>not approved</u>, issue a decision in writing to notify the employee:

(1) Of the determination and the reasons the determination was made, and institute appropriate administrative action.

(2) If the employee wishes to request <u>reconsideration</u>, <u>the employee must</u>:

(a) Request from management (in writing) within 48 hours of the receipt of the decision, a reconsideration. If management has reason to believe additional medical documentation exists, they may approve the employee's

request for a reconsideration. Management may provide copies of additional documents to the employee as needed by the employee (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation).

(b) Within 5 days of the receipt of the decision, ensure that the health care providers submit the medical documentation or other information not previously provided, that would warrant further consideration by the Agency's agency medical officer.

(c) In the event a request for reconsideration is approved, management will forward a copy of the authorizing letter and the due date of the medical information to the agency medical officer.

h. Notify the agency medical officer of the final administrative disposition for tracking purposes.

i. Forward a copy of all documentation received from the agency medical officer to OWCP for consideration in the employee's claim in accordance with 5 C.F.R. 339.304 - (d) Records and reports. – Agencies shall forward to the Office of Worker Compensation Programs (OWCP), Department of Labor, a copy of all medical documentation and reports of examinations of individuals who are receiving or have applied for injury compensation benefits including continuation of pay."

3. Agency Medical Officer Actions:

a. Review the medical documentation for its probative value to substantiate the employee's claim for a medically-based absence;

b. Inform management, in writing, if medical documentation was not received by the due date (see Sample Letter # 2);

c. At the request of management:

(1) Confer with the supervisor/department head;

(2) Contact the employee's physician(s).

d. Utilize the position description/physical requirements of the job, received medical documentation, the Standards of Review of the Medical Documentation, the agency's light/limited/modified duty policy and other relevant publications in determining the probative value of the information to substantiate that the individual can or cannot travel to and from work, be at work, and safely and efficiently carry out the assigned duties and tasks of the job.

e. Review the medical information with an understanding that the agency medical officers' responsibility is only to review the medical facts of the case and to communicate to the agency what the medical documentation supports that the individual can or cannot do.

f. Review the medical documentation in light of the abilities of the employee, and what the agency is willing to offer in the form of light/limited/modified duty. It is not the responsibility of the agency medical officer to state that the employee can or should return to work, but merely to state whether the medical information supports the employee's claim that they can or cannot travel to and from work, be at work, and safely and efficiently carry out the assigned duties and tasks of the job. A determination of whether the employee can or cannot work is to be made by the employee's attending physician and the employee.

g. Provide written review and analysis to management stating whether or not there is a medical basis upon which to recommend approval of the absence.

h. In cases that are requested and approved for reconsideration, review all documentation of the case that has been received for its probative value to substantiate the employee's claim.

g. Maintain a log on the status of receipt of medical documentation on each case for review: (see Sample Form).

4. Return to Work After Approved Medically-Based Absence

a. An employee's eligibility to return to the same or another position, must be consistent with both generally accepted principles and practice of medicine and the position description/physical requirements of the job.

b. When an employee's qualifications or suitability for employment have changed as a result of illness or injury on a permanent basis, the procedures for accommodation set forth in this document will apply.

C. Long-Term Disability Claims - The following guidelines are intended to follow the FECA, as amended, and not to supplant or replace any of OWCP's or OPM's purview, the agency's and the employee's responsibilities under FECA and or OPM Guidance Documents. Where and when appropriate, we encourage reference to pertinent literature. The following guidelines are intended to assist federal managers in utilizing the available FECA, OWCP, OPM - FPM guidance documents and other pertinent Federal Regulations and guidelines in the performance of his/her responsibilities in complying with the above statutes and regulations as they apply to the performance of the agency's mission, duties and responsibilities. As such, Federal managers may request assistance in the review of the medical documentation of a long-term disability claim (under FPM Chapter 810, Subchapter 810-39) prior to offering a medical examination. (See FPM Chapter 810 - Injury Compensation - 810-30 & 39 : subchapter 6-4-c. Medical Treatment and Evaluation; which refers the Agency's requests for medical examinations to 5 CFR 339.301 et seq.; which is:

> **"Medical Determinations Related to Employability,"** which states under 339.301 (b) "An agency may require an employee receiving workers' compensation benefits or assigned to limited duties as a result of an on-the-job injury to report for medical evaluation when the agency has identified an assignment or position (including the employee's regular position) which it reasonably believes the employee can perform consistent with the medical limitations of his/her condition. If the medical information (consistent with generally accepted medical principles and practice) indicates that the employee is capable of performing the duties identified, the agency will promptly return the employee to corresponding duty and pay status."

Inherent in this statement is the assumption that the agency (or their agency medical officer) is aware of the medical documentation of the case and how to match the individual's abilities in light of his/her medical condition to his/her current position, to a light/limited/modified position or potential accommodations that may be offered at the request of an employee.

According to Subchapter 8-1. INITIAL ACTIONS BY OWCP - "A long-term disability case is one where disability continues for at least 60 days. In such cases the employee is placed on the periodic roll, advised that OWCP will notify him/her when the medical evidence shows termination of total disability, and asked to provide information concerning previous education and work experience."

According to Subchapter 8-3. REEMPLOYMENT WITH THE AGENCY - "When the medical evidence shows that total disability has ended, the agency may consider re-employment even if notification from OWCP has not yet been received. The following procedures apply to all employees still on agency rolls, regardless of how long they have received compensation."

> "**a. Medical evidence**. In order to make an appropriate job~~,~~ offer the agency will need to obtain and evaluate medical evidence pertinent to the employee's work tolerance limitations (in some cases OWCP will provide this information). Medical information which is not more than 3 months old, and which addresses current medical limitations will usually be sufficient for the purposes of making a job offer. If the employee refuses to provide sufficient medical information for the agency to evaluate the propriety of a job offer, the agency should so notify OWCP."

The employee should be made aware of the following:

> (i) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.110 (a) - Burden of Proof - "A claimant has the burden of establishing by the weight of reliable, probative and substantial evidence that the claimed condition and the disability, if any, was caused, aggravated, or adversely affected by the claimant's Federal employment. As a part of this burden, the claimant must specify the employment incident or the factors or conditions of employment to which the injury, disease or disability is attributed and must submit rationalized medical opinion evidence, based upon a complete and accurate factual and medical background, showing causal relationship between the claimed condition and the Federal employment. The fact that a condition or disease manifests itself during a period of Federal employment by itself does not raise an inference that there is causal relationship between the two. Neither the fact that the condition or disease became manifest during a period of Federal employment, nor the belief of the claimant that the condition or disease was caused or aggravated by employment conditions or factors, is sufficient in itself to establish causal relationship."
>
> (ii) In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.123 - Employing agency's responsibilities in returning the employee to work. - "the employing agency is responsible for monitoring the employee's medical progress and duty status by obtaining periodic medical reports, in order to facilitate the "return to work" of the employee. "
>
> (iii)In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (a) Employee's obligation to return to work or to seek work when able. - "An employee whose disability has ceased and who is able to resume regular Federal employment has the obligation to do so."

(iv)In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (b) Employee's obligation to return to work or to seek work when able. - "Where an agency has advised the employee of its willingness to accommodate, where possible, the employee's work limitations and restrictions, the employee shall so advise the attending physician and request the physician to specify the limitations and restrictions imposed by the injury. The employee has the responsibility to advise the employing agency immediately of the limitations and restrictions."

(v)In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (c) Employee's obligation to return to work or to seek work when able. - "An employee who refuses or neglects to work after suitable work has been offered or secured for the employee has the burden of showing that such refusal or failure to work was reasonable or justified, and shall be provided with the opportunity to make such showing before a determination is made with respect to termination of entitlement to compensation as provided by 5 U.S.C. 8106 (c) (2) and paragraph (e) of this section."

(vi)In accordance with Federal Regulations 20 CFR, Part he opportunity to make such 10, SubPart B 10.124 - (e) Employee's obligation to return to work or to seek work when able - "A partially disabled employee who, without showing sufficient reason or justification, refuses to seek suitable work or refuses or neglects to work after suitable work has been offered to, procured by, or secured for the employee, is not entitled to further compensation for total disability, partial disability, or permanent impairment as provided by sections 8105, 8106 and 8107 of the Act, but may remain entitled to medical benefits as provided by section 8103 of the Act."

1. **Employee Actions:**

a. Advise his/her attending physician of his/her responsibility to return to work as soon as possible to the same or light/limited/modified job. The employee will file the appropriate OWCP Forms with his/her supervisor and OWCP in accordance with published OWCP Guidelines. (For further information refer to FECA/OWCP Publications).

b. Upon receipt of a "Notification Letter to the Employee" (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation) from the agency, the employee will provide medical documentation to the agency's agency medical officer for review, by the

due date (this is in addition to documentation that may be required by OWCP in support of the employee's claim).

c. Keep his/her supervisor (and the agency) informed on when they can return to his/her regular job or light/limited/modified duty, as soon as possible.

d. Provide his/her health care provider with a copy of his/her job description and requirements and the "Standard for Review of Medical Documentation" advising the health care providers of the medical documentation required and how it will be analyzed. The employee will advise his/her health care provider that his/her employer has an obligation to return the employee to work as soon as possible to his/her regular or a modified job, as indicated by and in the medical documentation, in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.123 described above.

e. Keep his/her health care providers informed of the fact that his/her employer is willing to modify the individual's work environment as indicated by the substantive value of the medical documentation in accordance with generally accepted principles and practice of medicine, and in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 described above.

2. Management Actions:

a. Insure that the OWCP claims are forwarded in accordance with appropriate FECA/OWCP guidelines. Periodically (quarterly or annually as indicated by the case), prepare and issue a Notification Letter to the Employee (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation), in accordance with the procedures set forth in these guidelines, to require the employee to submit medical documentation to the agency medical officer and to advise the employee that his/her continued absence from the workplace will be approved only if (this is in addition to documentation that may be required by OWCP in support of the employee's claim):

(1) The medical documentation is received in accordance with the request by the due date, and

(2) Upon review by the agency medical officer, the criteria for a medically-based absence are met. (Utilizing the Standards for the Review of Medical Documentation and the Position Description).

(3) That in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 described above, the employee is obligated to advise his/her attending physician and request the physician to specify the limitations and restrictions imposed by the injury. The employee has the responsibility to advise the employing agency immediately of the limitations and restrictions. As such the employee has an obligation to accept work that they are capable of doing.

(4) That in accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 described above, the employing agency is responsible for monitoring the employee's medical progress and duty status by obtaining periodic medical reports, in order to facilitate the "return to work" of the employee. As such the employer has an obligation to provide light/limited/modified duty where and when appropriate.

b. Forward to the agency medical officer:

(1) A signed copy (showing it was received by the employee) of the Notification Letter to the Employee (see Sample Letter #1.)

(2) A copy of the employee's Position Description/ Physical Requirements of the job and any other relevant information on what the employee is required to do as a part of the job.

(3) The Agency's Light, Limited or Modified Duty Policy.

(4) The name and phone number of the agencies representative that may be contacted by the agency medical officer for more information on the potential for Light, Limited or Modified Duty for the employee.

c. Assess the agency medical officer's report of the review of the medical documentation (or notice that medical documentation was not been received by the due date) to determine whether or not there is medical justification to continue to approve the absence.

d. If the absence is approved, determine the appropriate pay and benefit status and notify the employee accordingly (see Sample Letter #3.)

e. If the absence is not approved, issue a decision in writing to notify the employee:

(1) Of the determination and the reasons for which the determination was made and institute appropriate administrative action to return the employee to an appropriate job,

(2) If the employee wishes to request reconsideration, the employee must:

(a) Request from management (in writing) within 48 hours of the receipt of the decision, a reconsideration. If management has reason to believe additional medical documentation exists, they may approve the employee's request for a reconsideration. Management may provide copies of additional documents to the employee as needed by the employee (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation).

(b) Within 5 days of the receipt of the initial decision, ensure that their health care providers have submitted the medical documentation or other information not previously provided, that would warrant further consideration to the Agency's agency medical officer.

(c) In the event of a request for reconsideration is approved, management will forward a copy of the authorizing letter and the due date of the medical information to the agency medical officer.

f. Notify the employee that the request for continued absence has not been approved, and

h. Notify the agency medical officer of the final administrative disposition for tracking purposes.

i. Forward a copy of all documentation received from the agency medical officer and or the claimant/employee to OWCP for consideration in the employee's claim in accordance with:

(1) 5 C.F.R. 339.304 - (d) Records and reports. - "Agencies shall forward to the Office of Workers'' Compensation Programs (OWCP), Department of Labor, a copy of all medical documentation and reports of examinations of individuals who are receiving or have applied for injury compensation benefits including continuation of pay;" and,

(2) Subchapter 8. Long-Term Disability Claims - 8-3 e. - **Claimant's response**. - "The agency should provide a copy of the employee's response to OWCP when it is received. If he/she accepts the job, the agency should notify the OWCP as soon as possible of the date of return to duty in order to avoid overpayments of compensation."

3. Agency Medical Officer Actions:

a. Review the medical documentation for its probative value to substantiate the employee's claim for a long-term disability claim and re-employment in the employee's current, previous or a modified position;

b. Inform management, in writing, if medical documentation was not received by the due date; (see Sample Letter # 2)

c. At the request of management:

(1) Confer with the supervisor/department head;

(2) Contact the employee's physician(s).

d. Utilize the position description/physical requirements of the job, received medical documentation, the Standards of Review of the Medical Documentation, the agency's light/limited/modified duty policy and other relevant publications in determining the probative value of the information to substantiate that the individual can or cannot travel to and from work, be at work, and safely and efficiently carry out the assigned duties and tasks of the job. Review the medical information with an understanding that the agency medical officer's responsibility is only to review the medical facts of the case and to communicate to the agency what the medical

documentation supports that the individual can or cannot do. To review the medical documentation in light of the abilities of the employee, and what the agency is willing to offer in the form of light/limited/modified duty. It is not the responsibility of the agency medical officer to state that the employee can or should return to work, but merely to state whether the medical information supports the employee's claim that they can or cannot travel to and from work, be at work, and safely and efficiently carry out the assigned duties and tasks of the job. A determination of whether the employee can or cannot work is to be made by the employee's attending physician and the employee.

e. Provide written review and analysis to management stating whether or not there is a medical basis upon which to recommend approval of the absence.

f. In cases that are requested and approved for reconsideration, review all documentation of the case that has been received for its probative value to substantiate the employee's claim.

g. Maintain a log on the status of receipt of medical documentation on each case for review: (see Sample Form #1).

D. Workplace Accommodation - The following guidelines are intended to assist Federal managers in utilizing the Rehabilitation Act of 1973 and the Americans With Disabilities Act and other pertinent federal regulations and guidelines in the performance of his/her responsibilities in complying with the above statutes and regulations as they apply to the performance of the agency's mission, duties and responsibilities. As such, Federal managers may request assistance in the review of the medical documentation of a workplace accommodation request by an employee.

1. Employee Actions:

a. Submit in writing to the first line supervisor all requests for accommodation of the workplace, specifically stating what workplace alteration is necessary to perform the job.

b. Upon receipt of a "Notification Letter to the Employee" (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation) from the Agency, the employee will provide medical documentation to the Agency's agency medical officer for review, by the due date.

c. Provide his/her health care provider(s) with a copy of his/her job description and requirements and the "Standard for Review of Medical Documentation" advising the health care providers of the medical documentation required and how it will be analyzed.

2. Management Actions:

a. Advise the employee that his/her accommodation of the workplace will be approved only if:

(1) The medical documentation is received in accordance with the request by the due date, and

(2) Upon review by the agency medical officer, the criteria for a workplace accommodation are met.

b. Forward to the agency medical officer:

(1) A copy of the employee's request for workplace accommodation.

(2) A signed copy (showing it was received by the employee) of the "Notification Letter to the Employee" (see Sample Letter #1).

(3) A copy of the employee's Position Description/ Physical Requirements of the job and any other relevant information on what the employee is required to do as a part of the job.

(4) The Agency's Workplace Accommodation Policy.

(5) The name and phone number of the agencies representative that may be contacted by the Medical review officer for more information on the potential for a workplace accommodation for the employee.

c. Assess the agency medical officer's report of the review of the medical documentation (or notice that medical documentation was not been received by the due date) to determine whether or not there is medical justification to recommend a workplace accommodation.

d. If the medical documentation supports a workplace accommodation, facilitate the workplace accommodation request and recommendation (see Sample Letter #3). Note: The workplace accommodation must still meet the "reasonable" accommodation test; i.e. the accommodation, even if medically supported, must not result in an undue hardship for the agency.

e. If the medical documentation does not support the requested workplace accommodation, issue a decision in writing to notify the employee:

(1) Of the determination and the reasons for which the determination was made and institute appropriate administrative action to offer the employee the opportunity to return to his/her job,

(2) If the employee wishes to request reconsideration, the employee must:

(a) Request from management a reconsideration. If management has reason to believe additional medical documentation exists or that the employee and his/her medical provider has modified the request for accommodation, management may approve the employee's request for a reconsideration. Management may provide copies of additional documents to the employee as needed by the employee (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation).

(b) ensure that his/her health care providers have submitted the medical documentation or other information not previously provided, that would warrant further consideration to the Agency's agency medical officer.

(c) In the event of a request for reconsideration is approved, management will forward a copy of the authorizing letter and the due date of the medical information to the agency medical officer.

f. Notify the employee that the request a workplace accommodation has not been approved, and

g. Notify the agency medical officer of the final administrative disposition for tracking purposes.

3. Agency Medical Officer Actions:

a. Review the medical documentation for its probative value to substantiate the employee's request for a workplace accommodation and re-employment in the employee's current, previous or a modified position;

b. Inform management, in writing, if medical documentation was not received by the due date (see Sample Letter # 2);

c. At the request of management:

(1) Confer with the supervisor/department head;

(2) Contact the employee's physician(s).

d. Utilize the position description/physical requirements of the job, received medical documentation, the Standards of Review of the Medical Documentation , the agency's workplace accommodation policy and other relevant publications in determining the probative value of the information to substantiate that the individual can or cannot travel to and from work, be at work, and/or safely and efficiently carry out the assigned duties and tasks of the job with or without a workplace accommodation. Review the medical information with an understanding that the agency medical officer's responsibility is only to review the medical facts of the case and to communicate to the agency what the medical documentation supports the employee can or cannot do and how a workplace accommodation will or will not facilitate the employee's performance of the job. To review the medical documentation in light of the abilities of the employee, and what the agency is willing to offer in the form of a workplace accommodation. It is not the responsibility of the agency medical officer to state that the employee can or should return to work with or without accommodation. The agency medical officer's responsibility is to state whether the medical information supports the employee's request for a workplace accommodation. The agency medical officer's review of the medical documentation should concentrate on whether the accommodation will facilitate the employee's ability to travel to and from work, be at work, and/or safely and efficiently carry out the assigned duties and tasks of the job. A determination of whether the employee can or cannot work is to be made by the employee's attending physician and the employee.

e. Provide written review and analysis to management stating whether or not there is a medical basis upon which to recommend approval of the workplace accommodation.

f. In cases that are requested and approved for reconsideration, review all documentation of the case that has been received for its probative value to substantiate the employee's request for a workplace accommodation.

g. Maintain a log on the status of receipt of medical documentation on each case for review (see Sample Form #1).

E. Fitness For Duty Examinations - The following guidelines are to assist Federal managers in determining if a Federal employee is capable of performing his/her job. In accordance with, **5 C.F.R. 339.301 - Examination authority. (a):**

"An agency may require an individual who has applied for or occupies a position which has physical/medical standards for selection or retention, or which is part of an established program of medical surveillance related to occupational or environmental exposure or demands, to report for a medical evaluation:

(1) Prior to appointment or selection (including re-employment on the basis of full or partial recovery from a medical condition);
(2) On a regularly recurring, periodic basis; and
(3) Whenever there is a direct question about an employee's continued capacity to meet the physical or medical requirements of the position."

In accordance with, **5 C.F.R. 339.301 - Examination authority. (b):**

"An agency may require an employee receiving workers' compensation benefits or assigned to limited duties as a result of an on-the-job injury to report for medical evaluation when the agency has identified an assignment or position (including the employee's regular position) which it reasonably believes the employee can perform consistent with the medical limitations of his/her condition. If the medical information (consistent with generally accepted medical principles and practice) indicates that the employee is capable of performing the duties identified, the agency will promptly return the employee to corresponding duty and pay status."

1. Employee Actions:

a. Report for a medical evaluation.

b. If s/he desires, submit medical documentation from his/her personal physician to the Examining Physician and the Agency's agency medical officer who will review and consider in the medical evaluation.

c. Insure that his/her personal physician submits medical documentation to the Examining Physician and the Agency's medical officer by the date of the medical examination. The employee will provide his/her personal physician and the Examining Physician with a Consent for Release of Confidential Medical Information form and insure that a signed release form accompanies the medical documentation sent to the Agency's medical officer by the due date.

2. Management Actions:

a. Advise the employee, in writing, of the reasons for ordering the examination and the consequences of failure to cooperate.

b. Forward to the Examining Physician:

(1) A copy of any approved medical evaluation protocol.

(2) Any applicable standards and requirements for the position, and/or detailed description of the duties of the position, including critical elements.

(3) The name and phone number of the agency's representative (including the Agency's medical officer) that may be contacted by the Examining Physician for more information on the employee's position.

(4) Instructions to forward the results of the medical examination to the Agency's medical officer for review.

c. Forward to the agency medical officer:

(1) A copy of the letter to the employee to report for a medical examination.

(2) A copy of the employee's Position Description/ Physical Requirements of the job and any other relevant information on what the employee is required to do as a part of the job.

(3) The name and phone number of the agencies representative that may be contacted by the agency medical officer for more information on the employee's job.

d. Assess the agency medical officer's report of the review of the medical documentation (or notice that medical documentation was not been received by the due date) and take appropriate administrative action.

e. If the medical documentation supports a medically-based absence or the need for a workplace accommodation, facilitate the request and recommendation as indicated (see Sample Letter #3).

f. If the medical documentation does not support a medically-based absence or the need for a workplace accommodation, issue a decision in writing to notify the employee:

(1) Of the determination and the reasons for which the determination was made and institute appropriate administrative action to offer the employee the opportunity to return to his/her job,

(2) If the employee wishes to request reconsideration, the employee must:

(a) Request from management a reconsideration. If management has reason to believe additional medical documentation exists or that the employee and his/her medical provider has modified the request for accommodation, management may approve the employee's request for a reconsideration. Management may provide copies of additional documents to the employee as needed by the employee (see Sample Letters #1 and #4, Consent for the Release of Confidential Medical Information Form, and the Standards for Review of Medical Documentation).

(b) ensure that his/her health care providers have submitted the medical documentation or other information not previously provided, that would warrant further consideration to the Agency's medical officer.

(c) In the event of a request for reconsideration is approved, management will forward a copy of the

authorizing letter and the due date of the medical information to the agency medical officer.

g. Notify the employee of the results of the medical examination, and

h. Notify the agency medical officer of the final administrative disposition for tracking purposes.

3. Agency Medical Officer Actions:

a. Review the medical documentation for its probative value to substantiate the employee's ability to perform his/her job;

b. Inform management, in writing, if medical documentation was not received by the due date (see Sample Letter # 2);

c. At the request of management:

(1) Confer with the supervisor/department head;

(2) Contact the employee's physician(s).

d. Utilize the position description/physical requirements of the job, received medical documentation, the Standards of Review of the Medical Documentation , the agency's workplace accommodation policy and other relevant publications in determining the probative value of the information to substantiate that the individual can or cannot travel to and from work, be at work, and/or safely and efficiently carry out the assigned duties and tasks of the job with or without a workplace accommodation. Review the medical information with an understanding that the agency medical officer's responsibility is only to review the medical facts of the case and to communicate to the agency what the medical documentation supports the employee can or cannot do and how a workplace accommodation will or will not facilitate the employee's performance of the job. To review the medical documentation in light of the abilities of the employee, and what the agency is willing to offer in the form of a workplace accommodation. It is not the responsibility of the agency medical officer to state that the employee can or should return to work with or without accommodation. A determination of whether the employee can or cannot work is to be made by the employee's attending physician and the employee.

e. Provide written review and analysis of the medical documentation to management.

f. In cases that are requested and approved for reconsideration, review all documentation of the case that has been received for its probative value to substantiate the employee's request for a workplace accommodation.

g. Maintain a log on the status of receipt of medical documentation on each case for review: (see Sample Form #1).

SAMPLE LETTERS
for
Case Review of the Medical Documentation

Sample Letter #1: (Notification Letter to Employee)
(The First Letter That The Agency Sends To The Employee)

Date:

From: [*manager/agency*]

To: [*employee name/organizational unit*]

Subj.: Request for Approval of [*an Absence Due to Sick Leave*] [*an Absence Due to a Workers' Compensation Claim*] [*a Workplace Accommodation*]

This letter and the attached materials are provided to assist you with your request for [*an absence due to sick leave*] [*an absence due to a Workers' Compensation Claim*] [*a request for a workplace accommodation*] due to an [*illness*] [*injury*] on [*date(s)*]. The U.S. Department of the Interior (DOI) provides for medically-based absence from the workplace consistent with the applicable sections of the Federal Personnel Manual, the Rehabilitation Act of 1973, and the Federal Employee Compensation Act.

In order for us to monitor and approve your absence, DOI requests that you provide medical documentation from your health care provider(s). The specific medical information must be reviewed by our agency medical officer.

You are <u>not</u> being asked to undergo a new medical examination at this time. Attached please find a "Consent for Release of Confidential Medical Information" form for you to provide to each of the health care providers involved in the care of your medical condition. Please request that each provider send photocopies of your medical records and the consent form (see Attachment 1) to the DOI medical officer. We are enclosing sample forms which may be used for this purpose. In addition, we have attached a copy of the "Standard For Review Of Medical Documentation" (see Attachment 2) so that you and your health care providers will understand the guidelines and criteria that are used by our agency medical officer in reviewing your medical documentation. Narrative descriptions or opinions concerning your medical condition are <u>not</u> substitutes for photocopies of the actual medical records. The information will be reviewed only by authorized personnel.

It is <u>your responsibility</u> to ensure that your health care providers submit your medical documentation within 7 calendar days of the date of this letter. Our decision regarding continuation of pay will be based on the information we have at that time.

Please have your health care providers forward the medical information in a sealed envelope marked "Medical Confidential Information" directly to our agency medical officer at the following address:

[*name and address of the agency medical officer*]

We will notify you as soon as we can regarding the status of this review. If your request is approved, you will be notified in writing. If your request is not approved, you will be notified in writing and appropriate administrative action will be taken.

In order to process your request in a timely manner, please ensure that all required information is submitted by [*specify the due date-- approximately 5 days from the date of this letter*] by your health care providers. Please remember that it is your responsibility to follow up with <u>your</u> health care providers to see that they have submitted the records you requested.

If you have any questions, please do not hesitate to call me at [*phone #*].

Sincerely,

[*name of supervisor*]

cc: [*agency medical officer*]

Sample Letter: #2
(This a sample letter an agency will receive from the agency medical officer after a review of the medical documentation.)

Date:

To: Personnel Officer, [*DOI agency/program/office*]

From: [*name of agency medical officer*], M.D.

Subj: Review of Medical Documentation - [*name of employee being reviewed*]

As you requested, I have reviewed the medical documentation submitted by [*name of employee*]'s health care providers in support of her request for approval of her [*sick leave*] [*absence due to a workers' compensation claim*] [*workplace accommodation*]. The information submitted included:

- a copy of clinical records from the office of Dr. [*name*], with entries dated [*dates of services provided by the physician*], accompanied by:

- [*list any additional documents supporting the physician's records, such as laboratory results, hospital discharge summaries, etc.*]

[*narrative summary of the sequence of significant medical events and supporting documents, and their relationship to the employee's request or claim, including an assessment of the records' support or non-support for the request or claim*]

Sincerely,

[*name of agency medical officer*], M.D.

Sample Letter: #3
(The Second Letter The Agency Sends To The Employee)

Date:

From: [*agency personnel officer*]

To: [*employee*]

Subj: Request for Approval of Your [*Sick Leave*] [*Workplace Accommodation*] [*Claim*]

Our agency medical officer has reviewed the documentation your health care providers submitted on your behalf for approval of your [*sick leave*] [*workplace accommodation*] [*claim*]. The documentation included medical records from the office(s) of Dr. [*physician(s)*] dated [*date(s)*].

The agency medical officer reports that a review of the medical documentation indicates that [*specify as appropriate*].

If you wish to request reconsideration of this decision, notify me in writing by the close of business on [*date 48 hours from date above*] of your intention to do so. To request reconsideration, you must provide additional medical documentation for review by our agency medical officer. This must be submitted no later than the close of business on [*specify 1 week from date above*].

It is <u>not</u> necessary for you to undergo a new medical examination at this time. Enclosed with this letter are sample letters you may use to request the required medical information from your health care provider(s). In addition, we have enclosed a copy of the "Standard for Review of Medical Documentation" so that you and your health care providers will understand the criteria used in reviewing medical information. Please ask each provider to send a photocopy of your records in a sealed envelope marked "Medical Confidential" and explain that photocopies of the actual medical records are required. Narrative summaries concerning your condition are not a substitute for a photocopy of your medical records. The information will be reviewed only by authorized personnel.

We will approve your [*sick leave*] [*workplace accommodation*] [*claim*] only if the medical documentation supports a conclusion that your medical condition precludes travel to and from work, being at work or assignment of appropriate tasks or duties. Remember, we are willing to assist you and your physician with light/limited/modified duty assignments.

Please send the information directly to:

[*name and address of medical reviewer*], M.D.

You should ensure that the information arrives at Dr. [*name*]'s office no later than the close of business on [*specify date 7 days from the above date*]. Dr. [*names*]'s opinion will be based on medical information available at that time.

We will notify you as soon as we can regarding the results of this review. Otherwise, we will expect you at your assigned shift on [*specify date*].

If you have any questions, please call me at [*phone*].

Sincerely,

[*name of personnel officer*]

Enclosures:

1. Consent for Release of Confidential Medical Information, to be signed and dated by employee
2. Health Care Provider Letter

cc. [*name of agency medical officer*], M.D.

Sample Letter #4: Health Care Provider (Clinic, Hospital, or HMO)
(Revise this form as appropriate, and make several copies along with the "Consent for Release of Confidential Medical Information" form for the employee.)

Date:

To: _____

_____

_____

_____

Dear [*Dr./Mr./Ms. -- name of physician or medical records person*]:

Please forward photocopies of my medical record to the doctor listed below. Narrative Summaries concerning my condition are not required and are not substitutes for a photocopy of the medical records. Also include copies of clinical notes from all office visits, telephone consultations, any reports of consultations by other physicians, x-rays reports, special tests, physical therapy, diagnostic procedures and laboratory tests from your office records.

My full name is _____

Date of Birth (DOB) _____

Social Security Number (SSN) is _____

Attached is a signed authorization for the release of the medical information for your files. Please make a photocopy (both sides) of the "Consent for Release of Confidential Medical Information" form and enclose it with the photocopies of my medical records to the Medical review officer listed below:

[*name of agency medical officer*], M.D.
[*address*]

In order to avoid or minimize interruption of my pay, it is necessary that my records arrive

at the agency medical officer's office no later than _____(date).
Please RUSH MY REQUEST.

Thank you for your prompt attention. If there are any problems with this request, please call me at home [*home phone number*] or work [*work phone number*].

Sincerely,

_____
Signature of Employee Date

SAMPLE MEDICAL DOCUMENTATION REVIEW FORM
for
Case Reviews

Agency/Program Office _____ Date _____

Employee _____ Case Type _____

Dates of Benefit or Consideration _____

	Requested	Recommended	Approved	Actual
Start				
End				

Employee's Request

Date _____

Benefit or Consideration Requested _____

Employer's Documentation Request

Date Sent _____ Due Date _____

Burden of Proof _____

Medical Documentation

_____
_____
_____
_____
_____
_____
_____
_____
_____

Standard for Review of Medical Documentation

Review of medical documentation is an assessment by, or in coordination with, a physician to ensure that the following criteria are met:

1. The diagnosis or clinical impression is justified in accordance with established diagnostic criteria, and

2. The conclusions and recommendations are consistent with generally accepted medical principles and practice.

The following kinds of information are taken into account, as appropriate, when medical records are reviewed:

1. The history of the specific medical condition(s), including reference to the circumstances of onset, findings from previous evaluations, treatment, and responses to treatment;

2. Clinical findings from the most recent medical evaluation, including any of the following that have been obtained: results of physical examination, laboratory tests, x-rays, EKG's and other special evaluations or diagnostic procedures; and, in the case of psychiatric disease, the results of mental status evaluation and psychological testing;

3. Assessment of the current clinical status and plans for future treatment;

4. Diagnosis;

5. The expected date of full or partial recovery;

6. Impact of the medical condition on life activities both on and off the job;

The following is the analysis methodology of the medical documentation:

7. A medical basis to support a conclusion that the medical condition has, or has not, become static or well stabilized;

8. A medical basis to support a conclusion that indicates the likelihood that the individual is, or is not, expected to experience sudden or subtle incapacitation as a result of the medical condition;

9. A medical basis to support a conclusion that duty restrictions or accommodations

are, or are not, warranted, and if they are, an explanation of their risk-avoiding or therapeutic value and the nature of any similar restrictions or accommodations recommended for non-work related activities; and

10. A medical basis to support a conclusion that indicates the likelihood that the individual is, or is not, expected to suffer injury or harm by carrying out, with or without accommodation, any of the tasks or duties of a position to which the individual is assigned or for which the individual is qualified.

DEFINITIONS USED IN THIS GUIDE

The following definitions are from:

A. 5 C.F.R. 339 - Medical Determinations Related to Employability

1. "**Medical condition**" means health impairment which results from injury or disease, including psychiatric disease.

2. "**Medical documentation"** or "**documentation of a medical condition**" means a statement which provides the following information, or the parts identified by the agency as necessary and relevant:

   a. The history of the specific medical condition(s), including references to findings from previous examinations, treatment, and responses to treatment;

   b. Clinical findings from the most recent medical evaluation, including any of the following any of the following which have been obtained: findings of physical examination; results of laboratory tests; x-rays; EKG's and other special evaluations or diagnostic procedures; and, in the case of psychiatric disease, the findings of a mental status examination and the results of psychological tests;

   c. Assessment of the current clinical status and plans for future treatment;

   d. Diagnosis;

   e. An estimate of the expected date of full or partial recovery;

   f. An explanation of the impact of the medical condition on life activities both on and off the job;

   g. Narrative explanation of the medical basis for any conclusion that the medical condition has or has not become static or well stabilized;

   h. Narrative explanation of the medical basis for any conclusion which indicates the likelihood that the individual is, or is not, expected to experience sudden or subtle incapacitation as a result of the medical condition;

   i. Narrative explanation of the medical basis for any conclusion that duty restrictions or accommodations are or are not warranted and, if they are, an explanation of their therapeutic or risk avoiding value and the nature of any similar restrictions or accommodations recommended for non-work-related activities; and

j. Narrative explanation of the medical basis for any conclusion which indicates the likelihood that the individual is, or is not, expected to suffer injury or harm by carrying out, with or without accommodation, the tasks or duties of a position for which he/she is assigned or qualified.

3. "**Medical specialist**" means any physician who is board-certified in a medical specialty, or a physician serving on active duty in the uniformed services who is board-eligible and who is designated by the uniformed service to perform examinations under this part.

4. "**Physician**" means a licensed Doctor of Medicine or Doctor of Osteopathy, or a physician who is serving on active duty in the uniformed services and is designated by uniformed service to conduct examinations under this part.

5. "**Review of medical documentation**" means assessment of medical documentation by, or in coordination with, a physician to ensure that the following criteria are met:

a. The diagnosis or clinical impression is justified in accordance with established diagnostic criteria, and

b. The conclusions and recommendations are not inconsistent with generally accepted medical principles and practice.

6. "**Static or well stabilized medical condition**" means a medical condition which is not likely to change:

a. As a consequence of the natural progression of the condition;

b. Specifically as a result of the normal aging process; or

c. In response to the work environment or the work itself.

7. "**Subtle incapacitation**" means gradual, initially inapparent impairment of physical or mental function which is likely to result in a performance failure, whether reversible or not.

8. "**Sudden incapacitation**" means abrupt onset of loss of control of physical or mental function.

B. 5 C.F.R. 630.403 - Supporting evidence.

1. An agency may grant sick leave only when supported by evidence administratively acceptable. Regardless of the duration of the absence, an agency may consider an employee's certification as to the reason for his absences evidence administratively acceptable. However, for an absence in excess of 3 workdays, or for a lesser period when determined necessary by an agency, the agency may also require a medical certificate, or other administratively acceptable evidence as to the reason for the absence.

C. 5 C.F.R. 831.502 - Disability Retirement.

1. "**Commuting area**", as used in this section, means the geographic area that usually constitutes one area for employment purposes. It includes any population center (or two or more neighboring ones) and the surrounding localities in which people live and reasonably can be expected to travel back and forth daily in their usual employment.

2. "**Disabled**" and "**disability**" mean unable or inability to render useful and efficient service because of disease or injury (a) in the employee's current position; or (b) in a vacant position in the same agency at the same grade or pay level for which the individual is qualified for reassignment. For the purpose of the preceding sentence, an employee of the United States Postal Service shall be considered not qualified for a reassignment if the reassignment is to a position in a different craft or is inconsistent with the terms of a collective bargaining agreement covering the employee.

3. "**Examination**" and " **reexamination** " mean an evaluation of evidentiary material related to the question of disability. Unless OPM exercises its choice of physician, the cost of providing medical documentation rests with the employee or disability annuitant, who will provide any information necessary to OPM's evaluation.

4. "**Income from wages and/or self-employment**" means money or property received by a disability annuitant as consideration for or in reward of personal services or a work product, or as a profit from a business (sole proprietorship, partnership, or corporation) wholly or partly owned by the disability annuitant and which the disability annuitant has an active role in the management thereof; and also includes, for a disability annuitant re-employed by the Federal Government, any amount offset or deducted under the provisions of 5 U.S.C. 8344. Income is deemed earned in the calendar year in which it is received.

5. "**Medical documentation**," "**documentation of a medical condition**," and

"**physician**" have the same meaning given these terms in § 339.102. "**Medical documentation**" submitted under this part shall be submitted from a physician.

6. "**Qualified for reassignment**" means able to meet the minimum requirements for the grade and series of the vacant position in question.

7. "**Useful and efficient service**" means

a. either acceptable performance of the critical or essential elements of the position or the ability to perform at that level; and

b. satisfactory conduct and attendance.

8. "**Proof of Claim**." No claim for disability retirement shall be allowed unless OPM determines that the claim should be granted based upon documentation provided by the applicant or the agency which demonstrates the following:

a. A deficiency in service with respect to performance, conduct or attendance, or in the absence of any actual service deficiency, a showing that the medical condition is incompatible with either useful service or retention in the position;

b. A medical condition which is defined as a disease or injury;

c. A relationship between the service deficiency and the medical condition such that the medical condition has caused the service deficiency;

d. The duration of the medical condition, past and expected, and a showing that the condition, in all probability, will continue for at least a year;

e. The applicant became disabled while serving under the Civil Service Retirement System;

f. The agency's inability to make reasonable accommodation to the employee's medical condition; and

g. The absence of another available position, within the employing agency and commuting area, at the same grade or pay level and tenure, for which the employee is qualified for reassignment. For their part, placement in the agency is limited to those facilities in the commuting area that are serviced by the same appointing authority.

D. Federal Regulations 20 CFR, Part 10 - Employees' Benefits Claims for Compensation Under the Federal Employees' Compensation Act (FECA), as amended as of June 1, 1987.

1. In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.110 (a) - **Burden of Proof** - "A claimant has the burden of establishing by the weight of reliable, probative and substantial evidence that the claimed condition and the disability, if any, was caused, aggravated, or adversely affected by the claimant's Federal employment. As a part of this burden, the claimant must specify the employment incident or the factors or conditions of employment to which the injury, disease or disability is attributed and must submit rationalized medical opinion evidence, based upon a complete and accurate factual and medical background, showing causal relationship between the claimed condition and the Federal employment. The fact that a condition or disease manifests itself during a period of Federal employment by itself does not raise an inference that there is causal relationship between the two. Neither the fact that the condition or disease became manifest during a period of Federal employment, nor the belief of the claimant that the condition or disease was caused or aggravated by employment conditions or factors, is sufficient in itself to establish causal relationship."

2. In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.123 - **Employing agency's responsibilities in returning the employee to work.** - "the employing agency is responsible for monitoring the employee's medical progress and duty status by obtaining periodic medical reports, in order to facilitate the "return to work" of the employee."

3. In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (a) **Employee's obligation to return to work or to seek work when able.** - "An employee whose disability has ceased and who is able to resume regular Federal employment has the obligation to do so."

4. In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (b) **Employee's obligation to return to work or to seek work when able**. - "Where an agency has advised the employee of its willingness to accommodate, where possible, the employee's work limitations and restrictions, the employee shall so advise the attending physician and request the physician to specify the limitations and restrictions imposed by the injury. The employee has the responsibility to advise the employing agency immediately of the limitations and restrictions."

5. In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (c) **Employee's obligation to return to work or to seek work when able**. - "An

employee who refuses or neglects to work after suitable work has been offered or secured for the employee has the burden of showing that such refusal or failure to work was reasonable or justified, and shall be provided with the opportunity to make such showing before a determination is made with respect to termination of entitlement to compensation as provided by 5 U.S.C. 8106 (c) (2) and paragraph (e) of this section."

6. In accordance with Federal Regulations 20 CFR, Part 10, SubPart B 10.124 - (e) **Employee's obligation to return to work or to seek work when able** - "A partially disabled employee who, without showing sufficient reason or justification, refuses to seek suitable work or refuses or neglects to work after suitable work has been offered to, procured by, or secured for the employee, is not entitled to further compensation for total disability, partial disability, or permanent impairment as provided by sections 8105, 8106 and 8107 of the Act, but may remain entitled to medical benefits as provided by section 8103 of the Act."

E. Americans With Disabilities Act

The following are excerpts from the Equal Employment Opportunity Commission's publication on: "A Technical Assistance Manual on the Employment Provisions (Title I) of the Americans With Disabilities Act"

1. Under the ADA, an individual with a disability is a person who has:

   a. a physical or mental **impairment** that **substantially limits** one or more major life activities;

   b. a **record** of such an impairment; or

   c. is **regarded as** having such an impairment.

2. A **physical impairment** is defined by the ADA as:

   "[a]ny physiological disorder, or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genito-urinary, hemic and lymphatic, skin, and endocrine."

3. A **mental impairment** is defined by the ADA as:

   "[a]ny mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities."

4. **Major Life Activities**:

To be a disability covered by the ADA, an impairment must substantially limit one or more major life activities. These are activities that an average person can perform with little or no difficulty. Examples are:

- walking
- speaking
- breathing
- performing manual tasks
- working
- standing
- reading
- seeing
- hearing
- learning
- caring for oneself
- sitting
- lifting

5. **Substantially Limits**:

An impairment is only a "disability" under the ADA if it substantially limits one or more major life activities. An individual must be unable to perform, or be significantly limited in the ability to perform, an activity compared to an average person in the general population.

The Regulations provide three factors to consider in determining whether a person's impairment substantially limits a major life activity.

- its nature and severity;
- how long it will last or is expected to last;
- its permanent or long term impact, or expected impact.

a. **Temporary Impairments**:

Employers frequently ask whether "temporary disabilities" are covered by the ADA. How long an impairment lasts is a factor to be considered, but does not by itself determine whether a person has a disability under the ADA. The basis question is whether an impairment "substantially limits" one or more major life activities. This question is answered by looking at the extent, duration, and impact of the impairment. Temporary, non-chronic impairments that do not last for a long time and that have little or no long term impact usually are not disabilities.

b. **Substantially Limited in Working**:

It is not necessary to consider if a person is substantially limited in the major life activity of "working" if the person is substantially limited in any other major life activity.

In general, a person will not be considered to be substantially limited in performing only a particular job for one employer, or unable to perform a very specialized job in a particular field.

But a person need not be totally unable to work in order to be considered substantially limited in working. The person must be significantly restricted in the ability to perform either a class of jobs or a broad range of jobs in various classes, compared to an average person with similar training, skills, and abilities.

The regulations provide factors to help determine whether a person is substantially limited in working. These include:

- the **type of job** from which the individual has been disqualified because of the impairment;
- the **geographical area** in which the individual has been disqualified because of the impairment;
- the **number and types of jobs using similar training, knowledge, skill, or abilities** from which the individual is disqualified within the geographical area, and/or.
- the **number and types of other jobs in the area that do not involve similar training, knowledge, skill, or abilities** from which the individual also is disqualified because of the impairment.

c. **Specific Exclusions**:

A person **who currently illegally uses drugs is not protected by the ADA**, as an "individual with a disability", when an employer acts on the basis of such use. However, former drug addicts who have been successfully rehabilitated may be protected by the Act.

Homosexuality and **bisexuality** are not impairments and therefore are not disabilities covered by the ADA. The Act also states that the term "disability" does not include the following sexual and behavioral disorders:

- o transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments, or other sexual behavior disorders;
- o compulsive gambling, kleptomania, or pyromania; or
- o psychoactive substance use disorders resulting from current illegal use of drugs.

6. **Qualified Individual with a Disability**: as a person with a disability who:

"satisfies the requisite skill, experience, education and other job-related requirements of the employment position such individual holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position."

There are two basis steps in determining whether an individual is "qualified" under the ADA:

a. Determine if the individual meets necessary prerequisites for the job, such as:

- o education;
- o work experience;
- o training;
- o skills;
- o licenses;
- o certificates;
- o other job-related requirements, such as good judgment or ability to work with other people.

This first step is sometimes referred to as determining if an individual with a disability is "otherwise qualified." Note, however, that if an individual meets all job prerequisites except those that s/he cannot meet because of a disability, and alleges discrimination because s/he is "otherwise qualified" for a job, the employer would have to show that the requirement that screened out this person is "job related and consistent with business necessity."

b. Determine if the individual can perform the <u>essential functions</u> of the job, <u>with or without reasonable accommodation</u>. This second step, a key aspect of nondiscrimination under the ADA, has two parts:

- Identifying "essential functions of the job"; and
- considering whether the person with a disability can perform these functions, unaided or with a "reasonable accommodation."

The ADA requires an employer to focus on the essential functions of a job to determine whether a person with a disability is qualified. This is an important nondiscrimination requirement. Many people with disabilities who can perform essential job functions are denied employment because they cannot do things that are only marginal to the job.

Discretionary Medical Services - Periodic Health Exams Attachment - C 1

PERIODIC HEALTH EXAMS

When determined by management to be appropriate, periodic health exam (PHE) may be provided to those employees who wish to take advantage of this type of preventive health service. The exam is based on preventive health practices of proven value in detecting medical conditions at a time when intervention is most likely to be beneficial. It should be considered strictly voluntary, and the results of the examination are to remain confidential (i.e., no results or summary information are forwarded to the employer for review). The recommended frequency of the PHE is once every three to five years, though this may be adjusted depending on age or local management decisions.

Forms used in support of a PHE will depend on the provider of services. Most established, organizational medical service providers (e.g., a private or federal occupational health clinic) have standard forms for this purpose. These may be specific to that program, or generic forms, such as the DOI Standard Medical History and Examination Form (see Tab 12, Attachment D 3). If PHE services are obtained from private providers, it is suggested that the DOI form be used.

As noted in Tab 7 of this *Handbook*, the *Guide to Clinical Preventive Services* (Second Edition, 1996) serves as the best current summary of preventive services that have been shown through scientific study to be beneficial when used as a screening tool for the general public. While services may be provided that go beyond those recommended by the *Guide*, this should be done with the knowledge that such extra services may not be based on solid evidence of benefit. Some of the basic PHE elements that many physicians and other health care providers may offer include:

Medical History and Review of Systems
Vital Signs (Height, Weight, Blood Pressure)
Vision Screening
(Near and Far Vision, corrected and uncorrected; Peripheral Vision; Depth Perception; Color Vision)
Tetanus-diphtheria vaccination (once every ten years)
Cardiac Risk Blood Profile
(Total Cholesterol, HDL and LDL Cholesterol, and Triglycerides)
Health Risk Appraisal (HRA)
(One of several standardized assessments of health risk behaviors
Physical Examination
(Targeted to the age of the individual, and based on the Medical History, Review of Systems, the Cardiac Risk Blood Profile, and the HRA)
Age-specific Counseling, Instruction, and Referral, as Indicated

Plus other tests that may be recommended, or appear to be indicated at the time of the exam

The PHE frequently is conducted as a two step process. In the initial visit, the individual is given the medical history to complete; vital signs are obtained; vision screening is conducted; blood is drawn, centrifuged, separated, and sent for analysis; vaccination is done (if needed); and the HRA is completed. On a subsequent visit, the physical examination is done, and appropriate counseling and guidance for follow up are provided.

Medical records are maintained for the individual at the site of the examination, and a copy is made available to the individual to share with his/her personal physician. No further medical reports or summaries are prepared or distributed to agency representatives. Records indicating that services were provided are to be maintained in order to support billing statements and reports of utilization of the service.

ROUTINE OCCUPATIONAL HEALTH CENTER SERVICES

If the decision is made to provide routine occupational health center services for local DOI employees as an established, organized discretionary program, those services should be oriented towards efficiency for the agency and the employees, minimizing time that an employee must spend away from work because of minor health care problems, and responding in a timely and appropriate manner to urgent medical conditions. These routine services generally are in addition to other specified services that may be chosen (e.g., see Attachment C 1) or required (e.g., see Attachment D 1) for inclusion in the occupational health program, and serve to provide a more immediate benefit when they are utilized.

Services recommended for inclusion as routine occupational health center services include:

- **Walk-in and first response care**
  This service allows employees to seek and receive treatment or referral for medical problems that occur or become worse during working hours. Most facilities or arrangements for occupational health services will not be able to provide emergency medical care such as that found in a hospital emergency room. The intent of this service is not to provide emergency diagnosis and treatment, but rather to provide an initial assessment and either treatment or referral to a higher level emergency facility. **An employee's supervisor must always be notified if the employee visits the health center.**

  Generally provided by an occupational health nurse, walk-in and first response care may include follow-up evaluations for certain findings from medical surveillance or clearance examinations (e.g., blood pressure checks, repeat blood tests), treatment for minor injuries or illnesses (e.g., cuts, scrapes, or headaches), short term bed rest when it becomes necessary (e.g., for an employee recovering from an illness or injury), and assessment and referral employees with true emergency conditions (e.g., heart attack, major injury). Preventive health services may also be provided, including basic disease screenings (e.g., blood pressure checks) and health education services to encourage the adoption or maintenance of a health lifestyle.

- **Interventions Prescribed by an Employee's Physician**
  In order to save time for an employee, the occupational health center nurse often is able to provide medications or minor treatments under orders provided by the employee's personal physician. This may include periodic bed rest, blood pressure

monitoring, blood sugar monitoring, administration of medications (e.g., allergy shots, hormones, special vaccines or antibiotics), and dressing changes (e.g., for healing wounds that are under the physician's care).

- **Immunizations**
  Certain immunizations are particularly valuable in preventing disease for individuals or among groups of employees. Administration of the immunizations in the occupational health center minimizes time away from work for the employee, and facilitates the provision of services that benefit the work force in general. Such immunizations often include influenza and tetanus/diphtheria.

- **Health Counseling**
  In order to maximize the opportunity for a healthy work force, individualized health counseling may be provided to offer guidance regarding smoking cessation, diet, physical exercise, alcohol and other drug use, and other health-related behavioral topics. See also *Employee Assistance Program Services* in Tab 7.

- **Occupational Health Site Visits**
  The on-site or near-by availability of an occupational health professional makes possible visits to the employees' work sites to assist the safety officer in assessing the site for potential occupational hazards. This on-site familiarity also assists the health center professional in being prepared for injuries or illnesses that may be more likely to occur, and in preparing appropriately tailored educational sessions for employees.

General Pre-Placement Medical Evaluations **Attachment - D 1**

Pre-placement evaluations are governed by 5 CFR 339 (Medical Qualification Determinations). Section 339.202 (Medical Standards) specifies that

> "An agency may establish medical standards for positions that predominate in that agency… . Such standards must be justified on the basis that the duties of the position are arduous or hazardous, or require a certain level of health status or fitness because the nature of the positions involve a high degree of responsibility toward the public or sensitive national security concerns. The rationale for establishing the standard must be documented. Standards established by … an agency must be:
>
> (a) Established by written directive and uniformly applied,
> (b) Directly related to the actual requirements of the position, and
> (c) Consistent with OPM instructions… ."

Pre-placement medical evaluations assess an individual's health status before assignment to a position that may involve arduous or hazardous conditions. The purpose of the evaluation is to ascertain whether the individual has any health condition that may prevent him or her from performing the job safely and efficiently, including the ability to wear protective equipment (e.g., a respirator) required for the job. The evaluation also should identify any health problems that could be aggravated and/or accelerated by the anticipated physical demands and working conditions of the job. It also serves as a baseline for those employees whose job duties include a need for medical surveillance (see Tab 12, Attachment D 2, *General Medical Surveillance Guidance*).

Because of the public safety risks involved, examinations also generally are required for applicants or incumbents for positions involving:

- operation of motor vehicles (e.g., truck drivers, crane operators);
- food handling;
- exceptional physical or mental stress;
- direct physical contacts with people (e.g., nurses); and
- hazardous work above ground level, or around power-driven machinery.

In addition to medical standards, an agency is authorized by Section 339.203 (Physical requirements) to:

> "establish physical requirements for individual positions without OPM approval when such requirements are considered essential for successful job performance. The requirements must be clearly supported by the actual duties of the position and documented in the position description."

Such physical requirements may include fitness requirements, such as for firefighters. They also may be applicable to positions that, due to their physical location (e.g., at the bottom of a hydroelectric dam) or geographic remoteness (e.g., on a small, sea-going research vessel), impose practical safety-related restrictions on physical conditions of employees.

Two types of information are essential for a pre-placement medical evaluation for those in positions with qualification standards. First, the physician reviewing the results of the examination (the **Agency Medical Officer**, or AMO) must understand the hazardous working conditions and physical demands of the position. Additionally, the AMO must be furnished additional information such as specific job duties or task lists if the DOI has conducted a validation study or job hazard analysis. The AMO also should be familiar with the organizational structure of the DOI. For the evaluation of some medical conditions, the physician will need to obtain further information about specific job duties in order to make a determination. This may require on-site inspections and consultation with the DOI Office of Managing Risk and Public Safety.

Secondly, the AMO needs to have accurate information about the applicant's health status, the functional limitations associated with any medical conditions, and an understanding of how physical demands and working conditions would impact on that condition. An accurate diagnosis is often the key factor in determining the applicant's capability. The physician must also recognize that individual variability may exist between persons with the same clinical condition. Upon completion of the examination, the AMO will inform the employing office whether the applicant is medically qualified to perform the full range of duties required for the position. The AMO also may offer recommendations regarding the applicant and the physical requirements of the job.

Having defined the goals of the pre-placement exam, and carefully identified and validated the essential job functions, the next step is formulation of the core physical examination, laboratory tests, and general occupational and medical history that will be required for each DOI applicant.

CONTENT OF THE PRE-PLACEMENT MEDICAL EXAMINATION

Because the pre-placement medical examination is to be tailored to the identified requirements of specified positions, there are no uniform, general recommendations for the scope and content of the physical examination, lab tests or history. The following recommendations are considered to be a valid starting point and guide to appropriate services. Specific medical exams requirements, where available, are presented elsewhere within this *Handbook*.

A comprehensive medical history is essential. The medical history should cover the applicant's known health problems, such as major illnesses, surgeries, medication use, allergies, etc. Symptom review is also important for detecting early signs of illness. In addition, a comprehensive medical history should include a personal health history, a family health history, a health habit history, an immunization history, and a reproductive history. An occupational history should also be obtained to collect information about the applicant's past occupational and environmental exposures (see Attachment D 2 (c) for an example of a form that may be used for this purpose).

The examination is a general medical and physical examination. The DOI Medical History and Examination Form may be used to record the results of this examination (see Tab 12, Attachment D 3). The general examination includes the following:

(a) Vital signs: pulse, respiration, and blood pressure
(b) Visual acuity, color vision, depth perception and peripheral vision testing
(c) Dermatological system
(d) Ears, eyes, nose, mouth, throat
(e) Cardiovascular system
(f) Respiratory system
(g) Gastrointestinal system
(h) Endocrine and metabolic system
(i) Musculoskeletal system
(j) Neurological system
(k) Mental status

and, if indicated,

(l) Audiometry
(m) Electrocardiography (ECG)
(n) Pulmonary function testing (PFT)
(o) Laboratory testing (see below)
(p) Tonometry (for glaucoma)
(o) Other procedures that may be necessary, based on the position

If they are to be done, these last procedures and tests must be carried out using standard methods and properly recorded so that the results may be used for the intended purposes:

Audiometry (Hearing Test): Audiograms ideally should be performed in an ANSI-approved "soundproof" booth (ANSI S3.1-1977) with equipment calibrated to ANSI standards (ANSI S3.6-1973). If a booth is unavailable, the test room sound pressure levels should not exceed those specified in the federal OSHA noise regulations (29 CFR 1910.95) for specified frequencies (500, 1000, 2000, 3000, 4000, 6000, 8000 Hz).

Electrocardiography: A standard 12-lead electrocardiogram should be recorded and interpreted by, or with the ability to consult with, a cardiologist.

Pulmonary Function Testing: Pulmonary function testing is helpful as part of the documentation of current pulmonary health status, and as a baseline for later comparison when job exposures have the potential to effect the lungs. The test should be administered only by certified or thoroughly experienced individuals. The result of the test is called a spirogram, and only spirograms that are technically acceptable and demonstrate the best efforts by an applicant should be used.

> Note: Electronic spirometers are available and may be used to measure Vital Capacity (VC), Forced Expiratory Volume in 1 sec (FEV_1), Forced Expiratory Volume in 1 sec as a percent of FVC (FEV_1/FVC), and Peak Expiratory Flow in L/min (PEF). These machines also will calculate the percent of expected levels (for age and height), providing useful standards for comparison. Although the spirometric test results may not allow a specific diagnosis, they can distinguish the difference between restrictive and obstructive pulmonary disorders and allows an interpretation of the severity of the process.

Laboratory testing: Baseline laboratory tests for the Pre-Placement examination may include: complete blood count (CBC), a routine urinalysis, and selected serum chemistries, as follows:

(a) Glucose
(b) Bilirubin - total
(c) Cholesterol
(d) HDL-Cholesterol
(e) LDL-Cholesterol
(f) Triglycerides
(g) GGTP
(h) LDH
(i) SGOT/AST
(j) SGPT/ALT

Special tests may be appropriate, depending upon the age of the applicant, the proposed job duties, or local medical problems (e.g., tuberculosis, hepatitis). If exposure to asbestos or silica are anticipated, a chest X-ray may be indicated.

Note: The following special tests, while often appropriate and valuable for general preventive health examinations, are NOT routinely indicated for occupationally-related pre-placement purposes:

* Exercise stress test (ETT, or cardiac stress test)
* VDRL (Venereal Disease Research Laboratory)
* Proctosigmoidoscopy (flexible sigmoidoscopy)
* Digital rectal examination (DRE)
* Fecal Occult Blood Test (FOBT)
* HIV testing
* Body fat composition
* Papanicolaou (PAP) smear
* Mammogram
* Pelvic examination

All applicants receiving a Pre-Placement medical evaluation will be informed ahead of time about the purpose of the medical evaluation and the content of the exam. The results of any medical examination are considered to be confidential medical information subject to customary patient-physician confidentiality restrictions. Under most circumstances, results and recommendations arising from the evaluation will be expressed in general terms without specific diagnostic information. The DOI employing office will be informed simply that:

* The candidate is medically qualified for the job; or
* The candidate is medically NOT qualified for the job; or
* The results of the examination are inconclusive, and follow-up information is required.

DOI management will be told only on a need to know basis the specific diagnoses or laboratory test results. Identifiable medical information will be released only with the explicit written permission of the applicant. In most cases a simple statement will suffice:

> "Based on the results of the pre-placement medical evaluation of [date], Jane Jones is [or is NOT] medically qualified for the position of [specify]."

In cases where more specific information is needed in order to make a decision on the status of an applicant, a specific consent form releasing that information should be obtained from the applicant. Blanket or general "release of medical information" forms should not be used. The results of the examination and tests will be reviewed with the applicant and the medical/occupational significance of any abnormal results explained. Copies of the medical examination findings and laboratory test results can be provided to the applicant's personal physician with the proper written authorization from the applicant.

General Medical Surveillance Guidance **Attachment - D 2**

Background

As a result of their job duties, federal employees may be exposed to chemicals, dust, noise, and other workplace hazards that may be covered by specific federal regulations regarding medical surveillance for the possible effects of that exposure. In those instances where workers are exposed to a potentially hazardous work environment, engineering safeguards often can be instituted to eliminate, or at least minimize, the possibility that a worker actually comes in direct contact with a dangerous substance or work process. Where such work hazards cannot totally be eliminated through engineering controls, administrative controls can be established (e.g., required breaks, mandatory training, time limitations at a given task) to minimize exposures. As a final measure the worker can be outfitted with proper personal protective devices (such as hearing protection, respirators, eye protection, gloves, aprons, boots, chemical protective suits, etc.) to further minimize the likelihood of harmful exposures. Periodic safety and industrial hygiene surveys provide the means to identify, evaluate and control potential worksite hazards.

A further assurance that employees are not receiving deleterious exposures is provided through a medical surveillance program. Such a program provides information about the actual effectiveness of the environmental control measures, and an early warning to employees and managers if harmful effects are occurring. A comprehensive program also will provide standardized data for computer-based tracking of occupational health data. Computerization can more easily provide individual and unit costs for the program, tracking of individual employees, evaluation of patterns and trends, cost projections for future evaluation, etc.

An effective medical surveillance and screening program also is necessary to protect workers from adverse effects due to occupational stressors or tasks. Because work-related diseases generally do not have an acute onset but develop over time, medical surveillance requires periodic medical monitoring of the workers at risk.

Screening and medical surveillance, although closely related, are not the same thing. *Screening* refers to detecting injury/illness before symptoms would ordinarily lead a person to seek medical care. As such, medical screening is a form of secondary prevention, i.e., the opportunity to treat or otherwise affect the outcome of disease that is already present. Medical screening allows the presumptive identification of unrecognized disease or defects by the application of tests, examinations or other procedures that can be applied rapidly. Screening tests sort out apparently well persons who probably have a disease from those who probably do not. Although a screening test is not intended to be diagnostic, it must detect as early as possible any abnormality related to exposure if it is to be useful in disease prevention. Ideally, such a test will detect an adaptation to the exposure long before symptomatic impairment occurs. Screening focuses on individuals

within a population. It is the application of clinical procedures to members of a group often asymptomatic, but at high risk, for the purpose of identifying those who need further attention.

When the risk of a particular disease outcome is known to be or could be elevated in a particular workplace or job category, *medical surveillance* is the strategy used to determine the group experience with that outcome. Surveillance focuses on the population. Information is obtained for the purpose of detecting group patterns of abnormal medical parameters or actual disease in order to initiate intervention, control, or additional investigation, if needed. Surveillance involves collecting medical information on groups of people in order to demonstrate changes or trends, allowing workplace job intervention which, in turn, can lead to primary prevention.

Surveillance programs must utilize the best available tests which are in use at the time. A test which is controversial or which is difficult to interpret may lead to confusion, and may delay prompt action. The most widely applied mandated surveillance procedures are based on relatively simple and straightforward tests. Medical surveillance programs must also include tests and examinations which are acceptable to the workers. Also, as with any clinical procedure, the benefit of the test to the worker must outweigh any potential harm it may cause.

The frequency of testing depends on the natural history of the disease; latency periods between an actual exposure and the appearance of disease are important considerations. Most surveillance procedures are repeated annually, since one year represents a reasonable reflection of economic concerns related to the cost of conducting exams, and the time over which adverse effects of harmful exposures may become evident. The following sections present a more specific summary of the components, purposes, and procedures of a medical surveillance program.

Attachment D 2 (a) provides an example of a letter that may be used to inform employees of the medical surveillance program, the tests that may be conducted, and the way the resulting information will be handled and used by the agency.

Components

The major components of the DOI medical surveillance program are designed to address the principles and concerns described in the previous discussion:

- Job Title/Position Exposure Profile
- Employee Specific Exposure Profile
- Exposure-Specific Examination and Laboratory Services

- Standardized Clinical Procedures
- Second Level Review by AMO
- Data Management and Analysis
- Agency and Employee Reporting Mechanisms
- Program Evaluation and Modification

Job Title/Position Exposure Profile

The medical surveillance program is based on a comprehensive evaluation of an agency's workforce, worksites, and job duties. This evaluation is intended to identify the type, frequency and severity of an employee's potential exposures to physical, environmental, chemical, or biological stressors according to the worker's duties and responsibilities. Using position descriptions, employees often can be divided into exposure groups that, internally, are quite similar. This *Handbook* provides several such job/exposure-specific sets of recommended services, along with forms and specific guides (see Tab 12, *Specific Program Criteria, Attachments and References*).

Industrial hygiene and occupational medicine specialist surveys form the basis for more specific hazard identification. Among the techniques available for further refining hazard identification and quantification are walk-through surveys and environmental monitoring.

A walk-through survey of the work environment provides a means of identifying hazards and unsafe work practices as the worker goes about a task. Employee and supervisory input also are sought in this assessment phase of the program. The work environment survey ideally should be performed by an occupational health and safety team consisting of the industrial hygienist, agency safety specialist, and occupational health physician or nurse.

Whenever possible, the medical surveillance program also should reflect environmental monitoring. In environmental monitoring, periodic or continuous measurements are made of a potential exposure in the workplace. The industrial hygienist may include workplace and/or personal sampling techniques in the analysis for specific exposures or stressors.

Following the position description or job title exposure profile assessment, the agency identifies individual employees to be included in the medical surveillance program, with the assistance of supervisors, the safety manager, the industrial hygienist, and the occupational health professional. These employees are then notified of their inclusion in the program and educated as to the program's goals, benefits, and procedures.

Employee Specific Exposure Profile
The aggregation of employees into essentially homogeneous exposure groups is a complex task since, by definition, each exposure group is intended to contain employees whose tasks are such that their probability of exposures is the same. Most personal exposure profiles cannot be determined entirely accurately in this manner, due to the diversity of specific tasks within a given job title or position description.

More specific exposure information may be obtained from each employee by way of an individual interview, or an employee-completed occupational exposure history form. The interview allows the industrial hygienist to determine specific frequencies and severities of exposures. Interview information also should be reviewed by the employee's supervisor to help assure validity. See *Attachment D 2 (b)* in this Attachment for an example of a form that may be used to record the results of an industrial hygienist's employee interview.

An occupational exposure history form also may be used to document an employee's perception of hazards to which s/he feels actually or potentially exposed. Individual histories should be reviewed by supervisory personnel, the safety officer, and an occupational health professional (e.g., the AMO) to determine the employee specific exposure profile. This history form is especially useful where exposure data from environmental monitoring is sparse or nonexistent, where industrial hygiene interviews cannot be (or have not been) conducted, and where a more formal job/title assessment has not been done. In these circumstances, it may be necessary to overestimate the extent of exposure in order to avoid missing true exposures, and the harm that may result for the employee and the agency. See *Attachment D 2 (c)* in this Attachment for an example of a form that may be used as an employee-completed occupational exposure history form.

Exposure-Specific Examination and Laboratory Services
The combination of the job title/position exposure profile and the employee specific exposure profile allows on occupational medicine professional to determine the recommended tests and examinations for each employee. Most listings of such tests and examination items reflect a basic core of services, upon which specific additional tests are performed, based on the identified exposures. See Tab 12, *Specific Program Criteria, Attachments and References*, for information on specific tests to be conducted, based on identified exposures or job categories.

Standardized Clinical Procedures
The medical evaluation can be provided in a variety of ways (see Tab 5, *Medical Service Providers*, in this *Handbook*). Nurses and physicians providing services must be aware of the goals of the program, and the necessity of collecting clinical information in a systematic manner. While a "general" physical examination may be performed, a key part of the medical surveillance program is the extra attention given to target organs and

systems that may be affected by agents identified in the exposure profile. See Tab 12, *Specific Program Criteria, Attachments and References*, for information on areas for special examination attention, based on identified exposures or job categories.

Second Level Review by Occupational Health Experts
Upon its completion, the provider conducting the examination forwards the data collected during the process to the AMO for review. To facilitate the review, copies of all the applicable physical exam forms, history forms, lab tests, audiograms, spirograms, electrocardiograms, X-ray reports, etc., should be submitted. By virtue of training and experience, the AMO is uniquely qualified to integrate clinical data with the toxicological profile of various substances and to recognize an association between symptoms and/or other findings and the presence of work-related exposures. In addition, examinations done at different sites and by different examiners can be compared in the event of similar findings. During this review process, any further studies which should be performed as part of the medical surveillance program (usually to further clarify a potential work-related problem) can be determined.

Data Management and Analysis
Following review by the AMO of the data from the examination and review phase, pertinent information should be entered into a DOI data base. Analysis of the data in any meaningful fashion will depend upon the standardization of the data elements entered into this database. Summary reports should be prepared at periodic intervals, including such things as the number and types of exams/tests completed, findings (without employee identification), group trends, and program costs. Long term data analysis will depend upon the steady, systematic collection of data for a number of years and on the commitment of the bureaus and area/programs to support medical surveillance programs for the long term.

All medical surveillance information must be treated with appropriate confidentiality. Data for analysis must be compiled in an aggregate form before being shared with management and employee representatives. These data will allow labor and management to evaluate workplace associated problems and to take remedial action without jeopardizing the rights of the individual employee. See Tab 6, *Medical Records - Employee Medical File System*, for further information on this topic.

Agency and Employee Reporting Mechanisms
Since one of the primary purposes of medical surveillance is to safeguard the health of the employee, a written summary of any examination should be sent to the employee. This summary should contain the results of the medical surveillance evaluation, including a report of laboratory tests and other procedures. Recommendations should be made to the employee for any additional testing indicated as part of the medical surveillance program, and information on non work-related problems requiring further medical evaluation should

also be conveyed to the employee in a timely manner.

The local agency manager should receive a written statement from the AMO indicating the physician's opinion concerning: 1) any detected medical conditions which place the employee at increased risk of harm from continued performance of the job; 2) any recommended work modifications; and 3) and a statement that the employee has been informed of the results of these findings and any other findings requiring further medical follow up. Medical conditions are not identified specifically in these agency letters. No medical findings or diagnoses unrelated to the employee's jobs are included in the report to the supervisor. For further information on this subject, see Tab 6, *Medical Records - Employee Medical File System*.

Program Evaluation and Modification

It is important for any program to continuously assess the quality of its functions and to improve those areas in which it is deemed to be deficient. The purposes of a comprehensive quality review include: 1) documentation of high quality health care services; 2) measurement of the efficacy of program activities in meeting agency goals (with subsequent modification of the program, as appropriate); 3) assessment of client satisfaction; and 4) satisfaction of legislative and regulatory requirements. Assistance with setting up a program evaluation process may be sought through the AMO. Please also refer to Tab 10, *Agency Continuous Quality Improvement Program for Medical Services*.

Example - Medical Surveillance Introductory Letter Attachment D 2 (a)

The following represents the text of a letter that can be used in introducing the medical surveillance program to employees enrolled for services:

Introduction to the Medical Surveillance Program
Because of the nature of your job, you have been designated by your employer to participate this year in the medical surveillance program provided by this agency. This examination and review program is provided to assure that you are able to meet the various requirements of your job, to comply with federal regulations, and to help safeguard both you and your co-workers from preventable illnesses and injuries. Though you retain the right to refuse to participate, and you may accept or withdraw from any or all of the program components that are offered, it is important that you understand that complete recommendations and medical clearances for your job can only be provided if the examination has been carried out. In some cases, these clearances depend on an employee meeting specific agency policies or federal regulations, such as those for law enforcement officers, firefighters, or drivers of commercial vehicles.

Important Forms to Be Completed
The **Notice to Patients** form conveys information on the Privacy Act of 1974, which governs the collection, storage, and use of confidential medical information (it only needs to be signed once for this program; it does not need to be signed each year). All information gathered as part of the medical surveillance program is considered confidential and, in general, no information about the results of your exam can be released to anyone else without your written consent.

The **Authorization for Disclosure of Information** form is a consent form, and allows the examining facility to share summary, work-related information with your employer. Medical information that is not related to work will not be released to your employer without an additional, specific written consent from you. *We cannot provide any medical surveillance services to you unless we have your consent to release summary information to your employer*.

There are several types of medical history forms that you may be asked to complete. These are intended to provide information to assist the examining physician and the Agency Medical Officer as they evaluate your health and the effects of your job.

Preparation for Your Examination
You will be given instructions that are very important to follow in preparation for having lab tests done, to be sure the results are accurate. These primarily involve fasting for 12

hours before you have your blood drawn, and following a specific diet if you are to have your stools checked for blood. If you do not receive these instructions, please ask the nurse or call this office.

The Components of Your Exam
Your examination may involve one or more of the following components.

General Physical Examination -- This is a complete physical examination of the major body systems. You may be asked to disrobe for parts of the exam to allow the physician to see you fully as he or she conducts the examination. The examiner will pay particular attention to specified body systems, organs, or physical signs that may indicate harmful effects of the exposures identified in your occupational history. A brief or limited exam may be carried out if all you need is to have your hearing evaluated, or a clearance to wear a respirator.

Audiogram -- Baseline and periodic audiograms are carried out using equipment and test locations that meet the criteria established by the Council for Accreditation in Occupational Hearing Conservation (CAOHC). A hearing booth is not necessary to obtain accurate audiogram results as long as background noise can be shown to be below specified levels during the testing period. For at least 14 hours prior to your audiogram you should avoid all loud noises, or be sure to use effective hearing protection if noise cannot be avoided.

Vision Tests (Color, Best Near and Far, and/or Peripheral) -- Both corrected (with glasses or contacts) and uncorrected vision (without glasses or contacts) are usually checked in each eye and with both eyes combined. If you use contacts, be sure to bring any necessary containers and cleaning solutions you will need for holding them during the exam and reinserting them afterwards.

Chest X-Ray -- Such a test may be required to help evaluate clinical findings or medical history information, or if you have current asbestos exposure. X-ray tests are done by referral.

Pulmonary Function Test (Spirometry) -- A pulmonary function test (PFT) may be conducted to evaluate your ability to work safely while using a respirator and/or to look for evidence of lung problems. This test involves blowing into a tube as hard as you can while a machine records the results.

Electrocardiogram -- An electrocardiogram may be conducted to help evaluate the health of your heart.

Exercise Stress Test -- This test may be conducted if, in the opinion of the examining

physician or the AMO, it is important to evaluate your ability to safely carry out physically-demanding work tasks. It is done by referral.

Laboratory Tests -- These tests should be obtained following a 12 hour fast. Routine blood tests include a complete blood count and a chemistry panel, including glucose, BUN, creatinine, electrolytes, protein, calcium, phosphorus, liver function tests (enzymes, bilirubin), cholesterol, HDL, LDL, triglycerides, and iron or ferritin. A urinalysis is also done routinely. Other lab tests may be ordered, depending on your occupational history.

24 Hour Urine Test -- A 24 hour collection of urine may be ordered to check for certain heavy metals or other potentially toxic materials you may have been exposed to.

Follow-up

Following your examination, a complete review of your histories, laboratory results, and examination findings will be carried out by an occupational health physician, and we will send you a confidential summary of all your findings. Much of what you will find in the summary will be information of a strictly confidential nature. It is for your use, and we hope you will read it carefully and share it with your personal physician. Recommendations for follow up testing will be found in this letter, as well as clearances or recommended modifications in your work. Because we want you to have full access to all of your own health information, you also will receive a copy of the summary that is sent to your employer. This employer summary only contains recommendations regarding medical clearances for work; if work restrictions are needed; and/or if you have evidence of health problems from any work place exposures. No confidential medical information is included in the employer's letter.

If you have questions about your medical surveillance exam, please contact your supervisor or the AMO.

Example - Industrial Hygienist Interview Form Attachment D 2 (b)

The form on the following page is an example of a form that may be used to record the results of an industrial hygienist's interview with an employee as part of identifying potentially significant occupational exposures.

INDUSTRIAL HYGIENE INTERVIEW SUMMARY
EMPLOYEE DATA FOR DEPARTMENT OF THE INTERIOR
MEDICAL SURVEILLANCE PROGRAM

Employee Information: Date of Interview: _____

Last: _____ Date of Birth: _____
First: _____ Sex: M F
Middle: _____ SSN: _____

Agency: _____ Subunit: _____

Job Title: _____

Work Phone: _____ Name of Supervisor: _____
Work Address: _____

_____

Home Phone: _____
Home Address: _____

_____

Currently in Medical Surveillance Monitoring Program for:
(Circle) **ASBESTOS NOISE OTHER (Specify):** _____

Year of First Asbestos Exposure with This Agency ( ): _____

Year of Your Prior First Asbestos Exposure (Before this Agency): _____

Clearances Necessary (Circle as appropriate):
Diver Driver (CDL) Drive-for-Work (non-CDL) OTHER (Specify): _____
Respirator User: Y / N Type of Respirator (Air Purifying/Supplied Air/SCBA)

Exposure Information Summary:

(For each item, circle entry for both Frequency and Severity)

CODES:

Exposure Frequency
0 - 12 (one day/month or less) = Low
12 - 52 (one day/week or less) = Medium
52+ (more than one day/week)= High

Exposure Severity
I = Incidental (Process and/or products are used nearby. pass through the area or may conduct short inspection. Worker is not involved with job that is producing the potential exposure.
L = Low (Less than 1/2 the PEL or TLV.)
M = Medium (From 1/2, up to the full PEL or TLV.)
H = High (Greater than the PEL or TLV.

Exposure	Frequency	Severity	**Physician's** Notes (Sign)
NOISE	L M H	I L M H	
Industrial Hygienist's Notes:			
ASBESTOS	L M H	I L M H	
Industrial Hygienist's Notes:			
HEAVY METALS	L M H	I L M H	
(Arsenic, Mercury, Welding Fumes, Other-- Please Specify)			
Industrial Hygienist's Notes:			

Exposure	Frequency	Severity
LEAD	L **M*** H	I L **M*** H

* > 30 days/year at Action Level

Industrial Hygienist's Notes:

CADMIUM L **M*** H I L **M*** H

* > 30 days/year at Action Level

Industrial Hygienist's Notes:

[prior exposure > 60 months? Y / N

SOLVENTS L M H I L M H

(Please Specify Type)

Industrial Hygienist's Notes:

FORMALDEHYDE L M H I L M H

(And Other Aldehydes)

Industrial Hygienist's Notes:

DUSTS L M H I L M H

(Specify Type, e.g., wood, silica, etc.

Industrial Hygienist's Notes:

PESTICIDES L M H I L M H

Industrial Hygienist's Notes:

Physician's Notes (Sign)

Other Significant Exposures Which Should Prompt Examination:

(Please circle, as appropriate, and provide any necessary clarifying comments)

HEAVY LIFTING L M H (Over 50 lbs)

Industrial Hygienist's Notes:

VIBRATION L M H

Industrial Hygienist's Notes:

CORROSIVES L M H I L M H

[i.e.: Acid, base, quick lime]

Industrial Hygienist's **Notes:**

Heat Stress L M H I L M H

[ie: Tyvek Suit]

Industrial Hygienist's Notes:

OTHER (Specify) L M H I L M H

[i.e.: PCBs, Ozone, EMF, Fiberglass]

Industrial Hygienist's Notes:

Industrial Hygiene Interviewer Date Agency Representative Date

Example - Occupational/Work History Form **Attachment D 2 (c)**

The form on the following page is an example of one that may be used by employees to record their occupational/work history, as part of identifying potentially significant occupational exposures.

U.S. DEPARTMENT OF THE INTERIOR
OCCUPATIONAL HEALTH DIVISION
MEDICAL SURVEILLANCE
OCCUPATIONAL/WORK HISTORY

1. NAME (Last, First Middle Initial)	2. SOCIAL SECURITY NUMBER	3. DATE OF BIRTH (MMDDYY)	4. JOB TITLE
5. WORK ADDRESS (Building, Street)	6. WORK ADDRESS (City, State, Zip)	7. SEX (X one) ☐ MALE ☐ FEMALE	8. TELEPHONE NUMBER (Please include area code)

This Occupational Work History form is to be completed first by the employee and then reviewed by the Supervisor and Safety Officer. Finally, it will be reviewed by the agency or national Medical Review Officer and forwarded to the examining physician.

EMPLOYEE:	Date Form Received	Date sent to Supervisor	Signature
SUPERVISOR:	Date Form Received	Date Sent to the MRO	Signature
	Comments by Supervisor (if any):	[Check certification exams needed:] ☐ Respirator ☐ Diver ☐ Commercial Driver's License ☐ Work-Related Driving Ability ☐ Other (specify) ☐ Other (specify)	

PLEASE READ THE FOLLOWING EXPLANATORY COMMENTS:

The Occupational/Work History is used to refine the medical surveillance evaluation to include those agents not usually considered when dealing with only your job description. It is also helpful to the examining physician in gathering more information regarding individual exposures. Attached is a list of agents or chemicals that you may have worked with on your job. Also included are some particular work conditions or "tasks." The presence of a chemical or work task on the list does not mean that you *have* or *will* come into contact with that item, but only serves as a checklist of some things you might otherwise forget.

The Occupational Work History does not serve as evidence for or against actual exposure (that is, actual entrance of a chemical into the body or actual biological effect from a physical agent).

Please do not include those exposures which may be "incidental" or "casual." For example, walking by the area where painting is taking place, but not actually participating in the painting operation, supervising the activity, or spending substantial time in the area for another reason, should not usually be included as a potential exposure.

Any ill effects which were noted at the time of a potential exposure or which you believe are connected to a particular chemical, physical agent, or task, should be indicated on the history form. Also, the type of protective equipment worn, if any, should be noted.

Feel free to make comments or notes where further explanation is deemed necessary.

BASELINE OCCUPATIONAL/WORK HISTORY
PRIOR WORK HISTORY

(Complete this page if this is your first DOI Medical Surveillance examination, or if previously submitted information requires updating.)

NAME:

Please list all *previous jobs* starting with the *most recent* (include only jobs prior to your current job):

Agency/Company	Dates	Specific Hazards*	Job Duties

* "Hazards" include but are not limited to: chemicals, dusts, gases fumes, radiation, vibration, cold, heat, intense light, repetitive motion, and loud noise.

Asbestos Exposure History

Please list the year and place where you first had exposure to asbestos without the benefit of personal protective equipment. (Examples: shipyard work, home remodeling, various hobbies). This question is important for you to answer as the date of exposure to asbestos is needed to determine the best way to screen for any asbestos related disease.

The potential exposures/agents listed below refer to your *current* job. (*Use blank lines to write in other chemicals/agents.)*

Potential Exposure or Work Condition	Frequency (check one) D = Daily W = Weekly M = Monthly S = Seasonal				Duration (check one) Average use in Hours			Intensity of any ill effects (check one) N = None MI = Mild (e.g. headache) MA = Major (e.g. slow recovery; need medical care)			Protective Equipment (check one) R = Respirator G = Gloves E = Eye Protection P = Protective Clothing				Physician Comments
	D	W	M	S	1	1-4	4-8	N	MI	MA	R	G	E	P	
Dusts or Fumes - Usual Route of Exposure: Inhalation															
Aluminum															
Silica															
Carbon Dust															
Chromium															
Iron															
Lead															
Mercury Metal															
Cadmium															
Nickel															
Zinc															
Asbestos															
Cement Dust															
Fibrous Glass															
Plastic Fumes															
Welding Fumes															
Wood Dust(s)															
Beryllium															
Solvents - Usual Route of Exposure: Inhalation and Skin															
Alcohols															
Acetone															
Methylene Chloride															
Paint (epoxy)															
Paint (oil based)															
Paint (urethane)															
Toluene															
Xylene															
Stoddard Solvent															
Hexane															
Benzene															
Trichloroethylene															
Other (specify)															

The potential exposures/agents listed below refer to your *current* job. (*Use blank lines to write in other chemicals/agents.)*

Potential Exposure or Work Condition	Frequency (check one) D = Daily W = Weekly M = Monthly S = Seasonal				Duration (check one) Average use in Hours			Intensity of any ill effects (check one) N = None MI = Mild (e.g. headache) MA = Major (e.g. slow recovery, need medical care)			Protective Equipment (check one) R = Respirator G = Gloves E = Eye Protection P = Protective Clothing				Physician Comments
	D	W	M	S	1	1-4	4-8	N	MI	MA	R	G	E	P	
Other Chemicals															
Acids															
Oil Mists															
PCB's															
Caustics (Bases)															
Pesticides															
(Organophosphate)															
(Other)															
Wood Preservatives															
Dioxins/Furans															
Pentachlorophenol															
Other Chemicals (specify)															
Other Potential Exposures or Work Tasks															
Noise over 85 dBA															
Vibrating Tools															
Heavy Equipment (cranes, forklifts, etc)															
Drive light vehicles															
Sewage samples															
Other Biological Hazards (Specify)															
Work in confined area															
Work in high places															
Carpentry															
Lifting over 50 lbs.															
Firearm use															
Hyperbaric Pressure															
Additional Comments - Please list any other chemicals or hazards to which you may be exposed, but which have not already been covered.															

NAME:

The protective equipment listed below refer to your *current* job. (*Use blank lines to write in other equipment.)*

Type of Equipment	Frequency (check one) D = Daily W = Weekly M = Monthly S = Seasonal E = Emergencies ONLY					Duration (check one) Average use in Hours			Intensity of work effort while wearing equipment (check one) S = Sedentary L = Light to Moderate (e.g. walking, climbing/no load) H = Heavy (e.g. walking, climbing with more than 20 lbs.)			Physician Comments
	D	W	M	S	E	0-1	1-4	4-8	S	L	H	
Negative Pressure Respirators:												
Half Mask Cartridge												
Full Mask Cartridge												
Powered Air-Purifying Respirators:												
Half Mask												
Full Mask												
Air Supplied Respirators:												
Self-Contained (SCBA)												
Air-Line (Half Mask)												
Air-Line (Full Mask)												
Protective Clothing:												
Cloth Overalls												
Tyvek type suits												
Firefighter turnout gear												
Vibration dampening gloves												

This section may be used for any additional explanations or comments:

DOI Standard Medical History and Examination Form Attachment - D 3

What follows this page is the DOI Standard Medical History and Examination Form. It may be used for pre-placement exams, medical surveillance exams, or specified clearance exams. It may be used independently, or in conjunction with an occupational history form, as presented in preceding sections of this Tab. If used with occupational history forms, their input may be incorporated into the additional tests or clearances that are indicated on the examination form.

Some programs use different forms in order to meet specific needs. Examples include those used for most law enforcement and wildland firefighter exams, as well as some types of inspectors.

DEPARTMENT OF THE INTERIOR
STANDARD MEDICAL HISTORY AND EXAMINATION FORM

CAUTION

WHEN COMPLETED, THIS DOCUMENT CONTAINS CONFIDENTIAL MEDICAL INFORMATION

***DOI Occupational Health Services Program Manager*: Please: 1) check the box on page 3 to indicate if this is a pre-placement / baseline / exit exam, or a periodic exam, and check all Function and Clearance boxes that apply; 2) enter the three addresses in the spaces below; 3) indicate by checking the correct box (☐ below) for the one to receive the forms once the exam is complete; and 4) deliver the form to the person who is to receive the examination. Also, if the examinee is a new-hire, and a compensated disabled veteran, he/she is to be informed that the following documents must be attached to this form at the time of the examination, and will become part of this record, if he/she wishes consideration as a disabled veteran: copies of a) Rating Sheet; b) Medical Exam for Disability Evaluation (VA-21-2545) or Rating Decision (VA-21-6796b) or detailed documentation on the diagnosis, treatment, and evaluation of his/her compensated disability; and c) specialist reports, if any.**

***Person to Receive the Examination*: Please see the Privacy Act Notice on the next page of this form. Prior to your examination appointment, please complete ALL of the shaded portions of the following pages of this form, sign and date it in the spaces provided on pages 5 through 9, and take the entire packet directly to the EXAMINING PHYSICIAN/CLINIC at the address noted below on the day of your scheduled examination. All positive entries in the medical history sections of the form should be explained fully, and may require further information from your personal physician. Incomplete forms, or those missing information, may result in a delay in clearing you for your assigned functions.**

Note #1: If you are a new-hire, and a compensated disabled veteran, you must attach the following documents to this form at the time of the examination if you wish to have your disabled veteran status considered: copies of a) Rating Sheet; b) Medical Exam for Disability Evaluation (VA-21-2545) or Rating Decision (VA-21-6796b) or detailed documentation on the diagnosis, treatment, and evaluation of your compensated disability; and c) specialist reports, if any.

Note #2: You should arrive for your examination in a fasting condition (e.g., no food or drink other than prescribed medications during the 12 hours prior to having your blood drawn at the examination site).

***Examining Physician*: Please complete all of the double-lined portions of the following form, through page 10. Note: Please provide full explanations or clarifying information for all findings that are not completely normal, and assure that the DOI or agency Medical Review Officer is provided all available information so that he/she can carry out DOI's occupational health review function. When complete, please return this form and any associated forms and reports to the recipient checked below.**

☐ DOI OHS PROGRAM MANAGER	☐ MEDICAL REVIEW OFFICER	EXAMINING PHYSICIAN/CLINIC
_____	_____	_____
_____	_____	_____
_____	_____	_____

PRIVACY ACT INFORMATION

The information obtained in the completion of this form is used to help determine whether an individual assigned to a job with duties that may be considered arduous or hazardous can carry out those duties in a safe and efficient manner that will not unduly risk aggravation, acceleration, exaggeration, or permanently worsening pre-existing medical condition(s). The collection and use of this information is consistent with the provisions of 5 USC 552a (the Privacy Act of 1974), 5 USC 3301, 5 CFR 339, and Executive Orders 12107 and 12564 (Drug Free Federal Workplace).

This form, along with any attached or associated information, will be placed in your Employee Medical File, and is to be used only for official purposes, as explained and published annually in the Federal Register under OPM/GOVT-10, the Office of Personnel Management system of records notice. Your submission of this information is **voluntary**. If you do not wish to provide the information, you are not required to do so. However, your assignment to perform duties that are considered arduous or hazardous depends on the availability of complete and current occupational health records. Failure to complete this form according to instructions, or to have the indicated medical examination, may result in a delay in processing or inability to assign you to certain job functions.

REGULATORY AUTHORITY TO REQUEST ADDITIONAL MEDICAL INFORMATION (e.g., from employee's personal physician)

5 CFR 339.104 Definitions.

For purposes of this part--

. . . .

Medical documentation or documentation of a medical condition means a statement from a licensed physician or other appropriate practitioner which provides information the agency considers necessary to enable it to make a employment decision. To be acceptable, the diagnosis or clinical impression must be justified according to established diagnostic criteria and the conclusions and recommendations must not be inconsistent with generally accepted professional standards. The determination that the diagnosis meets these criteria is made by or in coordination with a physician or, if appropriate, a practitioner of the same discipline as the one who issued the statement. An acceptable diagnosis must include the following information, or parts identified by the agency a necessary and relevant:

(a) The history of the medical conditions, including references to findings from previous examinations, treatment, and responses to treatment;

(b) Clinical findings from the most recent medical evaluation, including any of the following which have been obtained: Findings of physical examination; results of laboratory tests; X-rays; EKG's and other special evaluations or diagnostic procedures; and, in the case of psychiatric evaluation or psychological assessment, the findings of a mental status examination and the results of psychological tests, if appropriate;

(c) Diagnosis, including the current clinical status;

(d) Prognosis, including plans for future treatment and an estimate of the expected date of full recovery;

(e) An explanation of the impact of the medical condition on overall health and activities, including the basis for any conclusion that restrictions or accommodations are or are not warranted, and where they are warranted, an explanation of their therapeutic or risk avoiding value;

(f) An explanation of the medical basis for any conclusion which indicates the likelihood that the individual is or is not expected to suffer sudden or subtle incapacitation by carrying out, with or without accommodation, the tasks or duties of a specific position;

(g) Narrative explanation of the medical basis for any conclusion that the medical condition has or has not become static or well stabilized and the likelihood that the individual may experience sudden or subtle incapacitation as a result of the medical condition. In this context, "static or well-stabilized medical condition" means a medical condition which is not likely to change as a consequence of the natural progression of the condition, specifically as a result of the normal aging process, or in response to the work environment or the work itself. "Subtle incapacitation" means gradual, initially imperceptible impairment of physical or mental function whether reversible or not which is likely to result in performance or conduct deficiencies. "Sudden incapacitation" means abrupt onset of loss of control of physical or mental function.

. . . .

Physician means a licensed Doctor of Medicine or Doctor of Osteopathy, or a physician who is serving on active duty in the uniformed services and is designated by the uniformed service to conduct examinations under this part.

Practitioner means a person providing health services who is not a medical doctor, but who is certified by a national organization and licensed by a State to provide the service in question.

DOI Occupational Health Services Program – Standard Medical History and Examination Form

The individual to be examined is to complete the shaded medical history portions of this form prior to his/her appointment.

The examining physician/clinic is to attach to this form any hard copies of screening, diagnostic, and/or laboratory tests, and send them as a package to the addressee checked on page 1 of this form.

Name, address, and phone number (including fax) of physician/ health center performing examination:	**New Applicants ONLY**: Your Current Occupation: Your Current Employer: Time in Current Position (in years/months):

Name of Agency:

Examinee's Name:	**Position/Job Title:**	**SS#**
	Work Location:	**Region:**
Address:	**Home Phone:**	**Work Phone:**
Date of Scheduled Exam:	**Date of Birth:**	**Gender: Male ☐ Female ☐**

DOI OHS PROGRAM MANAGER

TYPE OF EXAMINATION

☐ Pre-placement/Baseline/Exit ☐ Periodic

SPECIFY FUNCTION AND/OR CLEARANCES REQUESTED
(Check ALL That Apply)

- ☐ Respirator User [requires completion of the *Request for Respirator Clearance* form]
- ☐ Law Enforcement (**Note #1**: A different form for LE officers may be required. Contact the Office of Managing Risk and Public Safety if you have questions) (**Note #2**: If indicated, check the box in the lower right corner of page 7 to request these special assessments.)
- ☐ Diver
- ☐ Wildland Firefighter
- ☐ Commercial Drivers License
- ☐ Hazardous Waste Worker
- ☐ Inspector
- ☐ Tower Climber
- ☐ Other (specify)

EXAMINING PHYSICIAN (Please Note - Core Exam Must *Always* be Completed, Plus All Function-Specific Services Shown on Following Page)

PRE-PLACEMENT/BASELINE/EXIT CORE EXAM

Required Services: (Check those services completed)

- ☐ Authorization for Disclosure Form
- ☐ General Medical History
- ☐ General Physical Examination
- ☐ Chemistry Panel (including Glucose, Bilirubin (total), Cholesterol, HDL-C, LDL-C, Triglycerides, GGTP, LDH, SGOT, SGPT), Complete Blood Count, and Urinalysis
- ☐ Audiometry (including noise exposure history)
- ☐ Electrocardiogram
- ☐ Spirometry
- ☐ Vision Screening (Corrected and Uncorrected Near and Far; Color; Peripheral; Depth Perception)
- ☐ **Plus other Function or Clearance-required services** (see the following page)

PERIODIC CORE EXAM

Required Services: (Check those services completed)

- ☐ Authorization for Disclosure Form
- ☐ General Medical History
- ☐ General Physical Examination
- ☐ Chemistry Panel (including Glucose, Bilirubin (total), Cholesterol, HDL-C, LDL-C, Triglycerides, GGTP, LDH, SGOT, SGPT), Complete Blood Count, and Urinalysis
- ☐ **Plus other Function or Clearance-required services** (see the following page)

Note: For **Respirator User** exams (see page 4), the General Physical Examination may be a brief, limited exam or a more extensive exam, depending on the health of the examinee and the judgement of the examiner. Also, laboratory tests (e.g., chemistry panel, blood count, and urinalysis) and procedures (e.g., electrocardiograms) are intended to be at the discretion of the examiner, rather than required services. Refer to the DOI Occupational Medicine Program Handbook for further guidance. For all Respirator User exams, completion of the DOI *Request for Respirator Clearance* form must **precede** this exam and be attached to this exam form when completed.

This examination does not substitute for periodic health evaluations conducted by your personal health care provider. It is being conducted for occupational purposes.

FUNCTION AND CLEARANCE-SPECIFIC EXAMINATION COMPONENTS

☐ Respirator User

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ *DOI Request for Respirator Clearance* form
- ☐ (May be a Limited Exam)

☐ (Use above for any Respirator User exam)

☐ Law Enforcement

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ Tonometry
- ☐ Tuberculosis skin test (PPD, Mantoux)
- ☐ Maximal, diagnostic, symptom-limited stress EKG using the Bruce Protocol (every 5 yrs. after age 40 and per MRO)
- ☐ Chest X-Ray – PA or PA/Lat (Requires MRO Clearance)
- ☐ Blood lead and Zinc protoporphyrin

☐ Periodic Core Exam Services, plus:

- ☐ Vision (Cor. and Uncor. Near/Far; Color; Peripheral; Depth)
- ☐ Tonometry (if over age 40 or medically indicated)
- ☐ Audiometry (including noise exposure history)
- ☐ Electrocardiogram
- ☐ Maximal, diagnostic, symptom-limited stress EKG using the Bruce Protocol (every 5 yrs. after age 40 and per MRO)
- ☐ Chest X-Ray – PA or PA/Lat (Requires MRO Clearance)
- ☐ Blood lead and Zinc protoporphyrin (firearm instructor only)

☐ Other (specify)

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐

☐ Periodic Core Exam Services, plus:

- ☐

☐ Diver

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ Chest X-Ray (PA/Lat)
- ☐ Stress EKG (Requires MRO Clearance)
- ☐ Blood Type and Rh
- ☐ Sickle Cell Prep
- ☐ Syphilis Serology

☐ Periodic Core Exam Services, plus:

- ☐ Audiogram (every 5 years) (including noise exposure history)
- ☐ Vision (Cor. and Uncor. Near/Far; Peripheral; Depth)
- ☐ Chest X-Ray (PA/Lat) (every 2 years after age 40)
- ☐ Electrocardiogram (every year after age 35)
- ☐ Syphilis Serology

☐ Wild Land Fire Fighter

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ Chest X-ray (PA/Lat)
- ☐ Cholinesterase (RBC/Plasma)
- ☐ Tuberculosis skin test (PPD, Mantoux) – recommended but not required
- ☐ Tetanus booster (if needed) – recommended but not required

☐ Periodic Core Exam Services, plus:

- ☐ Audiometry (including noise exposure history)
- ☐ Vision (Cor. and Uncor. Near/Far; Color; Periph.; Depth)
- ☐ Spirometry

☐ Commercial Drivers License

☐ Periodic Core Exam Services, plus:

- ☐ Audiometry (including noise exposure history)
- ☐ Vision (Corr. and Uncorr. Near/Far; Color; Peripheral; Depth)

☐ Hazardous Waste Worker

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ Chest X-ray (PA/Lat)
- ☐ Cholinesterase (RBC/Plasma)

☐ Periodic Core Exam Services, plus:

- ☐ Vision (Cor. and Uncor. Near/Far; Color; Peripheral; Depth)
- ☐ Chest X-ray (PA/Lat) (prn)
- ☐ Spirometry
- ☐ Audiometry (including noise exposure history)
- ☐ Cholinesterase (RBC/Plasma)
- ☐ 24 hour Urine Heavy Metal Screen

☐ Inspector (Offshore or Onshore Inspections)

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ Chest X-Ray - PA/Lat
- ☐ Tuberculosis skin test (PPD, Mantoux) (Offshore Only)
- ☐ Tetanus booster (if needed) (Offshore Only)

☐ Periodic Core Exam Services, plus:

- ☐ Vision (Cor. and Uncor. Near/Far; Peripheral; Depth)
- ☐ Audiometry (including noise exposure history)
- ☐ Chest X-Ray - PA/Lat (if indicated, by history or exam)
- ☐ Spirometry (if indicated, by history or exam)

☐ Tower Climber

☐ Pre-Placement/Baseline/Exit Core Exam Services, plus:

- ☐ Chest X-Ray - PA/Lat
- ☐ Tuberculosis skin test (PPD, Mantoux)
- ☐ Tetanus booster (if needed)

☐ Periodic Core Exam Services, plus:

- ☐ Vision (Cor. and Uncor. Near/Far; Peripheral; Depth)
- ☐ Audiometry (including noise exposure history)

PAST MEDICAL HISTORY

(Please complete this page if this is your first time using this form, or if you are unsure if you have completed it before.)

A. Have you ever been treated for a mental or emotional condition? (If Yes, specify when, where, and give details.) ☐ Yes ☐ No

B. Have you had or have you been advised to have any operation? (If Yes, specify when, and give details.) ☐ Yes ☐ No

C. Have you ever been a patient in any type of hospital after infancy? (If Yes, specify when, where, and give details.) ☐ Yes ☐ No

D. Have you ever been treated with an organ transplant, prosthetic device (e.g., artificial hip), or an implanted pump (e.g., for insulin) or electrical device (e.g., cardiac defibrillator)? (If Yes, please describe fully, and provide copies of pertinent medical records.) ☐ Yes ☐ No

E. Have you ever had any other serious illness/injury? (If yes, specify when, where, and give details.) ☐ Yes ☐ No

F. Have you consulted or been treated by clinics, physicians, healers, or other practitioners within the past year for other than minor illness? (If Yes, specify when, where, and give details.) ☐ Yes ☐ No

G. Have you ever been rejected for military service or discharged from military service because of physical, mental, or other health reasons? (If Yes, give date and reason for rejection.) ☐ Yes ☐ No

H. Have you ever received, is there pending, or have you applied for a pension or compensation for a disability? (If Yes, specify what kind, granted by whom, what amount, when, and why.) ☐ Yes ☐ No

Every item checked "Yes" must be explained below or on the back of this form.

WELLNESS/HEALTH PROFILE

Smoking History

☐ Current Smoker

Number of cigarettes per day _____

Number of cigars per day _____

Number of pipe bowls per day _____

Total years you have smoked _____

☐ Former Smoker

Years since quitting _____

Number of cigarettes per day _____

Number of cigars per day _____

Number of pipe bowls per day _____

Total years you smoked _____

Alcohol/Drug Use

What is your average alcohol consumption (number) in a week?

_____ Drinks

(1 drink = 12 0z. beer, 1 glass wine or 1.5 oz liquor)

When do you drink alcohol?

☐ Weekdays ☐ Weekends ☐ Both ☐ Don't drink

RESPIRATOR CLEARANCE QUESTIONS

Have you ever used a respirator? Yes ☐ No ☐

Will you use one in the coming year? Yes ☐ No ☐

(If no, please skip the rest of this section.)

What hazards may be present during your use of a respirator?

☐ High altitude ☐ Temperature extremes ☐ Confined spaces

Have you ever had, or do you now have any of the following?

Yes	No	
☐	☐	Persistent cough or shortness of breath
☐	☐	Unexplained general weakness or fatigue
☐	☐	Asbestosis or silicosis
☐	☐	Lung cancer
☐	☐	Broken ribs or chest injury
☐	☐	Chest pain on deep inspiration
☐	☐	Sensation of smothering when using a respirator
☐	☐	Heat exhaustion or heat stroke
☐	☐	Trouble smelling odors
☐	☐	Difficulty squatting
☐	☐	Difficulty climbing stairs or ladder carrying 25# weight
☐	☐	Other conditions that might interfere with respirator use or result in limited work activity

(Discuss all "Yes" responses with the examining physician.)

Fully explain all medical problems identified in Respirator Clearance Questions section.

Describe Your Physical Activity or Exercise Program(check one)

Intensity: Low _____ Moderate _____ High _____ Duration, in Minutes per Session _____

Describe activity_____ Frequency _____Days per week

MEDICATIONS

List all medications (prescription and over-the-counter) you are currently taking.

Client Signature: _____ **Date:** _____

MEDICAL HISTORY

VASCULAR

	Yes	No
Do you have any vascular (blood vessel) disease?	☐	☐
Enlarged superficial veins, phlebitis, or blood clots?	☐	☐
Anemia?	☐	☐
Hardening of the arteries?	☐	☐
High Blood Pressure?	☐	☐
Heart failure?	☐	☐
Stoke or Transient Ischemic Attack (TIA)?	☐	☐
Aneurysms (Dilated arteries)?	☐	☐
Poor circulation or swelling of the hands or feet?	☐	☐
White fingers with cold or vibration?	☐	☐

RESPIRATORY

	Yes	No
Do you have any respiratory (lung/airway) disease?	☐	☐
Asthma (including exercise induced asthma)?	☐	☐
(Do you use an inhaler?)	☐	☐
Bronchitis?	☐	☐
Emphysema?	☐	☐
Acute or chronic lung infections?	☐	☐
Persistent or recurring coughing or wheezing?	☐	☐
Wind pipe or lung surgery?	☐	☐
Collapsed lung?	☐	☐
Scoliosis (curved spine) with breathing limitations?	☐	☐
History of Tuberculosis?	☐	☐
Previous positive TB skin test? Date:_____	☐	☐

HEART

	Yes	No
Do you have any heart disease?	☐	☐
Heart pain (Angina)?	☐	☐
Heart rhythm disturbance or palpitations (irregular beat)?	☐	☐
History of Heart Attack?	☐	☐
Organic heart disease (including prosthetic heart valves, mitral stenosis, heart block, heart murmur, mitral valve prolapse, pacemakers, Wolf Parkinson White (WPW) Syndrome, etc.)?	☐	☐
Heart surgery?	☐	☐
Sudden loss of consciousness?	☐	☐
Other (specify)?	☐	☐

DIAGNOSTIC AND PHYSICAL FINDINGS

Cardio/Pulmonary

Normal	Abnormal	
☐	☐	Lungs/Chest
☐	☐	Heart (thrill, murmur)
☐	☐	Vascular (varicosities, stasis, insufficiency)
☐	☐	Electrocardiogram - Attach with interpretation, if done
☐	☐	Stress EKG - Bruce Protocol, attach with interpretation, if exam requires

_____

Pulmonary Function Testing: (Attach Copy)

Calibration Date _____
(Should be same day as test)
Machine Brand _____

Actual FVC	Actual FEV1	Actual FEV1/FVC	Actual FEF 25-75
%Predicted FVC	%Predicted FEV1	%Predicted FEV1/FVC	%Predicted FEF 25-75

Comments/Findings on Vascular / Respiratory / Heart sections

Cardiac Risk Profile (record here, or attach report)

Chol _____ HDL _____ LDL _____ Trig _____ Gluc _____

Attach copy of complete blood count (CBC) report, including differential

CHEST X-RAY

Last PA Chest X-ray: Date _____
Result: ☐ Normal ☐ Abnormal
Comments: _____

TB Mantoux (PPD) Date: _____
mm Induration: _____

VITAL SIGNS

Height_____ (inches) Weight_____ (pounds)

Blood Pressure_____/_____ mm/hg

Pulse _____/MIN
(Conduct vital sign measurements while sitting; if elevated, repeat in 15 min.)

Respirations_____/MIN Temp(if indicated)_____

IMMUNIZATIONS

Last Tetanus (Td) Shot (Date): _____
Given today? ☐ Yes ☐ No

Has client received Hepatitis B Vaccine?
☐ Yes ☐ No ☐ Declined ☐ Not Applicable
Hep B series complete? ☐ Yes ☐ No When?
Date Immunization #1:_____ #2:_____ #3:_____

Has client received Hepatitis A Vaccine?
☐ Yes ☐ No ☐ Declined ☐ Not Applicable
Hep A series complete? ☐ Yes ☐ No
Date Immunization #1:_____ #2:_____

CORONARY RISK FACTORS

	Yes	No
Blood Pressure ≥ 145/90	☐	☐
Fasting Glucose ≥ 120 mg/dl	☐	☐
Total Cholesterol ≥ 200 mg/dl	☐	☐
Family history of CVD in members ≤ 55	☐	☐
Obesity	☐	☐
No regular exercise program	☐	☐
Currently smoking or ≥ pack/yr history	☐	☐

Client Signature: _____ **Date:** _____

MEDICAL HISTORY

ENDOCRINE

	Yes	No
Do you have any endocrine (hormone) disease?	☐	☐
Diabetes (insulin requiring; units per day _____)? (Year of diagnosis_____)	☐	☐
Diabetes (non-insulin requiring)? (Year of diagnosis_____)	☐	☐
Childhood Onset Diabetes?	☐	☐
Thyroid Disease?	☐	☐
Obesity?	☐	☐
Unexplained weight loss or gain?	☐	☐

OBSTETRIC

	Yes	No	NA*
Are you currently pregnant?	☐	☐	☐

*Male; question not applicable

MENTAL HEALTH

	Yes	No
Do you have any psychiatric or mental health problems?	☐	☐
History of psychosis?	☐	☐
Psychiatric/psychological consultation?	☐	☐
Difficulty dealing with stress?	☐	☐
Panic attacks, hyperventilation, or anxiety or phobia disorder?	☐	☐
Periods of uncontrollable rage?	☐	☐
Claustrophobia?	☐	☐
Diagnosed depression, personality disorder, or neuroses?	☐	☐

DERMATOLOGY/ALLERGY

	Yes	No
Do you have any skin or allergy diseases?	☐	☐
Sun sensitivity?	☐	☐
Allergic dermatitis to rubber or latex?	☐	☐
History of chronic dermatitis?	☐	☐
Active skin disease or infections?	☐	☐
Moles that have changed in size or color?	☐	☐
Allergies, including hay fever? (if so, to what?)	☐	☐

MUSCULOSKELETAL

	Yes	No
Do you have any muscle or bone disease?	☐	☐
Moderate to severe joint paint, arthritis, tendonitis?	☐	☐
Amputations?	☐	☐
Loss of use of arm, leg, fingers, or toes?	☐	☐
Loss of sensation?	☐	☐
Loss of strength in hands, arms, legs or feet?	☐	☐
Loss of coordination?	☐	☐
Back injury?	☐	☐
Chronic back pain? (back pain associated with neurological deficit or leg pain)	☐	☐

Are you RIGHT ☐ or LEFT ☐ handed? (check one)

Musculoskeletal

Normal	Abnormal	
☐	☐	Upper extremities (strength)
☐	☐	Upper extremities (range of motion)
☐	☐	Lower extremities (strength)
☐	☐	Lower extremities (range of motion)
☐	☐	Feet
☐	☐	Hands
☐	☐	Spine, other musculoskeletal
☐	☐	Flexibility of neck, back, spine, hips, knees

Comments/Findings

DIAGNOSTIC AND PHYSICAL FINDINGS

Comments/Findings
(Attach copy of blood chemistry panel report.)

Comments/Findings

Please assess the following, if box is checked: ☐

Medically cleared to perform the following:

Yes	No	
☐	☐	Vigorous aerobic exercise program 3 hr/wk
☐	☐	Push ups
☐	☐	Pull ups
☐	☐	Sit ups
☐	☐	One and one half mile (1 1/2) timed run
☐	☐	3-mile timed walk
☐	☐	Squat/rise w/o holding on; hold squat 45 sec.
☐	☐	Kneel on one knee, arms extended for 7 sec.
☐	☐	Assume a 1 then 2 knee kneeling position w/i 2 seconds, rise w/o assistance, repeat

Comments/Findings

Client Signature: _____ **Date:** _____

MEDICAL HISTORY

NEUROLOGICAL

	Yes	No
Do you have any neurological disease?	☐	☐
Tremors, shakiness?	☐	☐
Seizures (recent or previous)?	☐	☐
Spinal Cord Injury?	☐	☐
Numbness or tingling?	☐	☐
Head/spine surgery?	☐	☐
History of head trauma with persistent deficits?	☐	☐
Chronic recurring headaches (migraine)?	☐	☐
Brain tumor?	☐	☐
Loss of memory?	☐	☐
Insomnia (difficulty sleeping)?	☐	☐

GASTROINTESTINAL

	Yes	No
Do you have any stomach or intestinal disease?	☐	☐
Hernias?	☐	☐
Colostomy?	☐	☐
Persistent stomach/abdominal pain or heartburn?	☐	☐
Active ulcer disease?	☐	☐
Hepatitis, or other liver disease?	☐	☐
Irritable bowel syndrome?	☐	☐
Rectal bleeding?	☐	☐
Vomiting blood?	☐	☐

GENITOURINARY

	Yes	No
Do you have any disease of the urinary system or genitals?	☐	☐
Blood in urine?	☐	☐
Kidney Stones?	☐	☐
Difficult or painful urination?	☐	☐
Infertility (difficulty having children)?	☐	☐

DIAGNOSTIC AND PHYSICAL FINDINGS

Neurological

Normal	Abnormal	
☐	☐	Cranial Nerves (I - XII)
☐	☐	Cerebellum
☐	☐	Motor/Sensory (include vibratory and proprioception)
☐	☐	Deep Tendon reflexes
☐	☐	Mental Status Exam

Comments/Findings

Gastrointestinal

Normal	Abnormal	
☐	☐	Auscultation
☐	☐	Palpation
☐	☐	Organo-megaly
☐	☐	Tenderness
☐	☐	Inguinal hernia

Attach blood chemistry panel report

Comments/Findings

Genitourinary

Normal	Abnormal	
☐	☐	Urogenital exam

(Attach urinalysis report, if done.)

Comments/Findings

Client Signature: _____ **Date:** _____

MEDICAL HISTORY

VISION

	Yes	No
Do you have any vision problems or eye disease?	☐	☐
Frequent headaches?	☐	☐
Blurred vision?	☐	☐
Loss of vision in either eye?	☐	☐
Eye irritation when using a respirator or goggles?	☐	☐
Difficulty reading?	☐	☐
Eye disease, glaucoma?	☐	☐
Eyeglasses?	☐	☐
Contact lenses?	☐	☐
Cataracts?	☐	☐
Color blindness?	☐	☐
Have you had any type of eye surgery (e.g., radial keratotomy, PRK [laser], cataract, etc.)? If "YES", please provide specific type and date of surgery:	☐	☐

HEARING

	Yes	No
Do you have any hearing problems or ear disease?	☐	☐
Exposure to loud, constant noise or music in the last 14 hours?	☐	☐
Exposure to loud, impact noise in past 14 hours?	☐	☐
Ringing in the ears?	☐	☐
Difficulty hearing?	☐	☐
Ear infections or cold in the last 2 weeks?	☐	☐
Dizziness or balance problems?	☐	☐
Eardrum perforation?	☐	☐
Do you use a hearing aide?	☐	☐
Are you in a Hearing Conservation Program?	☐	☐
Do you use protective hearing equipment?	☐	☐
If yes, type(s): ☐ foam ☐ pre-mold/plugs ☐ ear muffs		
Have you had prior Military Service?	☐	☐
Have you had prior ear surgery?	☐	☐
Have you had recurrent ear infections?	☐	☐

DIAGNOSTIC AND PHYSICAL FINDINGS

Head and Neck

Normal	Abnormal	
☐	☐	Head, Face, Neck (thyroid), Scalp
☐	☐	Nose/Sinuses/Eustachian tube
☐	☐	Mouth/Throat
☐	☐	Pupils equal/reactive
☐	☐	Ocular Motility
☐	☐	Ophthalmoscopic Findings
☐	☐	Speech

Comments/Findings

Ears

Right

Normal	Abnormal	
☐	☐	Canal/External ear
☐	☐	Tympanic Membrane

Left

☐	☐	Canal/External ear
☐	☐	Tympanic Membrane

Comments/Findings:

Eyes / Vision

Color Vision
Normal ☐ Abnormal ☐ Number Correct: _____ of _____ tested

Can see Red/Green/Yellow? ☐ Yes ☐ No

Type of test
☐ Ishihara plate ☐ Function test (Yarn, wire, etc.)
☐ Other (specify_____)

Tonometry
Right _____ mm/Hg Left _____ mm/Hg

Visual Acuity
Corrected vision (Snellen Units)

Both Near 20/_____ Right Near 20/_____ Left Near 20/_____

Both Far 20/_____ Right Far 20/_____ Left Far 20/_____

Uncorrected vision (Snellen Units)

Both Near 20/_____ Right Near 20/_____ Left Near 20/_____

Both Far 20/_____ Right Far 20/_____ Left Far 20/_____

Peripheral Vision
Right
Nasal_____degrees Temporal_____degrees

Left
Nasal_____degrees Temporal_____degrees

Depth Perception (Type of test:_____)
☐ Normal ☐ Abnormal Number Correct: _____ of _____ tested

Interpretation: _____ Seconds of Arc

Hearing

Audiogram: **Type**: ☐ Baseline ☐ Annual ☐ Termination
(Attach current and baseline audiogram)

With hearing aid? ☐ Yes ☐ No
(Note: The use of hearing aids is not acceptable for some clearance examinations, such as for law enforcement.)

Calibration Method: ☐ Oscar ☐ Biological Date _____

Frequency	500Hz	1000Hz	2000Hz	3000Hz	4000Hz	6000Hz	8000Hz
Right ear							
Left ear							

Review/compare with baseline: No Change ☐ Mild Change ☐ Change of 10 dB ave. or more in 2000, 3000, and 4000 Hz ☐

☐ **Normal** ☐ **Abnormal** **Explain:**

Client Signature: _____ **Date:** _____

PROFESSIONAL STAFF Please check all the topics you discussed during the diagnostic work-up or physical examination	EXAMINING PHYSICIAN: WORKPLACE EXPOSURE MONITORING	EXAMINING PHYSICIAN Summary of Abnormal Findings with Plan of Action/Referral
☐ Diet ☐ Low-calorie ☐ Low-fat ☐ Low-salt ☐ Cholesterol ☐ Hypertension ☐ Exercise ☐ Obesity ☐ Smoking Cessation ☐ Avoid Sun Exposure/Sun Screen ☐ Alcohol Use ☐ Cancer Screening ☐ Immunizations ☐ Hearing Protection ☐ Vision Referral ☐ Other Personal Protective Equipment ☐ Job Stressors ☐ Referral(s) Others _____	Is workplace monitoring data or other exposure data for this employee or this position available for your review? ☐ Yes ☐ No If yes, what type of data is available? ☐ Acute Exposure Data ☐ Periodic Exposure Data ☐ Ongoing Workplace Monitoring Data ☐ Individual Dosimetry Data ☐ Material Safety Data Sheets How was data made available? ☐ Electronic Database ☐ Hard Copy Report ☐ Employee Self-Report If exposure data was available, please explain what changes, if any, were made in the examination due to this data: _____ _____ Based upon your knowledge of the physical demands of the position and/or the potential exposure to occupational hazards, please answer the following: Does the employee need to be in a medical surveillance program? ☐ Yes ☐ No ☐ Cannot determine based on information available ☐ Other _____	Impressions: 1) _____ 2) _____ 3) _____ 4) _____ 5) _____ Plan: 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

SIGNATURES DATE

Nurse _____ _____

Physician _____ _____

I have had the examination findings explained to me and received a copy of the examination if requested. I understand the recommendations.

Client _____ _____

PLEASE BE SURE ALL REQUIRED SECTIONS OF THIS FORM HAVE BEEN COMPLETED AND ARE LEGIBLE BEFORE RETURNING IT FOR REVIEW BY THE DESIGNATED MEDICAL REVIEW OFFICER. THANK YOU.

DEPARTMENT OF THE INTERIOR
OCCUPATIONAL HEALTH SERVICES PROGRAM

Medical Review Officer's Qualification Statement

Name of Examined Individual: _____ Physician/Clinic Address: _____
SS#: _____ _____

Date of Birth: _____ Physician/Clinic Phone: _____

POSITION(S) OR FUNCTION(S) FOR WHICH CLEARANCE(S) HAVE BEEN REQUESTED
[please check all that apply]

Functional Clearance Area	Pre-placement / Baseline / Exit	Periodic	Functional Clearance Area	Pre-placement / Baseline / Exit	Periodic
Respirator Use	☐	☐	Hazardous Waste Work	☐	☐
Law Enforcement	☐	☐	Inspector	☐	☐
Diver	☐	☐	Tower Climber	☐	☐
Wildland Firefighter	☐	☐	Other (specify:_____)	☐	☐
Commercial Driver's License	☐	☐	Other (specify:_____)	☐	☐

This review is based on:

☐ Report of Medical Examination, Dated: _____

☐ Supplemental Medical Information, Dated: _____

Findings:

☐ **No Significant Findings** - Individual meets the Department's medical standards for the function(s) / clearance(s) requested..

☐ **A Final Determination Cannot be Made Based on Available Medical Information** – The following results were inconclusive and require further information or additional testing. Final recommendations cannot be made until this has been completed. The requested information should be provided within 30 days of the review date to the Medical Review Officer at the address noted at the bottom of this page.

☐ **Significant Medical Findings** - The individual does not meet the Department's medical standards for the safe and efficient performance of the duties of the function(s) / clearance(s) requested.

Date of Initial Medical Review: _____ Reviewing Physician: _____

Date of Final Medical Review: _____ Signature: _____

Reviewer's Address: _____

Privacy Act Notification Form **Attachment - D 3 (a)**

What follows this page is the DOI Privacy Act Notification Form. If the DOI Standard Medical History and Examination Form is not used, this Privacy Act Notification Form should be used by an employee who is to receive clinical services from which the agency will be receiving reports or summaries.

U. S. DEPARTMENT OF THE INTERIOR

PRIVACY ACT NOTIFICATION FORM

The following information is provided in order to comply with the requirements of the Privacy Act of 1974, and is consistent with the provisions of 5 CFR 293, 5 USC 2951(2) and 3301, Executive Orders 12107 and 12564, and the Departmental Manual 370 DM 293.

The health services you receive related to your employment with the Department of the Interior result in the gathering and recording of information that is personal and may be highly confidential. Depending on the provider of services (i.e., Departmental, other federal agency, or private health services agency), original documents or copies will be placed in an Employee Medical Folder (EMF), which is a distinct part of your official personnel folder. The EMF is maintained within the Employee Medical File System (EMFS) of the employing Department, Bureau, or individual office. The categories of records contained in your EMF are: 1) occupational medical records; 2) employee exposure records; and 3) records resulting from the testing for use of illegal drugs.

The records may be maintained in a manual or electronic system. Regardless of location, the information these folders contain is yours, and is considered privileged. Protecting the physical security of your record, as well as the information it contains, is the responsibility ultimately of the Department's Director of Personnel, with delegations of responsibility to the heads of the employing bureau or office, and the personnel officer of the employing bureau or office. The provider of clinical services also is held responsible for the security of all confidential information for which they have records.

Unless it is with your written consent, the information in your EMF is only for official purposes as specified by law. Those purposes include the following:

a. To ensure that records required to be retained on a long-term basis to meet the mandates of law, Executive order, or regulations (e.g., the Department of Labor's Occupational Safety and Health Administration (OSHA) and OWCP regulations), are so maintained.
b. To provide data necessary for proper medical evaluations and diagnoses, to ensure that proper treatment is administered, and to maintain continuity of medical care.
c. To provide an accurate medical history of the total health care and medical treatment received by the individual as well as job and/or hazard exposure documentation and health monitoring in relation to health status and claims of the individual.
d. To enable the planning for further care of the patient.
e. To provide a record of communications among members of the health care team who contribute to the patient's care.
f. To provide a legal document describing the health care administered and any exposure incident.
g. To provide a method for evaluating quality of health care rendered and job-health-protection including engineering protection provided, protective equipment worn, workplace monitoring, and medical exam monitoring required by OSHA or by good practice.
h. To ensure that all relevant, necessary, accurate, and timely data are available to support any medically-related employment decisions affecting the subject of the records (e.g., in connection with fitness-for-duty and disability retirement decisions).
i. To document claims filed with and the decisions reached by the OWCP and the individual's possible reemployment rights under statutes governing that program.
j. To document employee's reporting of on-the-job injuries or unhealthy or unsafe working conditions, including the reporting of such conditions to the OSHA and actions taken by that agency or by the employing agency.
k. To ensure proper and accurate operation of the agency's employee drug testing program under Executive Order 12564.

The "Routine Uses" of your EMF are summarized on the back of this page.

Your receipt of health services as part of your employment, and your submission of confidential information to your EMF, are **voluntary**. If you do not wish to participate in these services, or provide the requested information, you are not required to do so. However, your continued employment or assignment to specific duties may depend on the availability of complete and current occupational health records. Lacking such information, the Department may be required to take personnel action related to your employment.

ACKNOWLEDGMENT OF REVIEW OF PRIVACY ACT INFORMATION

I have reviewed the Department of the Interior Privacy Act Notification Form and understand the use of my confidential medical information within the Department's Employee Medical File System.

_____ _____

(Signature) (Date)

ROUTINE USES ALLOWED FOR EMPLOYEE MEDICAL FILE SYSTEM RECORDS

a. To disclose information to the Department of Labor, Department of Veterans Affairs, Social Security Administration, Federal Retirement Thrift Investment Board, or a national, State, or local social security type agency, when necessary to adjudicate a claim (filed by or on behalf of the individual) under a retirement, insurance, or health benefit program.

b. To disclose information to a Federal, State, or local agency to the extent necessary to comply with laws governing reporting of communicable disease.

c. To disclose information to another Federal agency, to a court, or a party in litigation before a court or in an administrative proceeding being conducted by a Federal agency when the Government is a party to the judicial or administrative proceeding.

d. To disclose information to the Department of Justice, or in a proceeding before a court, adjudicative body, other administrative body before which the agency is authorized to appear, when:

1. The agency, or any component thereof; or
2. Any employee of the agency in his or her official capacity; or
3. Any employee of the agency in his or her individual capacity where the Department of Justice or the agency has agreed to represent the employee; or
4. The United States, where the agency determines that litigation is likely to affect the agency or any of its components, is a party to litigation or has an interest in such litigation, and the use of such records by the Department of Justice or the agency is deemed by the agency to be relevant and necessary to the litigation, provided, however, that in each case it has been determined that the disclosure is compatible with the purpose for which the records were collected.

e. To disclose in response to a request for discovery or for appearance of a witness, information that is relevant to the subject matter involved in a pending judicial or administrative proceeding.

f. To disclose pertinent information to the appropriate Federal, State, or local agency responsible for investigating, prosecuting, enforcing, or implementing a statute, rule, regulation, or order when the disclosing agency becomes aware of anindication of a violation or potential violation of civil or criminal law or regulation.

g. To disclose information to the Office of Management and Budget at any stage in the legislative coordination and clearance process in connection with private relief legislation as set forth in OMB Circular No. A-19.

h. To disclose information to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

i. To disclose information to the Merit System Protection Board or the Office of the Special Counsel, the Federal Labor Relations Authority and its General Counsel, the Equal Employment Opportunity Commission, arbitrators, and hearing examiners to the extent
necessary to carry out their authorized duties.

j. To disclose information to survey team members from the Joint Commission on Accreditation of Hospitals (JCAH) when requested in connection with an accreditation review, but only to the extent that the information is relevant and necessary to meet the JCAH standards.

k. To disclose information to the National Archives and Records Administration in records management inspections and its role as Archivist.

l. To disclose information to health insurance carriers contracting with the Office to provide a health benefits plan under the Federal Employees Health Benefits Program information necessary to verify eligibility for payment of a claim for health benefits.

m. By the agency maintaining or responsible for generating the records to locate individuals for health research or survey response and in the production of summary descriptive statistics and analytical studies (e.g., epidemiological studies) in support of the function for which the records are collected and maintained. While published statistics and studies do not contain individual identifiers, in some instances the selection of elements of data included in the study might be structured in such a way as to make the data individually identifiable by inference.

n. To disclose information to the Office of Federal Employees Group Life Insurance or Federal Retirement Thrift Investment Board that is relevant and necessary to adjudicate claims.

o. To disclose information, when an individual to whom a record pertains is mentally incompetent or under other legal disability, to any person who is responsible for the care of the individual, to the extent necessary.

p. To disclose to the agency-appointed representative of an employee, all notices, determinations, decisions, or other written communications issued to the employee, in connection with an examination ordered by the agency under--

(1) Medical evaluation (formerly Fitness for Duty) examinations procedures; or
(2) Agency-filed disability retirement procedures.

q. To disclose to a requesting agency, organization, or individual the home address and other information concerning those individuals who it is reasonably believed might have contracted an illness or been exposed to or suffered from a health hazard while employed in the Federal workforce.

r. To disclose information to a Federal agency, in response to its request or at the initiation of the agency maintaining the records, in connection with the retention of an employee, the issuance of a security clearance, the conducting of a suitability or security investigation of an individual, the classifying of jobs, the letting of a ontract, or the issuance of a license, grant, or other benefit by the requesting agency; or the lawful, statutory, administrative, or investigative purpose of the agency, to the extent that the information is relevant and necessary to the requesting agency's decision on the matter.

s. To disclose to any Federal, State, or local government agency, in response to its request or at the initiation of the agency maintaining the records, information relevant and necessary to the lawful, statutory, administrative, or investigatory purpose of that agency as it relates to the conduct of job related epidemiological research or the insurance of compliance with Federal, State, or local government laws on health and safety in the work environment.

t.To disclose to officials of labor organizations recognized under 5 U.S.C. chapter 71, analyses using exposure or medical records and employee exposure records, in accordance with the records access rules of the Department of Labor's OSHA, and subject to the limitations at 29 CFR 1910.20(e)(2)(iii)(B).

u. To disclose the results of a drug test of a Federal employee pursuant to an order of a court of competent jurisdiction where required by the United States Government to defend against any challenge against any adverse personnel action.

v. To disclose information to contractors, grantees, or volunteers performing or working on a contract, service, grant, cooperative agreement or job for the Federal Government. Policies and practices of storing, retrieving, safeguarding, and retaining and disposing of records in the system

Authorization for Disclosure of Information Form Attachment - D 3 (b)

What follows this page is the DOI Authorization for Disclosure of Information Form. It may be used by an employee who is authorizing the release of confidential information from his or her occupational medical record to any other recipient of such information, including management personnel in the employee's bureau, another DOI office, or any other person/program to whom the employee wishes to allow access to his/her confidential medical records. This form should be signed prior to any examination which is intended to result in clearances or job related actions.

U. S. DEPARTMENT OF THE INTERIOR

AUTHORIZATION FOR DISCLOSURE OF INFORMATION FORM

The following information is provided in order to comply with the requirements of the Privacy Act of 1974, and is consistent with the provisions of 5 CFR 293, 5 USC 2951(2) and 3301, Executive Orders 12107 and 12564, and the Departmental Manual 370 DM 293. The release of information about a patient who is treated or referred for treatment of alcohol or drug abuse, or the medical results of such abuse, is governed by the Confidentiality of Alcohol and Drug Abuse Patient Record Regulations, 42 CFR, Part 2. Any person who knowingly and willfully requests or obtains any record concerning an individual from a Federal agency under false pretenses shall be guilty of a misdemeanor and fined not more than $5,000 (5 USC 552a(I)(3) and in the case of alcohol and drug abuse patient records a falsified authorization of disclosure is prohibited under 42 CFR 2.31(d) and is punishable by a fine of not more than $500 for a first offense or a fine of not more than $5,000 for a subsequent offense in accordance with 42 CFR 2.14.

TO: _____
(Name of Health Services Provider -- Custodian of the Records to be Released)

_____
(Address)

_____

You are hereby authorized to furnish information from the record of:

_____
(Name of Subject Individual)

An employee (or prior employee) of: _____
(Bureau/Office/Agency)

The records are to be released to the following recipient:

_____
(Name of Individual or Entity to Receive the Information)

_____
(Address)

_____

The inclusive dates for the information that is to be released, and the **specific information to be released**, are:

From_____ To_____

The release is for the following specific purpose:

☐ COMPENSATION CLAIM(S)
☐ INSURANCE CLAIM(S)
☐ PRIVATE PHYSICIAN
☐ ATTORNEY
☐ SELF
☐ OTHER

If this authorization has not otherwise been revoked or has not expired in accordance with the terms of the duration statement provided above or has not been given for a longer period as set forth in the duration statement, it will terminate one year from the date of the signature.

Signature:	Date:
Signature of Parent or Guardian, if Subject is a Minor:	If the signer is other than the subject individual, indicate the relationship or authority for this request:

Law Enforcement Officers **Attachment - D 4**

What follows is a comprehensive guide to the medical examination and review of applicants and incumbents for firearms-carrying law enforcement positions within the Department of the Interior. It may be used for general reference on the subject, or the materials may be used to implement a full program acceptable to DOI.

The guidelines in this section for the medical examination and review of DOI law enforcement applicants and incumbents have been developed using many references and resources. Below are listed the major resources used to develop these guidelines.

1. OPM Guidelines for 1811 IG, 1985

2. U.S. OPM 5 CFR-339, "Medical Qualifications Determinations"

3. A review of existing Federal agency law enforcement medical guidelines and standards

4. Federal agency law enforcement scientific studies, including the U.S. Secret Service study on visual acuity, U. S. Treasury study on radial keratotomy, and U.S. Marshall study on hearing loss

5. State of California law enforcement medical guidelines, 1994

6. Onsite observation of the performance of law enforcement duties by DOI and U.S. Public Health Service personnel.

7. Executive Order 11478 (1969) as amended by Executive Order 13087 (1998).

Rationale for Medical Evaluation and Review of Law Enforcement Positions

The job requirements for law enforcement employees of the DOI are by their nature arduous and hazardous. These job requirements are performed under variable and unpredictable working conditions. Due to their job requirements and working conditions, the DOI has developed an occupational safety and health program that includes medical standards for law enforcement positions in order to insure the following.

1. That DOI law enforcement personnel will be able to perform the full range of duties under the conditions under which those duties must be performed.

2. That existing/preexisting medical conditions of DOI law enforcement personnel will not be exacerbated, aggravated, nor accelerated.

3. The DOI has a strong commitment to the public and a strong commitment in maintaining the integrity of mission accomplishment.

These standards establish minimum requirements for medical fitness that are necessary for the safe and efficient performance of the essential functions of law enforcement officers. Executive Order 11478 (as amended) prohibits discrimination in federal employment because of race, color, religion, sex, national origin, handicap, age, or sexual orientation.

The implementation of the DOI occupational safety and health program insures the uniformity, consistency, and defensibility of the DOI medical personnel management decision-making process.

Medical Evaluations

Medical evaluations of law enforcement employees are to be conducted as a pre-placement exam, and thereafter as outlined below. The AMO may determine that, due to health and safety risks, the medical evaluation requires an increased frequency.

- ages 29 and under - every 3 years;
- ages 30-39 - every 2 years; and
- ages 40 and above - every year.

The medical evaluations are to consist of:

- a baseline (for a pre-placement exam) or interval medical history (the DOI Standard Medical History and Exam Form may be used for this purpose);
- a baseline (for a pre-placement exam) or interval occupational history, including significant exposures since the last exam (the DOI Medical Surveillance Occupational/Work History form may be used for this purpose);
- a measurement of height, weight, and blood pressure; and
- a medical examination.

The evaluation is to be conducted by a qualified health care provider (see Tab 5, *Medical Services Providers*), and the DOI Standard Medical History and Exam Form will be used for recording and reporting the results of the exam. The AMO will provide the final determination to the DOI receiving official as to whether law enforcement personnel have

duty limitations and are capable of meeting the full range of law enforcement duties. The medical determination by the AMO will be based upon the medical requirements for firearms-carrying law enforcement personnel.

Medical Services to be Provided for Law Enforcement Personnel

SERVICES, BY CATEGORY

« HISTORIES »

General Medical History
Occupational History
Noise Exposure History

« EXAMINATION ITEMS »

General Physical Examination
General Appearance and Vital Signs
Special Attention To:

- Eyes, Ears, Nose, Mouth, and Throat
- Central Nervous System
- Peripheral Nervous System
- Back & Musculoskeletal System
- Cardiovascular System
- Genitourinary System
- Gastrointestinal System
- Respiratory System
- Skin
- Thyroid
- Endocrine and Metabolic System
- Habitus (obesity)

« DIAGNOSTIC TESTS/PROCEDURES »

Audiogram, Current - 500, 1000, 2000, 3000,
4000, 6000, 8000 Hertz in both ears
(per medical examination schedule and yearly for firearms instructors)
Vision - Far and Near Vision Acuity, (uncorrected and corrected, each eye separately, plus together)
Peripheral Vision (nasal and temporal, each eye separately measured)
Depth perception (seconds of arc)
Color Discrimination (Ishihara, at least 14 plates)
Tonometry (baseline and yearly after age 40)
Chest X-Ray, PA & Lateral (only with AMO approval)

Medical Services for Law Enforcement Personnel (continued)

Pulmonary Function Test-Spirometry (baseline only)
Electrocardiogram-Resting
Exercise Stress Test --maximal, symptom-limited graded exercise test using Bruce protocol (depending on agency, and as determined by AMO)
TB (Mantoux) skin test (baseline only)

« LABORATORY »

Lab Panel (CBC, UA, Chemistry Panel)
Blood Lead, Zinc Protoporphyrin (yearly for Firearms Instructors)
Other blood or urine tests, as determined by AMO

« CLEARANCES » **All medical clearances provided by AMO**

Medical Examination Review
Medical Clearance to Participate in DOI Physical Fitness Program
Respirator Medical Clearance (only with **AMO** approval)

- Cartridge Respirator Clearance
- Powered Air Respirator Med. Clear.
- Self-Cont. Breathing App. Clearance

THE UNITED STATES DEPARTMENT OF INTERIOR

GENERIC MEDICAL STANDARDS
For Commissioned Law Enforcement Officers

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for positions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the arduous and hazardous occupational, functional and environmental requirements of the positions covered by these standards. The medical standards are provided to aid the Agency medical reviewing physician and the Department of Interior officials in determining what medical problems may hinder the individual's ability to satisfactorily perform their full range of essential duties without undue risk to himself/herself or others. They are also to be used to ensure consistency and uniformity in the application of these standards.

> **Any disease, condition or impairment, not specifically listed in these medical standards, which interferes with the safe, efficient and expected performance of the essential duties and responsibilities may also constitute grounds for medical disqualification.**

These standards establish minimum requirements for medical fitness that are necessary for the safe and efficient performance of the essential functions of law enforcement officers. Executive Order 11478 (as amended) prohibits discrimination in federal employment because of race, color, religion, sex, national origin, handicap, age, or sexual orientation.

These standards will be guided by the considerations set forth in 5 CFR Part 339, Medical Qualifications Determinations. Listed below are examples of medical conditions and/or physical impairments that may be disqualifying. Individualized assessments will be made on a case-by-case basis to determine an individual's ability to meet the performance related requirements of positions covered by these standards. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination.

An applicant that is unable to obtain a drivers license for any medical reason will not be considered for these Department of Interior law enforcement positions until such time that the condition is resolved and a drivers license has been issued. Regardless of the re-issuance of a drivers license the applicant must still meet the medical standards outlined in this document.

These medical standards are intended to serve as a general guideline for the safe placement into and the continued working in hazardous and arduous job positions within the Department of Interior law enforcement. Each of the medical standards listed in this

document are subject to the clinical interpretation of the condition by the Agency medical reviewing physician who will incorporate his/her knowledge of the job requirements and environmental conditions in which employees must work.

VISION STANDARDS

Any disease or condition which interferes with a person's vision may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

1. **Uncorrected distant vision must be equal to or better than 20/100 – 20/200 in each eye.**
2. **Binocular distant vision must be correctable to 20/20.**
3. **Monocular vision is disqualifying.**
4. **Depth Perception must be equal to or better than 70 seconds of arc.**
5. **Peripheral Vision must be normal.**
6. **Color vision must be sufficient to pass the Ishihara 14 plate series color vision test or the Farnsworth D-15 color vision test. X-Chrome lenses are not acceptable as a means for correcting color deficiencies.**
7. **Orthokeratology is acceptable for meeting the corrected vision standard as long as individuals wear their lenses while on duty at all times and meet the above visual acuity requirements for corrected vision. (Orthokeratology involves the use of special hard contact lenses that "mold" the shape of the cornea to reduce myopia.**

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

Ophthalmologic conditions which are particularly susceptible to environmental exposures such as sunlight, dusts, fumes, various volatile compounds may cause an applicant to be disqualified.

1. **REFRACTIVE SURGICAL PROCEDURES (i.e., LASIK, Radial Keratotomy, Photorefractive surgery [laser], Keratoplasty, etc.)**
   These operative procedures are considered acceptable provided that the individual's vision meets the above standards post-operatively and the operation occurred **AT LEAST** 6 months (for radial keratotomy or photorefractive surgery) or 3 months (for LASIK) before application. The individual must be free of post-operative complications. The results of an eye examination by a board-certified Ophthalmologist will be required to insure that vision is not impeded due to post-operative complications such as infection, glare, and contrast-sensitivity.

2. **CHRONIC CONJUNCTIVITIS**
Due to the possible visual impairment and/or increased susceptibility to environmental exposures which could interfere with the job performance, this condition may result in a medical disqualification.

3. **PTERYGIUM**
This condition is generally disqualifying if vision is impaired by the growth.

4. **CORNEAL ABRASIONS**
Because this condition may interfere with visual acuity it is generally disqualifying. The degree of impairment must be determined by an Ophthalmologist.

5. **CORNEAL DYSTROPHY**
This condition is generally disqualifying if the individual can not meet the outlined Department of Interior law enforcement vision standards. Varying degrees of this condition could sufficiently impair the visual acuity which may result in a medical disqualification.

6. **CORNEAL SCARS**
This condition is generally disqualifying if the individual can not meet the Department of Interior law enforcement vision standards. Varying degrees of this condition could sufficiently impair the visual acuity which may result in a medical disqualification.

7. **CORNEAL ULCERS**
This condition is generally disqualifying since essential duties of the position could further exacerbate the condition, in addition to the condition causing impairments of the visual acuity. This condition must be treated and cleared by an Ophthalmologist before any further consideration is given to the applicant.

8. **KERATITIS**
Any visual impairment associated with keratitis that is likely to interfere with job performance is generally disqualifying.

9. **KERATOCONUS**
This condition causes a cone shape to the cornea and results in major changes in the refracting power of the eye which necessitates frequent changes in the eyeglass prescriptions. If the visual acuity is currently corrected to the above standards then the applicant would be considered acceptable.

10. **RETINAL DETACHMENT**
This condition is generally disqualifying due to the serious visual obstruction.

11. **RETINITIS PIGMENTOSA**

12. **LENS OPACITIES**
This condition could be considered disqualifying if the individual can not meet the Department of Interior law enforcement vision standards.

13. **GLAUCOMA**
This condition, if confirmed by an ophthalmologist, is generally disqualifying if there is any impairment of peripheral vision.

14. **NIGHT BLINDNESS**

THE HEARING STANDARDS

Any disease or condition which interferes with the ability to hear may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

1. **In the frequency range from 500 - 2,000 hertz (Hz), the deficit should not exceed 30 decibels in either ear.**
2. **At 3,000 Hz the deficit should not exceed 40 decibels in either ear.**
3. **HEARING AIDS: The use of any hearing aid to comply with the medical standards is unacceptable.**

A pure tone audiogram must be performed in an approved sound proof hearing booth that conforms to the American National Standards Institute (ANSI) standards, without hearing aids. The person must be binaural (have hearing in both ears). A whisper test is not acceptable. Additional testing may be required to render a final medical opinion, including, but not limited to, a second audiogram separated by a noise-free period of from 15-40 hours, an Otolaryngologist's examination, testing for speech reception threshold and word discrimination (at a presentation level of 50db), Sound Field Testing, and the Hearing In Noise Test (HINT Study).

OTOLOGICAL CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MENIERE'S DISEASE**
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO & PAROXYSMAL POSITIONAL VERTIGO**
4. **ACOUSTIC NEUROMA**
5. **WEGENER S GRANULOMATOSIS**
6. **OTOSCLEROSIS**

* Any other disease or defect of the ear which adversely affects hearing or equilibrium and which potentially interferes with the safe and efficient job performance is generally disqualifying.

HEAD, NOSE, MOUTH, THROAT AND NECK STANDARD

A general examination of the head and neck should be performed during the physical examination. Attention should be given to any skull deformities, loss of bony substance or any evidence of past surgery. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MUTISM/ APHONIA (INABILITY TO SPEAK)**
2. **ANOSMIA**
3. **ARTIFICIAL LARYNX OR ESOPHAGEAL SPEECH**
4. **FACIAL DEFORMITIES**
5. **TEMPOROMANDIBULAR JOINT SYNDROME (MODERATE TO SEVERE CASES)**
6. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
7. **RESTRICTED RANGE OF MOTION IN THE NECK**
8. **NECK MASSES, LYMPHADENOPATHY OR TRACHEOSTOMY**

* Any other chronic disease or condition which significantly interferes with speech or breathing and bears the potential to render the person suddenly incapacitated is generally disqualifying.

THE PERIPHERAL VASCULAR SYSTEM STANDARD

Any condition which significantly interferes with peripheral vascular function may be considered disqualifying. The peripheral vascular system involves the veins and arteries of the legs and arms. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**

CARDIOVASCULAR SYSTEM STANDARD

Any disease or condition which interferes with cardiac function may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **PACEMAKERS or PROSTHETIC VALVES** are generally disqualifying. Any other condition or post-surgical management that requires the use of Coumadin or other anti-coagulants is generally disqualifying.

2. **CORONARY ARTERY DISEASE**.

3. **HYPERTENSION** that requires the use of any medication to stabilize the blood pressure may be disqualifying. Systolic blood pressure exceeding 150 and/or diastolic blood pressure exceeding 90 mm Hg may be disqualifying. Confirmation of hypertension will require at least three (3) serial readings of blood pressure. Serial readings must include at least three (3) blood pressure readings taken on different days and should include readings in both arms in a standing, sitting, and recumbent position. Additional testing may be required to render a final medical opinion, including, but not limited to a maximal, symptom-limited exercise stress EKG, dilated funduscopic exam of the eye to detect hypertensive retinopathy, and a cardiologist evaluation to determine whether there exists any contraindication for vigorous intensity physical exercise. Individuals on medication will have to demonstrate the absence of orthostatic hypotension with blood pressure measurements in the sitting, standing, and lying positions. Anti-hypertensive medication will be evaluated to ensure that safe and efficient job performance will not be adversely affected.

4. **LEFT BUNDLE BRANCH BLOCK.**

5. **MYOCARDITIS/ ENDOCARDITIS/ PERICARDITIS** (Active or recently resolved cases). A past history of these diseases may require additional testing to determine the current capabilities.

6. History of **MYOCARDIAL INFARCTION**.

7. A history of **CARDIAC SURGERY** (depending on the procedure and when it was performed).

8. **VALVULAR HEART DISEASE** such as mitral valve stenosis, mitral valve regurgitation, aortic stenosis, mitral valve prolapse, etc.

9. **DYSRHYTHMIAS**: such as ventricular tachycardia or fibrillation, Wolff-Parkinson-White syndrome, Paroxysmal Atrial Tachycardia with or without block.

10. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS**.

11. **PULMONARY EMBOLISM** (within the past six months or if there is a recurrent history or use of anticoagulants.

12. **ANGINA PECTORIS** or chest pain of unknown etiology.

13. **CARDIOMYOPATHY** from any cause.

14. **CONGESTIVE HEART FAILURE**

15. **MARFAN'S SYNDROME**

16. **CONGENITAL ANOMALIES (case-by-case review of clinical presentation)**

CHEST AND RESPIRATORY SYSTEM STANDARD

Any disease or condition which interferes with respiratory function may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. FORCED VITAL CAPACITY (FVC) AND/OR FORCED EXPIRATORY VOLUME AT ONE SECOND (FEV1) THAT IS LESS THAN 70% OF THE EXPECTED VALUE.

2. THE FEV1/FVC RATIO SHOULD NOT REFLECT EVIDENCE OF A SIGNIFICANT OBSTRUCTIVE OR RESTRICTIVE DISORDER.

3. **ASTHMA** currently controlled on any medication is generally disqualifying. A history of asthma after the age of 12 years must be considered on a case-by-case basis. A person may be requested to submit to a methacholine challenge test,

exercise stress treadmill test, or other diagnostic assessment prior to making final recommendations.

4. **ACTIVE PULMONARY TUBERCULOSIS (TB)**: A history of confirmed TB that has been treated for longer than 6 months is acceptable provided that documentation supports the treatment history. Additionally, diagnostic studies may be required following the case evaluation. Evidence of significant lung destruction in fully treated cases will be evaluated on a case-by-case basis. Any case of **active TB** would delay medical qualification until a sufficient period of time has passed to render the person non-communicable and documentation must be provided to show evidence of medical regimen compliance.

5. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PFT RESULTS**.

6. **LUNG ABSCESS**

7. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)

8. **EMPHYSEMA**

9. **SARCOIDOSIS** (if associated with an impaired pulmonary function)

10. **PULMONARY EMBOLISM**

11. **PULMONARY INFARCTION**

12. **TUMORS OF THE LUNG**

13. **PNEUMONECTOMY** (if FEV1 less than 70%)

* Respiratory disorders not listed above will be reviewed on a case-by-case basis and may require the evaluation by a Pulmonologist.

GASTROINTESTINAL SYSTEM STANDARD

The gastrointestinal tract (GI) should be considered normal from the mouth to the anus by the examining physician. Any disorder of the GI tract capable of rendering the applicant suddenly incapacitated or incapable of sustaining attention to required tasks, i.e., chronic diarrhea, may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS**

2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS or IRRITABLE BOWEL SYNDROME** (Control of these conditions with surgical and/or medication treatments will be reviewed on a case-by-case basis.)

3. **COLOSTOMIES**

4. **ILEITIS** (recurrent or chronic)

5. **CHOLELITHIASIS** (symptomatic or asymptomatic)

6. **CHOLECYSTITIS** (chronic or recurring)

7. **DIVERTICULITIS** (symptomatic)

8. **DYSPHAGIA** from any cause. Control/severity/treatment of these conditions will be reviewed on a case-by-case basis.

9. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology)

10. **INTESTINAL OBSTRUCTION** from any cause

11. **PANCREATITIS**

12. **AN UNTREATED INGUINAL, INCISIONAL OR VENTRAL HERNIA**.

The following clinical scenarios and all other gastrointestinal conditions will be considered on a case by case basis:

* A history of bowel resection is generally disqualifying if there is any evidence of recurrent pain, hemorrhage or any dietary restrictions that might interfere with the performance of the duties and responsibilities.

* A history of gastric resection is generally disqualifying if there is any evidence (historical or physical) of pain, hemorrhage, fainting episodes or dietary restrictions that might interfere with the performance of the job.

* A history of a symptomatic hiatal hernia resulting in chest pain, gastrointestinal hemorrhage (occult or massive), or respiratory symptoms. The complication of gastroesophageal reflux controlled on antacids will generally be considered acceptable.

GENITOURINARY AND REPRODUCTIVE SYSTEM STANDARD

In general, any dysfunction of the genitourinary or reproductive system that has the capability of interfering with the required tasks or rendering the person suddenly incapacitated may be considered disqualifying. Any functional disorders rendering the individual incapable of sustained attention to work tasks, i.e., urinary frequency and/or significant discomfort secondary to such disorders, are generally disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE** or **CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **BERGER'S DISEASE**
7. **HISTORY OF RENAL VEIN THROMBOSIS**
8. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
9. **RENAL TOXICITY**

THE CONDITION OF PREGNANCY

A female currently pregnant in her first or second trimester would generally be requested to provide medical documentation from her treating physician in order for the agency to better determine her individual ability to participate in the Federal Law Enforcement Training Center (FLETC) training course. A female currently pregnant in her third trimester would generally be requested to postpone the FLETC training course until successful parturition and adequate time for convalescence.

ENDOCRINE AND METABOLIC SYSTEMS STANDARD

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or

pathology such as elevated blood pressure, weakness, fatigue and collapse. Any condition affecting normal hormonal/metabolic functioning and response that is likely to adversely affect safe and efficient job performance is generally disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ADRENAL DYSFUNCTION** (In the form of Addison's Disease or Cushing's Syndrome).

2. **THYROID DISEASE** (uncontrolled or associated with complications). Hypothyroidism adequately controlled by hormone replacement may be considered acceptable.

3. **PITUITARY DYSFUNCTION**

4. **DIABETES MELLITUS**

5. **HYPERGLYCEMIA** will require additional tests including but not limited to a glycohemoglobin (or hemoglobin A_1C), fasting glucose, and a 3 hour glucose tolerance test before a final medical determination.

6. **DIABETES INSIPIDUS**

MUSCULOSKELETAL SYSTEM STANDARD

Any condition that adversely impacts on an individuals movement, agility, flexibility, strength, dexterity, coordination or the ability to accelerate, decelerate and change directions efficiently may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ARTHRITIS** (ANY ETIOLOGY) if there is limited joint motion and/or pain.

2. **AMPUTATIONS** of one or more digits if it directly affects the ability to grip and efficiently handle weapons.

3. **AMPUTATIONS OF AN EXTREMITY**: Any loss of an upper or lower

extremity. Employees with fewer than five (5) digits on each hand will be evaluated on a case-by-case basis.

4. **ANKYLOSING SPONDYLITIS**.

5. **SCOLIOSIS,** if the lateral curve is 20 degrees of more

6. **MUSCULAR DYSTROPHY**

7. **LUMBOSACRAL INSTABILITY**: pain or limitations of flexibility and strength causing an inability to stand, bend, stoop, carry heavy objects or sit for long periods of time.

8. **DEGENERATIVE DISK DISEASE**

9. **FIXED LORDOSIS OR KYPHOSIS** which limits mobility and skeletal strength.

10. **FRACTURES** may require orthopedic evaluation to determine whether functional limitations currently exist. A recent fracture with current immobilization (such as casting, bracing, etc.) of a limb that prevents the performance of the full range of law enforcement duties will require documentation from the treating physician that immobilization is no longer required and that no physical limitations are present.

11. **SPINA BIFIDA**

12. **SCIATICA OR OTHER NEUROPATHIES**

13. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology may be considered disqualifying. Each case will be reviewed in context to the original history of the injury (or whatever the etiology), the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation. Any other documentation submitted or requested will be considered before a medical opinion is generated.

14. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches) may be disqualifying.

15. Any **PROSTHETIC DEVICE** will be reviewed on a case-by-case basis.

16. Evidence of a **CERVICAL RIB, SUBLUXATION, TORTICOLLIS, SYMPTOMATIC THORACIC OUTLET SYNDROME** or a **BRACHIAL CLEFT CYST**

17. Any evidence of a **CERVICAL NEUROPATHY** including numbness, tingling or loss of motor strength in the upper extremities may be disqualifying.

18. Any medical condition, congenital or acquired, which would interfere with a person's agility, dexterity, the lifting of heavy objects or the ability to perform the full range of law enforcement duties may be disqualifying.

19. A condition may be disqualifying if there is evidence that the general body symmetry may directly interfere with the safe utilization of issued standard and specialty equipment, including but not limited to handguns, shot guns, handcuffs, motor vehicles, etc.

HEMATOPOETIC SYSTEM STANDARD

Any hematopoietic disease or condition which interferes with the expected performance of these jobs is generally disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ANEMIA-- Generally considered as a:**
   HEMATOCRIT OF LESS THAN 39% AND A HEMOGLOBIN OF LESS THAN 13 gm/dl FOR MALES
   HEMATOCRIT OF LESS THAN 33% AND A HEMOGLOBIN OF LESS THAN 12 gm/dl FOR FEMALES
   (If anemia does exist but physical performance levels and pulmonary function are normal then this condition may be acceptable.)
2. **INHERITED CLOTTING DISORDERS (ex. HEMOPHILIA)** are generally disqualifying
3. **CHRONIC LYMPHANGITIS**
4. **THROMBOCYTOPENIA OR CLOTTING DISORDER**
5. **SICKLE CELL ANEMIA**
6. **SPLENOMEGALY**

CENTRAL AND PERIPHERAL NERVOUS SYSTEMS STANDARD

Any disease or condition which interferes with the central or peripheral nervous system function may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

1. Cerebral and cerebellar functions must be normal.

2. The peripheral nervous system and all reflexes should be acceptable.

3. An individual with a history of seizures currently controlled on medication(s) is generally disqualified. Re-evaluation of an individual is subject to the seizure policy outlined below.

SEIZURE POLICY

A history of seizures requires an individual to meet the following criteria before further medical consideration:

1. The individual must present the results of a sleep-deprived electroencephalogram (EEG) with photic and hyperventilation stimulation, following an acceptable, non-medicated, seizure-free period of time. The current EEG must be free of epileptiform abnormalities.

   An acceptable period of time will be defined by the prevailing scientific standards of medicine, a review of the current medical literature and the opinions of the individual's private Neurologist and, if necessary, a Neurologist selected by the Agency.

2. The medical history and/or documentation regarding the etiology of the seizure disorder must be submitted from the private physician(s), if available.

3. The agency may require a complete neurological and/or neuropsychological evaluation prior to further consideration of an individual.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ATAXIA**
2. **CHOREOATHETOSIS**
3. **EPILEPSY** (See the seizure policy above)

4. **HUNTINGTON'S CHOREA**
5. **MULTIPLE SCLEROSIS**
6. **MUSCULAR DYSTROPHY**
7. **NARCOLEPSY**
8. **NEUROFIBROMATOSIS**
9. **PARKINSON S DISEASE**
10. **CEREBROVASCULAR ACCIDENT (STROKE)**
11. **TRANSIENT ISCHEMIC ATTACKS**
12. **SENSORY DYSFUNCTION** (smell, touch, taste).
13. **MIGRAINE CEPHALGIA**

* Any neurological disease or disorder that is not listed above shall be reviewed on a case-by-case basis.

INFECTIOUS DISEASE POLICY
IMMUNE SYSTEM / ALLERGIC DISORDERS STANDARDS

Any communicable disease which can directly affect the occupational job performance and/or directly threaten the health and safety of others is generally disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **HEREDITARY ANGIOEDEMA**
2. **GOODPASTURE'S SYNDROME**
3. **AUTOIMMUNE HEMOLYTIC ANEMIA**
4. **VASCULITIS**
5. **HASHIMOTO'S THYROIDITIS**
6. **MYASTHENIA GRAVIS**
7. **SYSTEMIC LUPUS ERYTHEMATOSUS**

SPECIAL CONCERNS:

HIV / AIDS: In general an applicant that **VOLUNTEERS** information regarding a positive HIV status or AIDS may be considered medically ineligible. The applicant has the opportunity to **voluntarily** submit additional information supporting his/her HIV status at his or her expense in order for the agency to better determine his/her eligibility.

HEPATITIS: A history of chronic or acute active hepatitis B or hepatitis C is generally disqualifying. A finding of unexplained elevated liver enzymes may require additional diagnostic studies before a final medical recommendation is rendered. Additional medical information will be obtained in order for the agency to better determine their eligibility.

TUBERCULOSIS: A history of TB that has been appropriately treated for longer than 6 months is acceptable provided that documentation supports the treatment history and the person has a current normal chest x-ray. A person with a positive PPD or Mantoux skin test will be required to have a Chest X-ray and, if indicated, a sputum culture.

PSYCHIATRIC DISORDERS STANDARD

Only those psychiatric disorders which affect safe and efficient job performance may be disqualifying. All diagnosis must be consistent with the diagnostic criteria as established by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), or any subsequent revisions. Any psychiatric illness not listed here shall be reviewed on a case-by-case basis.

SPECIFIC PSYCHIATRIC DISORDERS THAT MAY BE DISQUALIFYING INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING EXAMPLES.

AXIS I DISORDERS:

DELIRIUM, DEMENTIA, AND AMNESTIC AND OTHER COGNITIVE DISORDERS

MAJOR DEPRESSION

MANIC-DEPRESSIVE DISORDER (BI-POLAR)

DISSOCIATIVE DISORDERS

KLEPTOMANIA

PANIC DISORDER AND OTHER ANXIETY DISORDERS (depending upon etiology, duration and severity of clinical expression)

PATHOLOGICAL GAMBLING

PYROMANIA

SCHIZOPHRENIA AND OTHER PSYCHOTIC DISORDERS

(Exceptions may be made in cases of a single episode of schizophrenic reactions associated with an acute illness capable of causing such reaction.)

SEXUAL AND GENDER IDENTITY DISORDERS (Homosexuality is not considered a mental disorder.)

AXIS II DISORDERS

NARCISSISTIC PERSONALITY DISORDER

ANTISOCIAL PERSONALITY DISORDER

DEPENDENT PERSONALITY DISORDER

PARANOID PERSONALITY DISORDER

SCHIZOID PERSONALITY DISORDER

ORGANIC BRAIN SYNDROME

MEDICATION STANDARD

All medication requirements, including psychotropic medication, will be evaluated to ensure that safe and efficient job performance will not be adversely affected. Cases will be reviewed on a case-by-case basis. Each of the following will be taken into consideration:

1. **MEDICATION(S)** (Type and dosage requirements)
2. **POTENTIAL DRUG SIDE EFFECTS**
3. **DRUG-DRUG INTERACTIONS**
4. **ADVERSE DRUG REACTIONS**
5. **DRUG TOXICITY AND ANY MEDICAL COMPLICATIONS ASSOCIATED WITH LONG TERM DRUG USE**
6. **DRUG-ENVIRONMENTAL INTERACTIONS**
7. **DRUG-FOOD INTERACTIONS**
8. **HISTORY OF PATIENT COMPLIANCE**

Medications such as narcotics, sedative hypnotics, barbiturates, amphetamines, or any drug with the potential for addiction, that are taken for extended periods of time (usually beyond 10 days) or are prescribed for a persistent or recurring underlying condition would

generally be considered disqualifying.

SPECIAL SUBJECT: ANABOLIC STEROID USE

Any person currently using anabolic steroids may be disqualified. Anabolic steroids were legislated a controlled substance on February 27, 1991, and now require a physician's prescription.

ORGAN TRANSPLANTATION AND PROSTHETIC DEVISES STANDARD

RENAL TRANSPLANTATION may be considered disqualifying unless the applicant is not taking immunosuppressive drugs and is medically cleared by the surgeon who performed the operation to participate in strenuous activities. The applicant must be considered by the surgeon to be capable of withstanding blunt trauma to his/her flanks without a significant probability of untoward personal damage.

OCULAR LENS IMPLANTATION may be acceptable considering an adequate post surgical recovery period and if the visual acuity meets the medical standards. (See vision standards)

COCHLEAR IMPLANTATION is acceptable provided that the applicant meets the hearing standards and can localize sound satisfactorily. (See hearing standards)

PACEMAKERS or PROSTHETIC VALVES are generally disqualifying. Any other condition or post-surgical management that requires the use of Coumadin or other anti-coagulants is disqualifying. (See cardiovascular standards)

Other transplantations and prosthetic devises will be considered on a case-by-case basis.

THE DERMATOLOGIC STANDARD

Any disease or condition which may cause the person to be unduly susceptible to injury or disease as a consequence of environmental exposures including the sun may be considered disqualifying. Cases will be reviewed on a case-by-case basis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ALBINISM**
2. **SKIN CANCER** (examples are Basal Cell carcinoma, Squamous Cell carcinoma, Mycosis fungoides)
3. **CHLORACNE** (This condition should be reviewed on a case-by-case basis for its association with toxic exposures)
4. **KAPOSI'S SARCOMA**
5. **SEVERE CHRONIC DERMATITIS**

CANCER STANDARD

Cases will be reviewed on a case-by-case basis. Further consideration will be given under the following circumstances: (all conditions must be met).

1. The cancer has a high cure rate.
2. The Oncologist declares the individual to be a complete responder with no evidence of active disease.
3. There is no evidence of medication or radiation side effects present.
4. There is no evidence of immune suppression as a result of the treatment.
5. The stage of the cancer is generally regarded as having a good prognosis.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **KAPOSI'S SARCOMA**
2. **SMALL CELL (OAT CELL) CARCINOMA OF THE LUNG**
3. **PANCREATIC CANCER**
4. **RENAL CARCINOMA**
5. **METASTATIC OVARIAN CARCINOMA**
6. **LEUKEMIA**
7. **ADRENAL CARCINOMA**
8. **NEOPLASIA OF THE CENTRAL NERVOUS SYSTEM**
9. **HEPATIC CARCINOMA**
10. **MULTIPLE ENDOCRINE NEOPLASIA TYPE 1 & 2**

As part of the assessment of an individual's ability to perform the duties of wildland fire fighting in a safe and efficient manner, an evaluation of physical fitness must be done. To participate in this physical fitness assessment, an individual must first be cleared for participation by a medical evaluation, as covered in this Attachment. To gauge physical fitness status, maximal oxygen consumption (Max VO2) may be measured or estimated. Max VO2 is expressed in milliliters of oxygen per kilogram of body weight per minute. This assessment may be done with a standard test of fitness, such as a "step test," or by the "pack test," a method recently developed that is more task oriented than the step test. The pack test involves having the individual being tested carry a bag of water (a pack that incorporates an amount of water of known weight) over level ground for a specified distance, within a specified period of time. The required performance of this test is indicated for each of the fitness categories listed below.

The Wildland Fire Qualification Subsystem Guide - 310-1 provides a listing of most positions likely to be involved in fire fighting activities. In addition, the Guide indicates for each position a description of duties and the required physical fitness status. Four categories of physical fitness are used:

- *Arduous*: Duties involve field work requiring physical performance calling for above-average endurance and superior conditioning. These duties may include an occasional demand for extraordinarily strenuous activities in emergencies under adverse environmental conditions and over extended periods of time. Requirements include running, walking, climbing, jumping, twisting, bending, and lifting more than 50 pounds; the pace of work typically is set by the emergency situation. This category requires a Max VO2 of 45. The pack test for arduous duty requires the individual to carry a 45 pound water bag 3 miles in 45 minutes or less.

- *Moderate*: Duties involve field work requiring complete control of all physical faculties and may include considerable walking over irregular ground, standing for long periods of time, lifting 25 to 50 pounds, climbing, bending, stooping, squatting, twisting, and reaching. Occasional demands may be required for moderately strenuous activities in emergencies over long periods of time. Individuals usually set their own work pace. This category requires a Max VO2 of 40. The pack test for moderate duty requires the individual to carry a 25 pound water bag 2 miles in 30 minutes or less.

- *Light, or Low*: Duties mainly involve office type work with occasional field activity characterized by light physical exertion requiring basic good health. Activities may

include climbing stairs, standing, operating a vehicle, and long hours of work, as well as some bending, stooping, or light lifting. Individuals almost always can govern the extent and pace of their physical activity. This category requires a Max VO2 of 35. The pack test for light or low duty requires the individual simply to walk (without a water bag) 1 mile in 16 minutes or less.

o *None* (no fitness required): Duties are normally performed in a controlled environment, such as an incident base or camp.

Note: Because of the risk of heat exhaustion and heat stroke, particular attention should be given by AMOs to factors such as a firefighter's past history of heat stroke or heat exhaustion, alcohol use, and the use of certain medications, such as diuretics, antihistamines, MAO inhibitors, and those with anticholinergic properties.

MEDICAL STANDARDS

And Review Criteria for Medical Review Officers

These Standards Are Applicable to the Following Function:

WILDLAND FIREFIGHTER (ARDUOUS DUTY)

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the arduous and hazardous occupational, functional and environmental requirements involved with wildland fire fighting. The medical standards are provided to aid the examining physician, the designated agency medical review officer(s), and officials of the involved agencies when determining whether medical conditions may hinder an individual's ability to safely and efficiently perform the requirements of a wildland firefighter without undue risk to himself/herself or others. They are also intended to ensure consistency and uniformity in the medical evaluation of applicants and incumbents for this role.

Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the job requirements and environmental conditions in which employees must work. Listed with the standards are examples of medical conditions and/or physical impairments that may be found to be disqualifying. Individualized assessments will be made on a case-by-case basis to determine the individual's ability to meet the performance-related requirements of the wildland firefighter function. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

> **Please Note:** These Medical Standards are distinct from the "*performance requirements*" of the wildland firefighter. Performance requirements are established by individual agencies, and are discussed in the report prepared by Dr. Brian J. Sharkey, entitled "Fitness and Work Capacity," Second Edition, National Wildfire Coordinating Group, April 1997.

Rationale for Medical Evaluation and Review of Wildland Firefighters

The functional requirements for wildland firefighters are by nature arduous and hazardous. These functions are performed under variable and unpredictable working conditions. Due to the performance requirements and working conditions, an interagency team has developed these standards in order to help insure the following:

1. Wildland firefighters will be able to perform the full range of requirements of their duties under the conditions under which those duties must be performed.

2. Existing/preexisting medical conditions of wildland firefighters and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened.

3. Demonstration of the interagency fire community's strong commitment to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Medical Examinations

Medical examinations of wildland firefighter applicants and incumbents are to be conducted both as a *pre-placement* exam for all permanently-employed individuals who are to be assigned to roles that involve the arduous level of wildland fire fighting, and then every five years thereafter until age 45, at which time the frequency of exams changes to every three years. Please refer to "Wildland fire Qualification Subsystem Guide, 310-1", National Wildfire Coordinating Group, for information on specific fire fighting positions that have been determined to require arduous exertion. On intervening years (when a physical examination is not conducted, an interval medical history will be completed by each firefighter and reviewed prior to the firefighter's taking the performance test. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual firefighters must be conducted more frequently.

Temporary firefighters must meet the same medical standards as permanent firefighters, but their evaluation will involve completing an annual medical history, medical screening, and clearance form until age 45, after which time a medical exam is to be completed every three years.

The medical examination is to consist of those services summarized on Page 7. The evaluation is to be conducted by a qualified health care provider (for assistance, please refer to Tab 5, "*Medical Services Providers*" in the Department of the Interior *Occupational Medicine Program Manual and Handbook*), using the form entitled **Federal Interagency Medical History, Examination, and Clearance Form for Wildland Firefighters (Arduous Duty)**. The examining physician will provide the medical clearance for firefighters if sufficient information is available to allow this decision. The AMO will provide the final medical determination in those cases in which a full clearance cannot be granted by the examining physician.

ESSENTIAL FUNCTIONS AND WORK CONDITIONS OF A WILDLAND FIREFIGHTER

Time/Work Volume	**Physical Requirements**	**Environment**	**Physical Exposures**
May include:			
• long hours (minimum of 12 hour shifts) • irregular hours • shift work • time zone changes • multiple and consecutive assignments • pace of work typically set by emergency situations • ability to meet "arduous" level performance testing (the "Pack Test"), which includes carrying a 45 pound pack 3 miles in 45 minutes, approximating an oxygen consumption (VO_2 max) of 45 mL/kg-minute *And up to*: • 14-day assignments	• use shovel, Pulaski, and other hand tools to construct fire lines • lift and carry more than 50# • lifting or loading boxes and equipment • drive or ride for many hours • fly in helicopters and fixed wing airplanes • work independently, and on small and large teams • use PPE (includes hard hat, boots, eyewear, and other equipment) • arduous exertion • extensive walking, climbing • kneeling • stooping • pulling hoses • running • jumping • twisting • bending • rapid pull-out to safety zones • provide rescue or evacuation assistance	• very steep terrain • rocky, loose, or muddy ground surfaces • thick vegetation • down/standing trees • wet leaves/grasses • varied climates (cold/hot/wet/dry/humid/ snow/rain) • varied light conditions, including dim light or darkness • high altitudes • heights • holes and drop offs • very rough roads • open bodies of water • isolated/remote sites • no ready access to medical help	• bright sunshine/UV • burning materials • extreme heat • airborne particulates • fumes, gases • falling rocks and trees • allergens • loud noises • snakes • insects/ticks • poisonous plants • trucks and other large equipment • close quarters, large numbers of other workers • limited/disrupted sleep • hunger/irregular meals • dehydration

Medical Examination Services to be Provided for the Wildland Firefighter

HISTORIES

- General Medical History
- Occupational History

EXAMINATION ITEMS

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination, with Special Attention To:
  - Overall Physical Fitness
  - Habitus (obesity)
  - Skin
  - Eyes, Ears, Nose, Mouth, and Throat
  - Neck (including flexibility and rotation)
  - Thyroid
  - Endocrine and Metabolic System
  - Respiratory System
  - Cardiovascular System
  - Back & Musculoskeletal System (including flexibility)
  - Extremities (including strength and range of motion)
  - Peripheral Vascular System
  - Abdomen
  - Gastrointestinal System
  - Genitourinary System
  - Central Nervous System (cranial nerves I-XII, cerebellar function)
  - Peripheral Nervous System (reflexes, sensation, and position sense)
  - Mental Status Evaluation

DIAGNOSTIC TESTS/PROCEDURES

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, near and far vision, corrected and uncorrected
- Peripheral Vision
- Depth perception
- Color Discrimination (red/green/yellow)
- Pulmonary Function Test-Spirometry
- Chest X-Ray, PA & Lateral (baseline exam only)
- Electrocardiogram-Resting (baseline exam only)
- TB (Mantoux) skin test (baseline exam only)
- Tetanus vaccination (to maintain as current)

LABORATORY

- CBC (hgb, hct, plate., WBC w/ diff.), dipstick UA (baseline/exit exam only), and blood chemistries: (LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]); (total chol., LDL-C, HDL-C, triglycerides, blood sugar [each exam])
- Cholinesterase (RBC/Plasma; baseline exam only)

CLEARANCES

- **Medical Clearance for Wildland Firefighter**

PSYCHIATRIC STANDARD

The applicant/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the requirements of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

(All diagnoses must be consistent with the diagnostic criteria as established by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, DSM-IV.)

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (depending upon etiology, duration and severity of clinical expression)
7. **PYROMANIA**
8. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness capable of causing such reaction.)
9. **ANTISOCIAL PERSONALITY DISORDER**
10. **PARANOID PERSONALITY DISORDER**
11. **SCHIZOID PERSONALITY DISORDER**
12. **ORGANIC BRAIN SYNDROME**
13. **PSYCHOTIC DISORDERS NOT ELSEWHERE CLASSIFIED**: Includes schizophreniform disorder, brief reactive psychosis, schizo affective disorder, atypical psychosis, infantile autism, childhood onset pervasive developmental disorder, atypical pervasive development disorder
14. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

PROSTHETICS, TRANSPLANTS, AND IMPLANTS STANDARD

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments

are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

Note: For individuals with transplants, prosthetics, or implanted pumps or electrical devices, the examinee will have to provide ***for agency review*** documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic or implanted device) is considered to be fully cleared for the specified functional requirements of wildland fire fighting.

IMMUNE SYSTEM/ALLERGIC DISORDERS STANDARD

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
  - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the requirements of the job; and
  - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **HEREDITARY ANGIOEDEMA**
2. **GOODPASTURE'S SYNDROME**
3. **AUTOIMMUNE HEMOLYTIC ANEMIA**
4. **VASCULITIS**
5. **HASHIMOTO'S THYROIDITIS**
6. **MYASTHENIA GRAVIS**
7. **SYSTEMIC LUPUS ERYTHEMATOSUS**
8. **CHRONIC OR ACUTE ACTIVE HEPATITIS B OR HEPATITIS C** A finding of unexplained elevated liver transaminases may require additional diagnostic studies before a final medical recommendation is rendered.
9. **TUBERCULOSIS** A history of TB that has been appropriately treated for longer than 6 months is not disqualifying, provided that documentation

supports the treatment history and the person has a current chest x-ray showing no active disease. A person with a positive PPD or Mantoux skin test will be required to have a Chest X-ray and, if indicated, a sputum culture.

10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

MEDICATION STANDARD

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications that are likely to present a safety risk or to worsen as a result of carrying out the specified functional requirements. Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)
2. Potential drug side effects
3. Drug-drug interactions
4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use
6. Drug-environmental interactions
7. Drug-food interactions
8. History of patient compliance

VISION STANDARD

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the requirements of the job. This requires binocular vision, far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity uncorrected of at least 20/100 binocular for wearers of hard contacts or spectacles; and
- Far visual acuity of at least 20/40 binocular corrected (if necessary) with contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 85^{o} laterally in each eye; and
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses and spectacles are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance, as well as being worn with any necessary personal protective equipment. Successful users of long-wear soft contact lenses are not required to meet the “uncorrected” vision guideline.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC CONJUNCTIVITIS**
2. **CORNEAL ULCERS**
   This condition must be treated and cleared by an Ophthalmologist before a medical clearance can be granted.
3. **RETINAL DETACHMENT**
4. **NIGHT BLINDNESS**
5. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

HEAD, NOSE, MOUTH, THROAT AND NECK STANDARD

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
  - normal flexion, extension, and rotation of the neck; and
  - open nasal and oral airways; and
  - unobstructed Eustachian tubes; and
  - no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

HEARING STANDARD

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the requirements of the job. This requires binaural hearing (to localize sounds) and

auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, 2000, and 3000 Hz in each ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: The use of a hearing aid(s) to meet this standard is ***not*** permitted.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MENIERE'S DISEASE**
2. **ACOUSTIC NEUROMA**
3. **OTOSCLEROSIS**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

DERMATOLOGY STANDARD

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the requirements of the function. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ALBINISM**
2. **KAPOSI'S SARCOMA**
3. **CHRONIC DERMATITIS**
4. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

VASCULAR SYSTEM STANDARD

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
  - no evidence of phlebitis or thrombosis; and
  - no evidence of venous stasis; and
  - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

CARDIAC STANDARD

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
  - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
  - a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
  - no pitting edema in the lower extremities, and
  - normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified requirements of the function, under the specified conditions, will be necessary before a clearance can be granted.
2. **CORONARY ARTERY DISEASE** A successful completion of an exercise stress test, or documentation from the individual's cardiologist acknowledging the requirements of the function and the work conditions, may allow a clearance despite this diagnosis.
3. **HYPERTENSION** that cannot be controlled to a level of 160/90 or less, or requires the use of any medication that affects the ability of the individual to safely and effectively carry out the requirements of the function, may be disqualifying.
4. **LEFT BUNDLE BRANCH BLOCK.**
5. **MYOCARDITIS/ ENDOCARDITIS/ PERICARDITIS** (Active or recently resolved cases).
6. History of **MYOCARDIAL INFARCTION.** Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified requirements of the function, under the specified conditions, will be necessary before a clearance can be considered.
7. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc. Exceptions may be granted depending upon the current clinical findings and diagnostic studies.
8. **DYSRHYTHMIAS**: such as ventricular tachycardia or fibrillation, Wolff-Parkinson-White syndrome, and Paroxysmal Atrial Tachycardia, with or without block.
9. **ANGINA PECTORIS** or chest pain of unknown etiology.
10. **CARDIOMYOPATHY** from any cause.
11. **CONGESTIVE HEART FAILURE**
12. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

CHEST AND RESPIRATORY SYSTEM STANDARD

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (baseline exam) showing:
  - forced vital capacity (FVC) of at least 70% of the predicted value; and
  - forced expiratory volume at 1 second (FEV1) of at least 70% of the predicted value; and
  - the ratio FEV1/FVC of at least 70% of the predicted value; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

Note: The requirement to use an inhaler (such as for asthma) requires agency review.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **SIGNIFICANT OBSTRUCTIVE OR RESTRICTIVE PULMONARY DISEASE.**
2. **ASTHMA** must be considered on a case-by-case basis.
3. **ACTIVE PULMONARY TUBERCULOSIS (TB)**: A history of confirmed TB that has been treated for longer than 6 months is acceptable provided that documentation supports the treatment history.
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
5. **LUNG ABSCESS**
6. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
7. **EMPHYSEMA** (if associated with impaired pulmonary function test results)
8. **SARCOIDOSIS** (if associated with an impaired pulmonary function test results)
9. **PULMONARY EMBOLISM**
10. **PULMONARY INFARCTION**
11. **PNEUMONECTOMY** (if associated with impaired pulmonary function)
12. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

ENDOCRINE AND METABOLIC SYSTEM STANDARD

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- Normal blood chemistry results; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ADRENAL DYSFUNCTION** (in the form of Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **PITUITARY DYSFUNCTION**
4. **INSULIN DEPENDENT DIABETES MELLITUS**
5. **HYPERGLYCEMIA** without a history of diabetes will require additional tests including but not limited to a glycohemoglobin (or hemoglobin A_1C) and fasting glucose before a final medical determination is made.
6. **DIABETES INSIPIDUS**.
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

THE CONDITION OF PREGNANCY

If a female applicant or incumbent raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the woman’s obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

HEMATOPOIETIC SYSTEM STANDARD

The applicant/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ANEMIA**-- Generally considered as:
   - hematocrit of less than 39% and a hemoglobin of less than 13.6 gm/dl for males
   - hematocrit of less than 33% and a hemoglobin of 12 gm/dl for females (If anemia does exist but physical performance levels and pulmonary function are normal, this condition may be acceptable.)
2. **HEMOPHILIA**
3. **CHRONIC LYMPHANGITIS**
4. **THROMBOCYTOPENIA OR CLOTTING DISORDER**
5. **SICKLE CELL ANEMIA**
6. **SPLENOMEGALY**
7. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

MUSCULOSKELETAL SYSTEM STANDARD

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the functional requirements of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength, flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

Note: For individuals who require the use of a prosthetic device, the examinee will have to provide ***for agency review*** documentation from his/her surgeon or physician that the individual (and, if applicable, his/her prosthetic device) is considered to be fully cleared for the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required performance activities.
2. **AMPUTATIONS OF AN EXTREMITY OR DIGITS** will be evaluated on a case-by-case basis.
3. **ANKYLOSING SPONDYLITIS**.
4. **MUSCULAR DYSTROPHY**
5. **LUMBOSACRAL INSTABILITY**: pain or limitations of flexibility and strength causing an inability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
6. **SCIATICA OR OTHER NEUROPATHIES**
7. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
8. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
9. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
10. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

CENTRAL AND PERIPHERAL NERVOUS SYSTEM STANDARD, AND VESTIBULAR SYSTEM STANDARD

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
  - intact cranial nerves, I-XII; and
  - normal vibratory sense in the hands and feet; and
  - normal proprioception of the major joints; and
  - normal sensation of hot and cold in the hands and feet; and

  - normal sense of touch in the hands and feet; and
  - normal reflexes of the upper and lower extremities; and
  - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO & PAROXYSMAL FUNCTIONAL VERTIGO**
4. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS**.
5. **EPILEPSY** (See the seizure standard, below)
6. **MULTIPLE SCLEROSIS**
7. **MUSCULAR DYSTROPHY**
8. **NARCOLEPSY**
9. **NEUROFIBROMATOSIS**
10. **PARKINSON'S DISEASE**
11. **CEREBROVASCULAR ACCIDENT (STROKE)**
12. **TRANSIENT ISCHEMIC ATTACKS**
13. **SENSORY DYSFUNCTION** (smell, touch, taste, proprioception)
14. **MIGRAINE**
15. **CEPHALGIA**
16. **SEIZURES***
17. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

Between 40 and 70 percent of people with a single, brief, generalized tonic-clonic seizure, who are found to have a normal EEG and no identified underlying cause for the seizure, will go on to experience further seizures if untreated. Also, approximately half of patients who become seizure-free on appropriate medication will be able to stop their medications and remain seizure-free. Those most likely to remain seizure-free are those who: 1) have had no seizures for 2 to 4 years; 2) had few seizures before the condition was medically controlled; 3) required only one medication to obtain control; 4) have a normal neurologic examination; 5) have no identified structural lesion responsible for the seizures; and 6) have a normal electroencephalogram (EEG) at the end of the treatment period. An individual

with a history of seizures must meet the following criteria before a medical clearance can be granted:

1. the individual must be seizure-free for two years, with or without medication; and
2. present for AMO review at the end of that two year period the normal results of the individual's electroencephalogram (EEG); and
3. provide a written opinion from the individual's neurologist and, if necessary, a neurologist selected by the employing agency, regarding the ability of the individual to safely and efficiently carry out the specified requirements of the function, under the anticipated work conditions.

*Harrison's Principles of Internal Medicine, 13th Edition, McGraw-Hill, Inc., San Francisco, page 2232

GASTROINTESTINAL SYSTEM STANDARD

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A physical exam and evaluation of the gastrointestinal tract that is within the range of normal variation; and
- Normal liver function and blood chemistry laboratory tests; and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 6).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS**.
2. **ACUTE VIRAL HEPATITIS** (After being asymptomatic for three (3) months an applicant may be re-evaluated).
3. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS/SPRUE or IRRITABLE BOWEL SYNDROME** (these conditions, controlled with surgical and/or medication treatments, will be reviewed on a case-by-case basis.)
4. **COLOSTOMIES**, unless the precipitating condition has stabilized and the applicant/incumbent demonstrates successful management of the colostomy, considering the requirements of the function and the work conditions.
5. **ILEITIS**, either recurrent or chronic.
6. **CHOLECYSTITIS** (chronic or recurring).
7. **DIVERTICULITIS** (symptomatic).

8. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology).
9. **INTESTINAL OBSTRUCTION** from any cause.
10. **ESOPHAGEAL VARICES**
11. **PANCREATITIS**
12. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
13. **ACTIVE GASTRIC OR DUODENAL ULCER**
14. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of pain, hemorrhage, fainting episodes or dietary restrictions that could interfere with the performance of the job.
15. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

GENITOURINARY SYSTEM STANDARD

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the requirements of the job. This may be demonstrated by:

- A normal clean catch urinalysis; and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 63).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE** or **CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **HISTORY OF RENAL VEIN THROMBOSIS**
7. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
8. **RENAL TOXICITY FROM ANY CAUSE**
9. Any other condition not otherwise listed that may adversely affect safe and efficient job performance will be evaluated on a case-by-base basis.

Divers **Attachment - D 6**

Due to the physical demands placed on the individual, medical examinations are required on a pre-placement and an annual basis for DOI employees assigned to positions that require diving. The following criteria will be used to evaluate the results of the examinations of applicants for diving positions, and to make determinations regarding clearances and further evaluation. To be cleared without restrictions for diving, an applicant must have a current recorded medical history and physical exam that demonstrate:

- the applicant is free of chronic disabling disease or disability of a type which would prevent active physical exercise, and could recur under diving conditions or arduous physical activity;

- the applicant is physically fit, sufficient to handle arduous work (Max VO2 of 45, see Attachment D 5, page 2; and Attachment E 3, pages 2 and 3);

- there are no acute or chronic sinus, ear, or upper respiratory infections or other problems, unless free drainage of the sinuses and free flow of air into and out of the lungs is assured;

- no evidence of acute or chronic otitis externa;

- an ability to equalize pressure on both sides of the eardrum, and with good movement of the eardrums;

- no current perforation of the ear drums (well healed perforations may be acceptable);

- no hearing loss of greater than 35 dB at 500, 1000, 2000, and 3000 Hz, and no more than 50 dB at 4000, 6000, and 8000 Hz, unless examined and cleared by an otolaryngologist (an audiogram is to be done at baseline, then every five years or more frequently if injury or symptoms of ear problems occur);

- no acute or chronic disease of the semi-circular canals that affects equilibrium;

- binocular vision, with
    - uncorrected near and distant vision in one or both eyes of at least 20/50, with no evidence of organic ocular disease, may be fully cleared for diving; or
    - uncorrected far visual acuity of between 20/50 and 20/100 and near visual acuity of 20/50 or better in one or both eyes, and no evidence of organic ocular disease, may be cleared if the applicant is advised of the greater risks involved in diving with reduced visual acuity; or

- if uncorrected far vision is less than 20/100 and near vision is less than 20/50, but can be corrected to at least 20/100 for distant vision and 20/50 for near vision with lenses that may be worn while diving, and there is no evidence of organic ocular disease, the applicant may be cleared if advised of the increased risk of diving with reduced visual acuity;

o no acute infectious diseases of the tissues of the oral cavity until curative treatment is completed;

o no bridgework or dentures, unless they fit securely and can be worn without conflicting with a diving mouthpiece;

o normal thrust, size, rhythm, and sounds of the heart (valvular disease, arrhythmias, angina, or other evidence of cardiovascular disease requires a referral to a cardiologist for further evaluation and clearance for diving, and surgery to correct these conditions is considered disqualifying);

o normal peripheral vasculature, with no disease that would interfere with normal gas exchange in an extremity (the vascular exam should demonstrate no pain, edema, trophic changes, or impaired deep venous circulation);

o normal vital signs (height, weight, pulse, and blood pressure), with BP that does not exceed 145/90 on at least three repeated assessments over a one hour period (pressures higher than this require control to this level or below by diet, salt restriction, exercise, and/or a medication that does not affect the other clearance requirements, such as balance or behavior; blood pressure that is brought under control must be demonstrated to be controlled by documentation of repeat measurements by a competent health care provider over a period of one month);

o free passage of air into and out of the lungs, with no history of spontaneous pneumothorax, thoracotomy, pulmonary blebs, active asthma (requiring treatment within the past two years), clinically active tuberculosis or other infectious disease, cystic disease, emphysema, or other conditions that would likely cause impairment of free air passage;

o no chronic or acute abdominal or gastrointestinal disease that could lead to debilitation, including ulcers and inguinal, femoral, large umbilical, or incisional hernias (until repaired and fully healed); hiatal hernias are not disqualifying unless symptoms impair the applicant's ability to work;

- no endocrine disease, including diabetes, requiring medication for control;

- no musculoskeletal abnormalities such as aseptic necrosis of the head of the femur, the shoulders, or the knees, and no recurrent or disabling orthopedic or rheumatological conditions;

- no renal disease which has a systemic effect;

- normal emotional maturity and stability, with no evidence of claustrophobia or other pertinent phobias, and no history of accident proneness or significant headaches, dizziness, fainting spells, dyspnea, palpitations, attempted suicide, drug use, excessive alcohol use, disciplinary problems, or other indications of emotional or behavioral instability;

- normal fine and gross muscular coordination, with normal reflexes;

- a normal central and peripheral nervous system, with no history or seizures, epilepsy, organic disease of the central nervous system, or head injury with neurological sequelae, and no disabling abnormalities with cranial nerves, deep tendon reflexes, balance, position sense, or sense of touch;

- (for females) no current pregnancy;

- a normal, resting 12-lead electrocardiogram on baseline (to be repeated annually for applicants over age 35, or more frequently if indicated by symptoms or examination findings);

- documentation of sickle cell screen, blood type and Rh factor (baseline examination only);

- a normal laboratory assessment, including:
    - syphilis serology;
    - chemistry panel, including fasting blood sugar;
    - complete blood count;
    - urinalysis;

- pulmonary function tests (FVC, FEV1, FEV1/FVC) at baseline; thereafter, only if indicated by history, examination findings, or known or suspected exposure to pulmonary toxic agents (e.g., asbestos, formaldehyde); and

- chest x-ray (PA and lateral) at baseline, and every 2 years after age 40.

In addition, ocular tonometry examination is recommended for divers over the age of 40.

A summary listing of medical services for divers exams is presented on the following page.

Medical Services to be Provided for Divers

SERVICES, BY CATEGORY

« HISTORIES »
General Medical History
Occupational History

« EXAMINATION ITEMS »
General Physical Examination
General Appearance and Vital Signs
Special Attention To:

- Habitus (Obesity)
- Overall Physical Fitness
- Ears (TM, TM Mobility, and Canals)
- Eyes
- Mouth and Oral Cavity
- Cardiovascular System
- Peripheral Vascular System
- Respiratory System
- Abdomen (Hernia)
- Anus (Hemorrhoids)
- Back & Musculoskeletal System
- Extremities
- Genitourinary Tract Exam
- Neuropsychiatric Status
- Central Nervous System
- Peripheral Nervous System

« DIAGNOSTIC TESTS/PROCEDURES »
Audiogram, Baseline, Then at Least Every 5 Years
Best Corrected and Uncorrected Far Vision Acuity
Best Corrected and Uncorrected Near Vision Acuity
Color Discrimination (Baseline)
Chest X-Ray, PA & Lateral
(Baseline, and Every 2 Years After Age 40)
Pulmonary Function Test-Spirometry (Baseline)
Electrocardiogram-Resting
(Baseline, Then Annually Over Age 35)
Exercise Stress Test (requires AMO clearance to conduct this test)

« LABORATORY »
Lab Panel (CBC, UA, Fasting Chemistry Panel)
Type & Group, Blood (Baseline)
Sickle Cell Prep, Blood (Baseline)
Syphilis Serology

« CLEARANCES »
Diver Medical Clearance

Inspectors **Attachment - D 7**

The Department of the Interior has several job categories that involve the inspection of facilities, structures, and environments. While each job has unique aspects, there are sufficient similarities to allow some generalizations to be valid for certain groups of jobs. For purposes of this *Handbook*, medical standards for two job groups have been developed: those that involve inspection of land-based features, and those that involve travel and inspection work in an off-shore environment that requires air travel. Both sets of standards were developed by multi-disciplinary teams involving DOI, Public Health Service, and Office of Personnel Management representatives who conducted field evaluations to assure that the resulting standards reflected actual work practices and requirements.

Before any agency uses either set of medical standards, careful consideration should be given to the applicability of the standards to the functions and working conditions of the jobs the agency wishes to cover. Reference should be made to the job description tables contained in the respective sets of standards, and adjustments in the standards may need to be made accordingly.

The first set of standards (Tab 12, Attachment D 7 (a)) is for employees who conduct inspections of remote land-based features, such as mine sites or terrain in which mines have existed in the past. The second set of standards (Tab 12, Attachment D 7 (b)) is for employees who conduct inspections of structures and environmental conditions in off-shore locations requiring air and boat travel for access.

SAMPLE MEDICAL STANDARDS

And Review Criteria for Agency Medical Officer**s**

These Standards Are Applicable to the Following Function:

EMPLOYEES WHO CONDUCT INSPECTIONS IN REMOTE LOCATIONS INVOLVING EXPOSURE TO HEAVY EQUIPMENT AND UNEVEN TERRAIN

Under 5 CFR 339, Medical Qualifications Determinations, medical standards may be established for positions with duties that are arduous or hazardous in nature. The medical standards described in this chapter are required because of the arduous and hazardous occupational, functional, and environmental requirements of these inspectors. The medical standards are provided to aid the examining physician, the agency medical officer, and agency officials in determining what medical problems may hinder an individual's ability to safely and efficiently perform the functional requirements of the position without undue risk to himself/herself or others. They are also intended to ensure consistency and uniformity in the medical evaluation of applicants and incumbent employees.

Each of the medical standards described in the chapter is subject to clinical interpretation by the agency's medical officer, who will incorporate his or her knowledge of the job requirements under and the environmental conditions in which bureau employees must work. The AMO will make specific assessments on a case-by-case basis to determine each given individual's ability to meet the performance related requirements of his or her position. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the preplacement or the periodic medical-examination processes.

A. RATIONALE FOR MEDICAL EVALUATION AND REVIEW OF THESE INSPECTORS

The job requirements for these employees are by their nature arduous and hazardous. These jobs, and those of similar positions, are performed under variable and unpredictable working conditions. For these reasons, the Medical Standards Review Team has developed the standards that follow for these positions. Our goal here has been to help ensure that:

- Personnel will be able to perform the full range of functional requirements of their position duties under the conditions in which those duties must be performed;

- Existing/preexisting medical conditions of personnel and applicants will not be aggravated or accelerated; and

- The agency's strong commitment to public and employee health and safety, as well as to the accomplishment, with integrity, of its mission will remain unimpaired.

B. MEDICAL EVALUATIONS

Medical evaluations of applicants are to be conducted before the applicant is placed (this is the so-called "preplacement exam"). Evaluations of incumbents are to be conducted every 3 years thereafter. The AMO may recommend that, owing to health and safety risks, a given individual's medical evaluation should be conducted more frequently.

The medical evaluation is to consist of those services summarized in table II-1. The evaluation is to be conducted by a qualified health care provider (see Tab 5, "Medical Services Providers,"), who should use the DOI Standard Medical History and Examination Form to record and report the results of the exam. The AMO will provide the final recommendation to a designated agency official as to whether or not an examined individual has been deemed capable of meeting the full range of position functional requirements.

An individual who is unable to obtain and maintain a drivers license for any medical reasons will not be considered for an inspector position until such time as the medical condition is resolved and a drivers license has been issued. Regardless of the reissuance of a drivers license, the applicant must still meet the medical standards outlined in this chapter.

COMMON FUNCTIONS AND WORK CONDITIONS FOR THESE INSPECTORS

Time/Work Volume	**Physical Requirements**	**Environment**	**Physical Exposures**
May include:			
up to: • 3-4 inspections/day □ about 25 per month *and*: □ long hours □ irregular hours	□ steep terrain □ rocky, loose, or muddy ground surfaces □ thick vegetation □ down/standing trees □ wet leaves/grasses □ falling rocks □ open water, still or flowing □ mostly outdoors □ varied climates (cold/hot/wet/dry/humid/ snow/rain) □ heights □ open holes/drop offs □ very rough roads □ isolated/remote sites	□ dim light or darkness □ bright sunshine/UV □ burning materials □ caustic materials □ explosives □ airborne particulates □ fumes □ fuel vapors □ allergens □ loud noises □ snakes □ insects/ticks □ large animals □ large equipment	□ inspect field sites □ work independently □ use PPE (may include hard hat, steel toed shoes, and eyewear) □ read maps □ change tires □ arduous exertion □ carry 10# □ use shovel and soil probe □ drive for many hours □ fly in helicopters and fixed wing airplanes □ extensive walking □ kneeling □ stooping □ loading boxes/equipment □ speak/meet with the public

Medical services to be provided

Histories:
- General medical history
- Occupational history

Examination items:
- General appearance and vital signs
- General physical examination, with special attention to:
  - Overall physical fitness
  - Skin
  - Eyes, ears, nose, mouth, and throat
  - Neck
  - Thyroid
  - Endocrine and metabolic system
  - Respiratory system
  - Cardiovascular system
  - Back and musculoskeletal system
  - Extremities
  - Peripheral vascular system
  - Abdomen
  - Gastrointestinal system
  - Genitourinary system
  - Central nervous system
  - Peripheral nervous system
  - Mental status evaluation

Diagnostic tests/procedures:
- Audiogram (including 500, 1,000, 2,000, 3,000, 4,000, 6,000, and 8,000 Hertz [Hz] in both ears)
- Vision, including:
- Far and near vision acuity (uncorrected and corrected)
- Peripheral vision
- Depth perception
- Color discrimination (red/green/yellow; baseline exam only)
- Chest x-ray, Posterior-Anterior and Lateral (baseline exam and as determined to be necessary)
- Pulmonary function test, spirometry (baseline exam and as determined to be necessary)
- Electrocardiogram, resting (baseline exam)

Laboratory:

Complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential)
Clean-catch dipstick urinalysis (baseline exam)
Liver function tests (LDH, SGOT, SGPT, GGT, and bilirubin; baseline exam)
Cardiac risk profile (total cholesterol, LDL, HDL, and triglycerides)
Fasting blood sugar

Clearances:

All medical clearances must be provided by the AMO.

C. MEDICAL STANDARDS

1. Vision Standard

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the functional requirements of the position. This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by meeting all of the following standards:

- Distant visual acuity of at least 20/200 in each eye without correction;
- Distant visual acuity of least 20/40 in each eye, with or without correction;
- Near visual acuity, with or without correction, of at least 20/25 (Jaeger equivalent No. 2);
- Color vision sufficient to distinguish at least red, green, and amber (yellow);
- Peripheral vision of at least 70° laterally in each eye;
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Any vision condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

2. Hearing Standard

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the functional requirements of the position. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by meeting all of the following standards:

- A current pure tone, air conduction audiogram, using equipment and a testing room which meet the standards of the American National Standards Institute (see 29 CFR 1910.95);
- Documentation of hearing thresholds of no greater than 40 decibels at 500, 1,000, 2,000, and 3,000 Hz in each ear, with or without a pre-fitted personal hearing aid;
- No evidence by physical examination or medical history of ear conditions (external, middle, or internal) likely to progress and/or pose problems with carrying out the functional requirements of the position.
- If a hearing aid is used, it must be of a type unlikely to be dislodged or damaged while the user performs the regular functional requirements of the position.

Any ear or hearing condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

3. Head, Nose, Mouth, Throat, and Neck Standard

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
  - normal flexion, extension, and rotation of the neck;
  - open nasal and oral airways;
  - unobstructed Eustachian tubes;
  - no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear;
  - normal sense of smell; and
  - normal conversational speech; and
- No evidence by physical examination or medical history of head, nose, mouth, throat, or neck conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any head, nose, mouth, throat, or neck condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

4. Peripheral Vascular System Standard

The applicant/incumbent must have peripheral vasculature that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
  - no evidence of phlebitis or thrombosis;
  - no evidence of venous stasis; and
  - no evidence of arterial insufficiency; and
- No evidence by physical examination or medical history of peripheral vasculature conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any vascular condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

5. Cardiovascular System Standard

The applicant/incumbent must have a cardiovascular system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
  - blood pressure of less than or equal to 160 mmHg systolic and 90 mmHg diastolic, whether treated or untreated (if treated, please see the Medication Standard);
  - a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
  - no pitting edema in the lower extremities; and
- No evidence by physical examination or medical history of cardiovascular conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any cardiovascular condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

6. Chest and Respiratory System Standard

The applicant/incumbent must have a respiratory system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This requires may be demonstrated by meeting all of the following standards:

- A physical exam of the respiratory system that is within the range of normal variation;
- A pulmonary function test (on the baseline exam) showing:
  - forced vital capacity (FVC) of at least 70 percent of the predicted value;
  - forced expiratory volume at 1 second (FEV1) of at least 70 percent of the predicted value; and
  - the ratio FEV1/FVC of at least 70 percent of the predicted value; and
- No evidence by physical examination or medical history of respiratory conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any chest or respiratory condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

7. Gastrointestinal System Standard

The applicant/incumbent must have a gastrointestinal tract that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam and evaluation of the gastrointestinal tract that is within the range of normal variation;
- Normal liver function tests (baseline exam); and
- No evidence by physical examination, laboratory, or medical history of gastrointestinal conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any gastrointestinal condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

8. Genitourinary System Standard

The applicant/incumbent must have a genitourinary system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam and evaluation of the genitourinary system that is within the range of normal variation;
- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination or medical history of genitourinary conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any genitourinary condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

9. The Condition of Pregnancy

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

10. Endocrine and Metabolic Systems Standard

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation;
- Normal fasting blood sugar level; and

- No evidence by physical examination, laboratory, or history of endocrine/metabolic conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any endocrine or metabolic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

11. Musculoskeletal System Standard

The applicant/incumbent must have a musculoskeletal system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for:
  - strength;
  - flexibility;
  - range of motion; and
  - joint stability; and
- No evidence by physical examination or medical history of musculoskeletal conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any musculoskeletal condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

12. Hematopoietic System Standard

The applicant/incumbent must have a hematopoietic (blood and blood-producing) system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the skin that is within the range of normal variation;
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and

- No evidence by physical examination, laboratory tests, or medical history of hematopoietic conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any hematopoietic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

13. Immune System/Allergic Disorders Standards

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A general physical exam of all major body systems that is within the range of normal variation, including:
  - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the functional requirements of the job;
  - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
  - normal nasal mucus membranes and major sinus cavities of the face;
- Normal complete blood count, including white blood count and differential; and
- No evidence by physical examination or medical history of infectious disease, immune system, or allergy conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any immune system or allergic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

14. Central and Peripheral Nervous Systems/Vestibular System Standard

The applicant/incumbent must have a nervous system that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting all of the following standards:

- A physical exam of the cranial and peripheral nerves and the vestibular system that is within the range of normal variation, including:

intact cranial nerves, I-XII;
normal vibratory sense in the hands and feet;
normal proprioception in the wrist s, elbows, ankles, and knees;
normal sensation of hot and cold in the hands and feet;
normal sense of touch in the hands and feet;
normal reflexes of the upper and lower extremities; and
normal balance (i.e., heel-toe walk; Romberg; balance on one foot);

- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination or medical history of nervous or vestibular system conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

An individual with a history of seizures must provide a written opinion from the individual's neurologist and, if necessary, a neurologist selected by OSM, regarding the ability of the individual to safely and efficiently carry out the specified functional requirements of the position, under the anticipated work conditions. Any central or peripheral nervous system or vestibular system condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

15. Psychiatric Disorders Standard

The applicant/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the functional requirements of the position. This may be demonstrated by meeting the following standard:

- No evidence by physical examination or medical history of psychiatric conditions or behaviors (including alcohol or substance abuse) likely to progress and/or pose problems with carrying out the functional requirements of the position.

Please note that current drug addiction and use of illegal drugs is disqualifying. Individuals who have successfully completed a substance abuse treatment program may be found to be disabled under provisions of the Americans with Disabilities Act, and may be eligible for accommodation consideration. Any psychiatric condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

16. Dermatology Standard

The applicant/incumbent must have skin that is normal or otherwise sufficient for the individual to safely and efficiently carry out the functional requirements of the position. This may be demonstrated by meeting both the following standards:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination or medical history of dermatologic conditions likely to progress and/or pose problems with carrying out the functional requirements of the position.

Any dermatologic condition that may adversely affect the safe and efficient performance of the functional requirements of the position will be evaluated on a case-by-case basis.

17. Organ Transplantation and Prosthetics Standard

The presence or history of organ transplantation or use of prosthetics are not of themselves disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the functional requirements of the position. There must be no evidence by physical examination, laboratory tests, or medical history that the transplant, the prosthesis, or the conditions that led to the need for transplant or prosthesis are likely to worsen and/or pose problems with carrying out the functional requirements of the position.

For individuals with transplants, it will be necessary for the AMO to receive and review documentation from the transplant surgeon or his/her representative that the individual is considered to be fully cleared to engage in the specified activities of the position, and under the conditions likely to be encountered.

18. Medication Standard

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications that are likely to progress and/or pose problems with carrying out the functional requirements of the position. Each of the following will be considered when making recommendations regarding the use of medications:

- Medication(s) (type and dosage requirements);
- Potential drug side effects;
- Drug-drug interactions;
- Adverse drug reactions;
- Drug toxicity and any medical complications associated with long-term drug use;
- Drug-environmental interactions;
- Drug-food interactions; and
- History of patient compliance.

Please note that anabolic steroids were legislated as controlled substances on February 27, 1991, and now require a physician's prescription for legitimate use. Any person currently using anabolic steroids without a prescription may be disqualified.

SAMPLE MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:

EMPLOYEES WHO CONDUCT INSPECTIONS IN REMOTE LOCATIONS, REQUIRING OVER-WATER HELICOPTER FLIGHT

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the arduous and hazardous occupational, functional and environmental requirements of inspectors who work offshore (hereinafter referred to as "Inspector"). Please refer to the table beginning on page 3 of this Attachment. The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of an Inspector without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all applicants and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties. Individualized assessments will be made on a case-by-case basis to determine the individual's ability to meet the performance-related requirements of the Inspector's job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation and Review of Inspectors

The essential functions of these Inspectors are by nature arduous and hazardous. These functions are performed under variable and unpredictable working conditions. In response, an interagency team has developed these standards in order to help insure the following:

1. Inspectors will be able to perform the full range of essential functions of their jobs under the conditions under which those functions may be performed.

2. Existing/preexisting medical conditions of Inspectors and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.

3. Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of Inspectors, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual Inspectors should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table on page 5 of this Attachment. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or another form that provides similar information). For assistance in arranging for physician services, please refer to Tab 5 of this *Handbook*. The AMO will review the results of all examinations, and provide the final medical recommendation to the agency.

COMMON FUNCTIONS AND WORK CONDITIONS FOR THESE INSPECTORS

Time/Work Volume	**Physical Requirements**	**Environment**	**Physical Exposures**
May include:			
• normal day of 8-10 hours • up to 16 hour shifts (2-3 times per year) • up to 2-3 days in a row at work • up to 2 weeks in a row on board the platforms • inspection trips conducted up to 150 days per year • may be expected to take inspection trips every day • over 95% of trips are out and back in one day • work conducted during daylight hours (flight dependent; no flying at night) • one day or less per year unable to return home after inspection, due to weather or equipment problems • potential for emergency problems resulting in spending one or more days on the platform • inspector sets own work pace	• put on and wear safety gear (e.g., hard hat, steel toed shoes, hearing protection, flight helmet) • lift and carry briefcase, laptop computer, and duffel bag (about #25) • lift and carry ice chests with drilling mud (about #20) • drive to take off point, or to on-shore inspection sites, 30 minutes to 2 hours • climb into and out of helicopters with small- (e.g., 2-person) to medium- (e.g., 6-person) sized cabins, • ability to fly in helicopters, including over water and for up to 2 hours at a time • aid pilot by watching for other aircraft while flying • from the air, and from platforms, watch for oil slicks on the water • read and manipulate small avionics devices • hear flight intercom for communications • manipulate certain aircraft controls, doors, shoulder harnesses • speak clearly (be understood by public, and co-workers) • climb and descend stairs and ladders (sometimes several flights, and often open-grated and over water) • see and step over obstacles and raised doorways • kneel, stoop, bend over, and push and pull objects	• airports and helicopter take-off points • offshore/ocean locations • slick metal and wooden surfaces • uneven surfaces • open gratings, over water • exposed heights (up to 200 feet on structures) • altitudes (up to 3000 feet in helicopters) • confined work areas • close living/working quarters • heat, cold, wet, dry (all with extremes) • wind • high waves • fog • wildlife (e.g., birds, sea lions) • major industrial environment (e.g., drilling, production, and pumping equipment) • moving materials and heavy equipment • high ladders, steep stairs, swing ropes, man-baskets • high pressure devices	• high voltages • extreme heat and cold • extreme noise (>107dB) • sea life (marine and avian biota) • gases, particulates, fumes, including hydrogen sulfide gas • sleep disruption • falling objects, including bird droppings • combustibles, corrosives, solvents, and other chemicals, including hydrofluoric acid and other acids • bright sun, high UV light • welding fumes and light • open flame • dehydration

CONTINUED

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
May include:			
	• work in confined, tight spaces • land on helipads, sometimes with hard landings • walk on open-grated walkways, sometimes without railings, and at great heights • look in all directions • listen for and respond to alarm signals • hold clip board, write with pen or pencil • read documents and maps • use computer keyboard and laptop or personal • read gauges • see and correctly interpret colored warning lights (red, yellow, and green) • swing holding onto a rope • climb into small, unsteady boats • climb into or onto personnel baskets and be suspended 100 feet or more above the water • untie small and large ropes • be continuously and clearly aware of surroundings • climb into emergency devices, escape pods • don, wear, and use SCBA • work independently and on small teams • enter and exit emergency equipment and helicopters quickly • be able to be dunked and upended quickly in water, and then become re-oriented in space	• gases, at high pressures and temperatures • isolated, remote sites • long distances from support or medical help • emergency evacuation craft (confined spaces) • confined aircraft cabins • uncooperative or potentially hostile contact personnel and the public • variable light conditions	

Medical Examination Services to be Provided for Inspectors

HISTORIES

- General Medical History
- Occupational History

EXAMINATION ITEMS

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination, with Special Attention To:
  - Overall Physical Fitness
  - Habitus (obesity)
  - Skin
  - Eyes, Ears (including TM mobility), Nose, Mouth, and Throat
  - Neck (including flexibility and rotation)
  - Thyroid
  - Endocrine and Metabolic System
  - Respiratory System
  - Cardiovascular System
  - Back & Musculoskeletal System (including flexibility)
  - Extremities (including strength, range of motion, and joint stability)
  - Peripheral Vascular System
  - Abdomen
  - Gastrointestinal System
  - Genitourinary System
  - Central Nervous System (including cranial nerves I-XII, and cerebellar function)
  - Peripheral Nervous System (including reflexes, sensation, and position sense)
  - Mental Status Evaluation

DIAGNOSTIC TESTS/PROCEDURES

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision, Depth perception
- Color Discrimination (including red, green, blue, and yellow) (baseline/exit exam)
- Pulmonary Function Test-Spirometry (baseline/exit exam)
- Chest X-Ray, PA & Lateral (baseline/exit exam)
- Electrocardiogram-Resting (baseline/exit exam)
- TB (Mantoux) skin test (baseline/exit exam)
- Tetanus vaccination (to maintain as current)

LABORATORY

- CBC (hemoglobin, hematocrit, platelets, white blood count with differential)
- Dipstick urinalysis (baseline/exit exam only)
- Blood chemistries:
  - LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]
  - total cholesterol, LDL-C, HDL-C, triglycerides, blood sugar [each exam]

CLEARANCES

- Medical Clearance for Inspectors
- Medical Clearance for self contained breathing apparatus

PSYCHIATRIC STANDARD

The applicant/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

(All diagnoses must be consistent with the diagnostic criteria as established by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, DSM-IV.)

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
6. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR,** or **OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **PYROMANIA**
9. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
10. **ANTISOCIAL, PARANOID,** or **SCHIZOID PERSONALITY DISORDER**
11. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

PROSTHETICS, TRANSPLANTS, AND IMPLANTS STANDARD

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Note: In general, hand or arm amputations (with or without a prosthesis) are incompatible with the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation ***for agency review*** from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

IMMUNE SYSTEM/ALLERGIC DISORDERS STANDARD

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
  - o no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and
  - o no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
  - o normal nasopharynx, major sinuses, Eustachian tube, and pulmonary exam
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3). Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **TUBERCULOSIS** A history of TB that has been appropriately treated for longer than 6 months is not disqualifying, provided that documentation supports the treatment history and the person has a current chest x-ray showing no active disease. A person with a positive PPD or Mantoux skin test will be required to have a Chest X-ray and, if indicated, a sputum culture.
2. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

MEDICATION STANDARD

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out (see page 3). Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)
2. Potential drug side effects
3. Drug-drug interactions
4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use
6. Drug-environmental interactions
7. Drug-food interactions
8. History of patient compliance

EYE / VISION STANDARD

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job (see page 3). This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/20 in each eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Near visual acuity of at least 20/30 (Snellen equivalent) at 16 inches; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, blue, and amber (yellow); and
- Peripheral vision of at least 85^{o} laterally in each eye; and
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance, as well as being worn with any necessary personal protective equipment.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC CONJUNCTIVITIS**
2. **CORNEAL ULCERS**
   This condition must be treated and cleared by an Ophthalmologist before a medical clearance can be granted.
3. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

HEAD, NOSE, MOUTH, THROAT AND NECK STANDARD

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
  - normal flexion, extension, and rotation of the neck; and
  - open nasal and oral airways; and
  - unobstructed Eustachian tubes; and
  - no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

EAR / HEARING STANDARD

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); and

- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, 2000, and 3000 Hz in each ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Note: The use of a hearing aid(s) to meet this standard is ***not*** permitted.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MENIERE'S DISEASE**
2. **RUPTURED OR PERFORATED EAR DRUM**
3. **ACUTE OR CHRONIC OTITIS MEDIA OR EXTERNA**
4. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

DERMATOLOGY STANDARD

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ALBINISM**
2. **CHRONIC DERMATITIS**
3. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

VASCULAR SYSTEM STANDARD

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
  - no evidence of phlebitis or thrombosis; and

- o no evidence of venous stasis; and
- o no evidence of arterial insufficiency; and

- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CARDIAC STANDARD

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
  - o blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
  - o a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
  - o no pitting edema in the lower extremities, and
  - o normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **CORONARY ARTERY DISEASE** Documentation from the individual's

cardiologist that the physician understands the essential functions of the job and the work conditions, and considers the individual to be capable of safely and efficiently performing them, may allow a clearance despite this diagnosis.

3. **HYPERTENSION** that cannot be controlled to a level of 160/90 or less, or requires the use of any medication that affects the ability of the individual to safely and effectively carry out the essential functions of the job, may be disqualifying.
4. History of **MYOCARDIAL INFARCTION.** Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be considered.
5. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified conditions and without aggravating the condition, will be necessary before a clearance can be considered.
6. **DYSRHYTHMIAS:** Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
7. **ANGINA PECTORIS** or chest pain of unknown etiology.
8. **CONGESTIVE HEART FAILURE**
9. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CHEST AND RESPIRATORY SYSTEM STANDARD

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (baseline exam) showing:
  - forced vital capacity (FVC) of at least 70% of the predicted value; and
  - forced expiratory volume at 1 second (FEV1) of at least 70% of the predicted value; and
  - the ratio FEV1/FVC of at least 70% of the predicted value; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential

functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **SIGNIFICANT OBSTRUCTIVE** or **RESTRICTIVE PULMONARY DISEASE.**
2. **ASTHMA** must be considered on a case-by-case basis.
3. **ACTIVE PULMONARY TUBERCULOSIS (TB)**: Please see the Immune System/Allergic Disorders Standard for specific guidance on TB.
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
5. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
6. **PNEUMONECTOMY** (if associated with impaired pulmonary function)
7. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

ENDOCRINE AND METABOLIC SYSTEM STANDARD

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS**
4. **HYPERGLYCEMIA** without a history of diabetes will require additional

tests including but not limited to a glycohemoglobin (or hemoglobin A_{1C}) and fasting glucose before a final medical determination is made.

5. **DIABETES INSIPIDUS**.
6. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

THE CONDITION OF PREGNANCY

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

HEMATOPOIETIC SYSTEM STANDARD

The applicant/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ANEMIA**
2. **HEMOPHILIA**
3. **CHRONIC LYMPHANGITIS**
4. **SICKLE CELL ANEMIA**
5. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

MUSCULOSKELETAL SYSTEM STANDARD

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the

range of normal variation for strength, flexibility, range of motion, and joint stability; and

- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required performance activities.
2. **AMPUTATIONS OF DIGITS** will be evaluated on a case-by-case basis.
3. **ANKYLOSING SPONDYLITIS**.
4. **LUMBOSACRAL INSTABILITY**: pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
5. **SCIATICA OR OTHER NEUROPATHIES**
6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
9. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CENTRAL AND PERIPHERAL NERVOUS SYSTEM STANDARD, AND VESTIBULAR SYSTEM STANDARD

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
  - intact cranial nerves, I-XII; and
  - normal proprioception of the major joints; and
  - normal sensation of hot and cold in the hands and feet; and
  - normal sense of touch in the hands and feet; and

- o normal reflexes of the upper and lower extremities; and
- o normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and

- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS**.
6. **EPILEPSY** (See the seizure standard, below)
7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **MIGRAINE**
10. **SEIZURES***
11. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

Between 40 and 70 percent of people with a single, brief, generalized tonic-clonic seizure, who are found to have a normal EEG and no identified underlying cause for the seizure, will go on to experience further seizures if untreated. Those most likely to remain seizure-free are those who: 1) have had no seizures for 2 to 4 years; 2) had few seizures before the condition was medically controlled; 3) required only one medication to obtain control; 4) have a normal neurologic examination; 5) have no identified structural lesion responsible for the seizures; and 6) have a normal electroencephalogram (EEG) at the end of the treatment period. An individual with a history of seizures must meet the following criteria before a medical clearance can be granted:

1. the individual must be seizure-free for two years, with or without medication; and
2. present for review at the end of that two year period the results of the individual's current electroencephalogram (EEG), showing normal findings; and
3. provide a written opinion from the individual's neurologist and, if necessary, a neurologist selected by the employing agency, regarding the

ability of the individual to safely and efficiently carry out the specified essential functions of the job, under the anticipated work conditions, referencing the table on page 3.

*Harrison's Principles of Internal Medicine, 13th Edition, McGraw-Hill, Inc., San Francisco, page 2232

GASTROINTESTINAL SYSTEM STANDARD

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam and evaluation of the gastrointestinal tract that is within the range of normal variation; and
- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS**.
2. **ACUTE VIRAL HEPATITIS** (After being asymptomatic for three (3) months an applicant may be re-evaluated).
3. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS/SPRUE or IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medication treatments, will be reviewed on a case-by-case basis.)
4. **COLOSTOMIES**, unless the precipitating condition has stabilized and the applicant/incumbent demonstrates successful management of the colostomy, considering the requirements of the function and the work conditions.
5. **ILEITIS**, either recurrent or chronic.
6. **CHOLECYSTITIS** (chronic or recurring).
7. **DIVERTICULITIS** (symptomatic).
8. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology).
9. **INTESTINAL OBSTRUCTION** from any cause.
10. **ESOPHAGEAL VARICES**
11. **PANCREATITIS**
12. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL,**

INCISIONAL OR VENTRAL HERNIA that is associated with symptoms

13. **ACTIVE GASTRIC OR DUODENAL ULCER**
14. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of post-treatment, current pain, hemorrhage, fainting episodes or dietary restrictions that could interfere with the performance of the job.
15. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

GENITOURINARY SYSTEM STANDARD

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE** or **CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
7. **RENAL TOXICITY FROM ANY CAUSE**
8. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

DEFINITIONS

Hazardous Materials Response Team (per 29 CFR 1910.120): "...an organized group of employees, designated by the employer, who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. The team members perform responses to releases or potential releases of hazardous substances for the purpose of control or stabilization of the incident."

Permissible Exposure Level (per 29 CFR 1910.120): "...the exposure limits published in 'NIOSH Recommendations for Occupational Health Standards' dated 1986 incorporated by reference, or if none is specified, the exposure limits published in the standards specified by the American Conference of Governmental Industrial Hygienists in their publication 'Threshold Limit Values and Biological Exposure Indices for 1987-88' dated 1987 incorporated by reference."

Post Emergency Response (per 29 CFR 1910.120): "...that portion of an emergency response performed after the immediate threat of a release has been stabilized or eliminated and clean-up of the site has begun."

Employee (per 29 CFR 1910.20): "...a current employee, a former employee, or an employee being assigned or transferred to work where there will be exposure to toxic substances or harmful physical agents. In the case of a deceased or legally incapacitated employee, the employee's legal representative may directly exercise all the employee's rights... ."

Employees covered by this protocol are further specified by 29 CFR 1910.120(f)(2), and include:

"(i) all employees who are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits or, if there is no permissible exposure limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year;

(ii) all employees who wear a respirator for 30 days or more a year or as required by 29 CFR 1910.134 [Respiratory protection];

(iii) all employees who are injured, become ill or develop signs or symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation; and

(iv) members of HAZMAT teams."

Employee Exposure Record (per 29 CFR 1910.20): "...a record containing any of the following kinds of information:

Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent,...

Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems [e.g., laboratory tests],...

Material safety data sheets...

...a chemical inventory or any other record which reveals where and when used and the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent."

Employee Medical Record (per 29 CFR 1910.20): "...a record concerning the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel or technician..."

ASSESSMENT OF RISKS FOR EMPLOYEES

The performance of appropriate medical surveillance and respirator clearance services first requires a determination of the nature of an employee's workplace tasks, and exposures and potential exposures to toxic materials and physical stressors. Information to contribute to this determination may come from several sources. Any approach may be augmented significantly by the involvement of industrial hygienists who are familiar with the work sites, and the work tasks of the employees.

Material Safety Data Sheets should be made available to the employees for any known chemicals or potentially toxic materials used or encountered in the course of the employee carrying out his/her duties. The appropriate MSDS forms also should be made available to the examining physician as part of the post-emergency response when an employee is suspected or known to have been exposed to an identified toxic material.

Because of the risk of exposure to bloodborne pathogens, either as a result of contact with contaminated materials in the work place or as a result of providing emergency first responder medical services to co-workers or the public, consideration of this important potential risk must be incorporated into program planning.

Job Descriptions may provide information regarding the exposures that an employee could experience in carrying out their duties, including their assignment to the HAZMAT

Team. Also, the job description should cover any personal protective equipment (PPE) that is to be used by employees in the specified position, and any known or anticipated significant environmental or ergonomic stressors. Actual employee exposures will depend on the nature of the incidents to which the Team responds, the tasks the individual employee carries out, the conditions under which the tasks are carried out, and the adequacy of PPE that is used. Because of variability in the adequacy of PPE and the consistency and accuracy of its use, however, medical monitoring is necessary in response to environmental exposures that exceed the permissible exposure level, regardless of the use of PPE. In general, job descriptions are useful only for a preliminary categorization of groups of employees who: 1) need further quantification of potential exposure; or 2) are not likely to require further assessment or surveillance services.

Employee **Occupational Histories** may provide further information if accurately and completely prepared. They may be prepared individually by or for each employee, or by the employer for groups of employees who are known to carry out similar tasks and face similar potential toxic exposures or physical stressors. Reference should be made to Attachment D 2 (b), (c), and D 3 of this *Handbook* for examples of forms that may be used.

In addition, a current medical history must be made available to the examining physician, allowing a consideration of symptoms that might be related to exposure to hazardous materials, and to fitness of the employee both for carrying out the expected duties at the work site and for using any personal protective equipment that may be necessary for the specific work sites and duties. The DOI Standard Medical History and Examination Form may be used for this purpose (see Attachment D 3).

SERVICES TO BE PROVIDED

As a minimum, a general medical examination should be provided to all HAZMAT team members. Information obtained through the history and exposure review process described above is used to tailor further medical history questions, emphasize specific portions of the examination, and conduct further laboratory studies to assure the evaluation of organ systems most likely to demonstrate health effects of known or potential toxic exposures. In this way, expensive tests that do not need to be carried out are avoided, and those that are mandated by known or suspected exposures are not left out inadvertently.

OSHA Mandated Services are described in federal regulations, and include both the **frequency** of types of examinations and the **toxic agents** requiring medical surveillance. A list of these agents is provided in 29 CFR 1910 Subpart Z, which has been summarized in Tab 8 of this *Handbook*. The list includes the Federal Register locations of the regulations that apply to each listed agent. The content of the regulations for each specific agent are not reproduced here. However, 29 CFR 1910.120(f) provides the applicable

regulations for the general category of "Hazardous waste operations and emergency response."

As covered by 29 CFR 1910.1030 (Bloodborne Pathogens), employees whose job duties include the provision of services that involve significant potential for exposure must be offered training in blood borne pathogens, and offered the three shot hepatitis B immunization series. A model plan and a guide to a blood borne pathogens program are available from the OMRPS as companion documents to this *Handbook*. As part of the program for preventing injury and illness, and responding to untoward events when they occur, each DOI bureau/area/program should assure that an appropriate plan is in place for any employees with potential exposure.

Recommended Examination Components, and Exam Periodicity

The regulations presented in 29 CFR 1910.120(f) specify that medical examinations for the HAZMAT team "shall include a medical and work history (or updated history if one is in the employee's file) with special emphasis on symptoms related to the handling of hazardous substances and health hazards, and to fitness for duty including the ability to wear any required PPE under conditions (i.e., temperature extremes) that may be expected at the work site." The content of the exam itself "shall be determined by the attending physician." At the end of this section is a general listing of appropriate services that may be provided to members of the HAZMAT team, with the recognition that additional tests, procedures, or foci of attention may be necessary, depending on individual employee variation in documented or anticipated exposures.

The CFR specifies the **periodicity** of exams for HAZMAT team members, according to the purpose of the exam:

- **prior to assignment** to a position on the HAZMAT team, an exam is to be provided to the proposed team member (as governed by provisions of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, these should be approached as "pre-placement" exams, rather than "pre-employment" exams). The pre-placement exam allows the establishment of a baseline for subsequent comparisons, and provides for the identification of medical conditions that may impact the actual assignment of an employee to duties that might be contraindicated by those conditions;

- at least once **every twelve months**, unless determined by a physician to be necessary only every other year (the exams may be no less frequent than every other year);

- at the **termination of employment or reassignment** to a situation where the employee would not be covered by these requirements;

- **following the development of signs or symptoms** indicating possible overexposure to hazardous substances or health hazards, or if the employee has been injured or known to have been exposed above the permissible exposure limits or published exposure levels; or

- at **more frequent times**, if the physician determines this to be necessary. It should be added here that specific requirements for medical surveillance for some of the hazards identified in 29 CFR 1910 may require more frequent evaluations, including examinations and/or laboratory tests. An example would be an employee found to have elevated blood lead levels (covered by 29 CFR 1910.1025), in which case several repeat tests may be necessary before the employee can be cleared to return to work in the setting where exposures occurred.

Medical Services to be Provided for Hazardous Waste Workers

SERVICES, BY CATEGORY

« HISTORIES »
General Medical History
Occupational History

« EXAMINATION ITEMS »
General Physical Examination
General Appearance and Vital Signs
Special Attention To:
- Central Nervous System
- Peripheral Nervous System
- Back & Musculoskeletal System
- Cardiovascular System
- Eyes
- Respiratory System
- Skin
- Thyroid
- Metabolic System
- Habitus (obesity)
- Overall Physical Fitness

« DIAGNOSTIC TESTS/PROCEDURES »
Vision Test, Best Far Vision Acuity
Vision Test, Best Near Vision Acuity
Vision Test, Color Discrimination
Chest X-Ray, PA and Lateral (if indicated)
Pulmonary Function Test-Spirometry
Electrocardiogram-Resting (if indicated)
Exercise Stress Test (requires AMO clearance)

« LABORATORY »
Lab Panel (CBC, UA, Chemistry Panel)
Cholinesterase-RBC and Plasma
Heavy Metal Screen (24 Hour Urine, Quantitative, As, Pb, Hg, Cd)
Other, depending on known or potential exposures

« CLEARANCES »
Respirator Medical Clearance

Medical Services for Hazardous Waste Workers (continued)

Cartridge Respirator Clearance
Powered Air Respirator Medical Clearance
Self-Contained Breathing Apparatus Clearance
Medical Clearance for Lifting or Heavy Exertion
Medical Clearance to Work in Moisture Impermeable Clothing

[Note: The following constitutes the Medical Standards and Certification requirements of the Federal Aviation Regulations, as presented in 14CFR67. These regulations, with amendments, became effective September 16, 1996. They were revised effective January 1, 1999.]

PART 67--MEDICAL STANDARDS AND CERTIFICATION

Subpart A--General

Sec.
67.1 Applicability.
67.3 Issue.
67.5 Certification of foreign airmen.
67.7 Access to the National Driver Register.

Subpart B--First-Class Airman Medical Certificate

67.101 Eligibility.
67.103 Eye.
67.105 Ear, nose, throat, and equilibrium.
67.107 Mental.
67.109 Neurologic.
67.111 Cardiovascular.
67.113 General medical condition.
67.115 Discretionary issuance.

Subpart C--Second-Class Airman Medical Certificate

67.201 Eligibility.
67.203 Eye.
67.205 Ear, nose, throat, and equilibrium.
67.207 Mental.
67.209 Neurologic.
67.211 Cardiovascular.
67.213 General medical condition.
67.215 Discretionary issuance.

Subpart D--Third-Class Airman Medical Certificate

Authority: 49 U.S.C. 106(g), 40113, 44701-44703, 44707, 44709-44711, 45102-45103, 45301-45303.

Subpart A- General

Sec. 67.1 Applicability.

This part prescribes the medical standards and certification procedures for issuing medical certificates for airmen and for remaining eligible for a medical certificate.

Sec. 67.3 Issue.

Except as provided in Sec. 67.5, a person who meets the medical standards prescribed in this part, based on medical examination and evaluation of the person's history and condition, is entitled to an appropriate medical certificate.

Sec. 67.5 Certification of foreign airmen.

A person who is neither a United States citizen nor a resident alien is issued a certificate under this part, outside the United States, only when the Administrator finds that the certificate is needed for operation of a U.S.-registered aircraft.

Sec. 67.7 Access to the National Driver Register.

At the time of application for a certificate issued under this part, each person who applies for a medical certificate shall execute an express consent form authorizing the Administrator to request the chief driver licensing official of any state designated by the Administrator to transmit information contained in the National Driver Register about the person to the Administrator. The Administrator shall make information received from the National Driver Register, if any, available on request to the person for review and written comment.

Subpart B- First-Class Airman Medical Certificate

Sec. 67.101 Eligibility.

To be eligible for a first-class airman medical certificate, and to remain eligible for a first-class airman medical certificate, a person must meet the requirements of this subpart.

Sec. 67.103 Eye.

Eye standards for a first-class airman medical certificate are:

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

(c) Ability to perceive those colors necessary for the safe performance of airman duties.

(d) Normal fields of vision.

(e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required

except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

Sec. 67.105 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a first-class airman medical certificate are:

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969 (11 West 42d Street, New York, NY 10036):

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db).....	35	30	30	40
Poorer ear (Db).....	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that—

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

Sec. 67.107 Mental.

Mental standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:
(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
(2) A psychosis. As used in this section, ``psychosis'' refers to a mental disorder in which:
(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or
(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.
(3) A bipolar disorder.
(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section--
(i) ``Substance'' includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and
(ii) ``Substance dependence'' means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by--
(A) Increased tolerance;
(B) Manifestation of withdrawal symptoms;
(C) Impaired control of use; or
(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.
(b) No substance abuse within the preceding 2 years defined as:
(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;
(2) A verified positive drug test result acquired under an anti-drug program or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or
(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds--
(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.109 Neurologic.

Neurologic standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Epilepsy;

(2) A disturbance of consciousness without satisfactory medical explanation of the cause; or

(3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.111 Cardiovascular.

Cardiovascular standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Myocardial infarction;

(2) Angina pectoris;

(3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;

(4) Cardiac valve replacement;

(5) Permanent cardiac pacemaker implantation; or

(6) Heart replacement;

(b) A person applying for first-class medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:
  (1) At the first application after reaching the 35th birthday; and
  (2) On an annual basis after reaching the 40th birthday.

(c) An electrocardiogram will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

Sec. 67.113 General medical condition.

The general medical standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.115 Discretionary issuance.

A person who does not meet the provisions of Secs. 67.103 through 67.113 may apply for the discretionary issuance of a certificate under Sec. 67.401.

Subpart C- Second-Class Airman Medical Certificate

Sec. 67.201 Eligibility.

To be eligible for a second-class airman medical certificate, and to remain eligible for a second-class airman medical certificate, a person must meet the requirements of this subpart.

Sec. 67.203 Eye.

Eye standards for a second-class airman medical certificate are:

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

(c) Ability to perceive those colors necessary for the safe performance of airman duties.

(d) Normal fields of vision.

(e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

Sec. 67.205 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a second-class airman medical certificate are:

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db).....	35	30	30	40
Poorer ear (Db).....	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that--

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

Sec. 67.207 Mental.

Mental standards for a second-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.

(2) A psychosis. As used in this section, ``psychosis'' refers to a mental disorder in which:

(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or

(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.

(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total

abstinence from the substance(s) for not less than the preceding 2 years. As used in this section--

(i) ``Substance'' includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) ``Substance dependence'' means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by--

(A) Increased tolerance;

(B) Manifestation of withdrawal symptoms;

(C) Impaired control of use; or

(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result acquired under an anti-drug program or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds--

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.209 Neurologic.

Neurologic standards for a second-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:
  (1) Epilepsy;
  (2) A disturbance of consciousness without satisfactory medical explanation of the cause; or
  (3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause;
(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.211 Cardiovascular.

Cardiovascular standards for a second-class medical certificate are no established medical history or clinical diagnosis of any of the following:
(a) Myocardial infarction;
(b) Angina pectoris;
(c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
(d) Cardiac valve replacement;
(e) Permanent cardiac pacemaker implantation; or
(f) Heart replacement.

Sec. 67.213 General medical condition.

The general medical standards for a second-class airman medical certificate are:
(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.
(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.215 Discretionary issuance.

A person who does not meet the provisions of Secs. 67.203 through 67.213 may apply for the discretionary issuance of a certificate under Sec. 67.401.

Subpart D--Third-Class Airman Medical Certificate
Sec. 67.301 Eligibility.

To be eligible for a third-class airman medical certificate, or to remain eligible for a third-class airman medical certificate, a person must meet the requirements of this subpart.

Sec. 67.303 Eye.

Eye standards for a third-class airman medical certificate are:
(a) Distant visual acuity of 20/40 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/40 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.
(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses.
(c) Ability to perceive those colors necessary for the safe performance of airman duties.
(d) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

Sec. 67.305 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a third-class airman medical certificate are:
(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.
(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.
(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db).....	35	30	30	40
Poorer ear (Db).....	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that--
(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or
(2) Interferes with clear and effective speech communication.
(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

Sec. 67.307 Mental.

Mental standards for a third-class airman medical certificate are:
(a) No established medical history or clinical diagnosis of any of the following:
(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
(2) A psychosis. As used in this section, ``psychosis'' refers to a mental disorder in which--
(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or
(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.
(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section--

(i) Substance'' includes: alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) Substance dependence'' means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by--

(A) Increased tolerance;

(B) Manifestation of withdrawal symptoms;

(C) Impaired control of use; or

(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result conducted under an anti-drug rule or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds--

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.309 Neurologic.

Neurologic standards for a third-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:
  (1) Epilepsy;
  (2) A disturbance of consciousness without satisfactory medical explanation of the cause; or
  (3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.311 Cardiovascular.

Cardiovascular standards for a third-class airman medical certificate are no established medical history or clinical diagnosis of any of the following:

(a) Myocardial infarction;
(b) Angina pectoris;
(c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
(d) Cardiac valve replacement;
(e) Permanent cardiac pacemaker implantation; or
(f) Heart replacement.

Sec. 67.313 General medical condition.

The general medical standards for a third-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds--
  (1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or
  (2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Sec. 67.315 Discretionary issuance.

A person who does not meet the provisions of Secs. 67.303 through 67.313 may apply for the discretionary issuance of a certificate under Sec. 67.401.

Subpart E--Certification Procedures

Sec. 67.401 Special issuance of medical certificates.

(a) At the discretion of the Federal Air Surgeon, an Authorization for Special Issuance of a Medical Certificate (Authorization), valid for a specified period, may be granted to a person who does not meet the provisions of subparts B, C, or D of this part if the person shows to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. A medical certificate of the appropriate class may be issued to a person who does not meet the provisions of subparts B, C, or D of this part if that person possesses a valid Authorization and is otherwise eligible. An airman medical certificate issued in accordance with this section shall expire no later than the end of the validity period or upon the withdrawal of the Authorization upon which it is based. At the end of its specified validity period, for grant of a new Authorization, the person must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force.

(b) At the discretion of the Federal Air Surgeon, a Statement of Demonstrated Ability (SODA) may be granted, instead of an Authorization, to a person whose disqualifying condition is static or nonprogressive and who has been found capable of performing airman duties without endangering public safety. A SODA does not expire and authorizes a designated aviation medical examiner to issue a medical certificate of a specified class if the examiner finds that the condition described on its face has not adversely changed.

(c) In granting an Authorization or SODA, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including--
  (1) The combined effect on the person of failure to meet more than one requirement of this part; and
  (2) The prognosis derived from professional consideration of all available information regarding the person.

(d) In granting an Authorization or SODA under this section, the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any or all of the following:
  (1) Limit the duration of an Authorization;
  (2) Condition the granting of a new Authorization on the results of subsequent medical tests, examinations, or evaluations;
  (3) State on the Authorization or SODA, and any medical certificate based upon it, any operational limitation needed for safety; or
  (4) Condition the continued effect of an Authorization or SODA, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.

(e) In determining whether an Authorization or SODA should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.

(f) An Authorization or SODA granted under the provisions of this section to a person who does not meet the applicable provisions of subparts B, C, or D of this part may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if--
  (1) There is adverse change in the holder's medical condition;
  (2) The holder fails to comply with a statement of functional limitations or operational limitations issued as a condition of certification under this section;
  (3) Public safety would be endangered by the holder's exercise of airman privileges;
  (4) The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under this section; or
  (5) The holder makes or causes to be made a statement or entry that is the basis for withdrawal of an Authorization or SODA under Sec. 67.403.

(g) A person who has been granted an Authorization or SODA under this section based on a special medical flight or practical test need not take the test again during later physical examinations unless the Federal Air Surgeon determines or

has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

(h) The authority of the Federal Air Surgeon under this section is also exercised by the Manager, Aeromedical Certification Division, and each Regional Flight Surgeon.

(i) If an Authorization or SODA is withdrawn under paragraph (f) of this section the following procedures apply:

(1) The holder of the Authorization or SODA will be served a letter of withdrawal, stating the reason for the action;

(2) By not later than 60 days after the service of the letter of withdrawal, the holder of the Authorization or SODA may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;

(3) Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

(4) A medical certificate rendered invalid pursuant to a withdrawal, in accordance with paragraph (a) of this section, shall be surrendered to the Administrator upon request.

(j) No grant of a special issuance made prior to September 16, 1996, may be used to obtain a medical certificate after the earlier of the following dates:

(1) September 16, 1997; or

(2) The date on which the holder of such special issuance is required to provide additional information to the FAA as a condition for continued medical certification.

Sec. 67.403 Applications, certificates, logbooks, reports, and records: Falsification, reproduction, or alteration; incorrect statements.

(a) No person may make or cause to be made--

(1) A fraudulent or intentionally false statement on any application for a medical certificate or on a request for any Authorization for Special Issuance of a Medical Certificate (Authorization) or Statement of Demonstrated Ability (SODA) under this part;

(2) A fraudulent or intentionally false entry in any logbook, record, or report that is kept, made, or used, to show compliance with any requirement for any medical certificate or for any Authorization or SODA under this part;

(3) A reproduction, for fraudulent purposes, of any medical certificate under this part; or

(4) An alteration of any medical certificate under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for--

(1) Suspending or revoking all airman, ground instructor, and medical certificates and ratings held by that person;

(2) Withdrawing all Authorizations or SODA's held by that person; and
(3) Denying all applications for medical certification and requests for Authorizations or SODA's.

(c) The following may serve as a basis for suspending or revoking a medical certificate; withdrawing an Authorization or SODA; or denying an application for a medical certificate or request for an authorization or SODA:
(1) An incorrect statement, upon which the FAA relied, made in support of an application for a medical certificate or request for an Authorization or SODA.
(2) An incorrect entry, upon which the FAA relied, made in any logbook, record, or report that is kept, made, or used to show compliance with any requirement for a medical certificate or an Authorization or SODA.

Sec. 67.405 Medical examinations: Who may give.

(a) First-class. Any aviation medical examiner who is specifically designated for the purpose may give the examination for the first-class medical certificate. Any interested person may obtain a list of these aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.
(b) Second- and third-class. Any aviation medical examiner may give the examination for the second- or third-class medical certificate. Any interested person may obtain a list of aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.

Sec. 67.407 Delegation of authority.

(a) The authority of the Administrator under 49 U.S.C. 44703 to issue or deny medical certificates is delegated to the Federal Air Surgeon to the extent necessary to--
(1) Examine applicants for and holders of medical certificates to determine whether they meet applicable medical standards; and
(2) Issue, renew, and deny medical certificates, and issue, renew, deny, and withdraw Authorizations for Special Issuance of a Medical Certificate and Statements of Demonstrated Ability to a person based upon meeting or failing to meet applicable medical standards.
(b) Subject to limitations in this chapter, the delegated functions of the Federal Air Surgeon to examine applicants for and holders of medical certificates for compliance with applicable medical standards and to issue, renew, and deny medical certificates are also delegated to aviation medical examiners and to authorized representatives of the Federal Air Surgeon within the FAA.
(c) The authority of the Administrator under 49 U.S.C. 44702, to reconsider the action of an aviation medical examiner is delegated to the Federal Air Surgeon; the Manager, Aeromedical Certification Division; and each Regional Flight Surgeon. Where the person does not meet the standards of Secs. 67.107(b)(3) and (c),

67.109(b), 67.113(b) and (c), 67.207(b)(3) and (c), 67.209(b), 67.213(b) and (c), 67.307(b)(3) and (c), 67.309(b), or 67.313(b) and (c), any action taken under this paragraph other than by the Federal Air Surgeon is subject to reconsideration by the Federal Air Surgeon. A certificate issued by an aviation medical examiner is considered to be affirmed as issued unless an FAA official named in this paragraph (authorized official) reverses that issuance within 60 days after the date of issuance. However, if within 60 days after the date of issuance an authorized official requests the certificate holder to submit additional medical information, an authorized official may reverse the issuance within 60 days after receipt of the requested information.

(d) The authority of the Administrator under 49 U.S.C. 44709 to re-examine any civil airman to the extent necessary to determine an airman's qualification to continue to hold an airman medical certificate, is delegated to the Federal Air Surgeon and his or her authorized representatives within the FAA.

Sec. 67.409 Denial of medical certificate.

(a) Any person who is denied a medical certificate by an aviation medical examiner may, within 30 days after the date of the denial, apply in writing and in duplicate to the Federal Air Surgeon, Attention: Manager, Aeromedical Certification Division, AAM-300, Federal Aviation Administration, P.O. Box 26080, Oklahoma City, Oklahoma 73126, for reconsideration of that denial. If the person does not ask for reconsideration during the 30-day period after the date of the denial, he or she is considered to have withdrawn the application for a medical certificate.

(b) The denial of a medical certificate--

(1) By an aviation medical examiner is not a denial by the Administrator under 49 U.S.C. 44703.

(2) By the Federal Air Surgeon is considered to be a denial by the Administrator under 49 U.S.C. 44703.

(3) By the Manager, Aeromedical Certification Division, or a Regional Flight Surgeon is considered to be a denial by the Administrator under 49 U.S.C. 44703 except where the person does not meet the standards of Secs. 67.107(b)(3) and (c), 67.109(b), or 67.113(b) and (c); 67.207(b)(3) and (c), 67.209(b), or 67.213(b) and (c); or 67.307(b)(3) and (c), 67.309(b), or 67.313(b) and (c).

(c) Any action taken under Sec. 67.407(c) that wholly or partly reverses the issue of a medical certificate by an aviation medical examiner is the denial of a medical certificate under paragraph (b) of this section.

(d) If the issue of a medical certificate is wholly or partly reversed by the Federal Air Surgeon; the Manager, Aeromedical Certification Division; or a Regional Flight Surgeon, the person holding that certificate shall surrender it, upon request of the FAA.

Sec. 67.411 Medical certificates by flight surgeons of Armed Forces.

(a) The FAA has designated flight surgeons of the Armed Forces on specified military posts, stations, and facilities, as aviation medical examiners.
(b) An aviation medical examiner described in paragraph (a) of this section may give physical examinations for the FAA medical certificates to persons who are on active duty or who are, under Department of Defense medical programs, eligible for FAA medical certification as civil airmen. In addition, such an examiner may issue or deny an appropriate FAA medical certificate in accordance with the regulations of this chapter and the policies of the FAA.
(c) Any interested person may obtain a list of the military posts, stations, and facilities at which a flight surgeon has been designated as an aviation medical examiner from the Surgeon General of the Armed Force concerned or from the Manager, Aeromedical Education Division, AAM-400, Federal Aviation Administration, P.O. Box 26082, Oklahoma City, Oklahoma 73125.

Sec. 67.413 Medical records.

(a) Whenever the Administrator finds that additional medical information or history is necessary to determine whether an applicant for or the holder of a medical certificate meets the medical standards for it, the Administrator requests that person to furnish that information or to authorize any clinic, hospital, physician, or other person to release to the Administrator all available information or records concerning that history. If the applicant or holder fails to provide the requested medical information or history or to authorize the release so requested, the Administrator may suspend, modify, or revoke all medical certificates the airman holds or may, in the case of an applicant, deny the application for an airman medical certificate.
(b) If an airman medical certificate is suspended or modified under paragraph (a) of this section, that suspension or modification remains in effect until the requested information, history, or authorization is provided to the FAA and until the Federal Air Surgeon determines whether the person meets the medical standards under this part.

Sec. 67.415 Return of medical certificate after suspension or revocation.

The holder of any medical certificate issued under this part that is suspended or revoked shall, upon the Administrator's request, return it to the Administrator.

SAMPLE MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:
TOWER CLIMBERS

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section are required because of the hazardous occupational and environmental aspects of the function of tower climber [hereinafter referred to as "climber"] (please refer to the table beginning on page 3). The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of a climber without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all applicants and incumbents.

Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. Individualized assessments will be made on a case-by-case basis to determine the individual's ability to meet the performance-related requirements of the climber's job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation and Review of Climbers

The essential functions of climbers in supporting departmental and bureau missions are by nature hazardous. Also, these functions are performed under variable and unpredictable

working conditions. In response, an interagency team has developed these standards in order to help insure the following:

1. Climbers will be able to perform the full range of essential functions of their jobs under the conditions under which those functions may be performed.

2. Existing/preexisting medical conditions of climbers and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.

3. Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of climbers, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual climbers should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table on page 4. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or an alternative form that provides similar information). For assistance in arranging for physician services, please refer to Tab 5, "*Medical Services Providers*". The AMO will review the results of all examinations, and provide the final medical recommendation to the agency.

Please note: Consistent with the above discussion, these medical standards do not address *physical fitness* or *job performance*. Assessment of these factors would involve separate procedures, and are governed by separate regulations.

ESSENTIAL FUNCTIONS AND WORK CONDITIONS FOR THE JOB OF TOWER CLIMBER

Time/Work Volume	Physical Requirements	Environment	Physical Exposures
May include:			
• up to 10 climbs per day • climbs conducted up to 100 days per year • may be expected to make climbs every day • 75% of climbing trips are out and back in one day • work conducted during daylight hours; no climbing at night) • routine climbs allow resting as needed • climbs in support of fire suppression activities may limit the opportunity for rests • climbs to conduct personnel rescue work require rapid ascent and descent	• read documents and maps • drive to work sites or trail heads, 30 minutes to 2 hours • operate crane, trucks, or other motor vehicles • lift and carry gear bags and safety equipment (up to #45 or more) • put on and use personal protective, fall prevention, and fall arrest equipment • manipulate small and large devices, including 2-step carabiners and hooks, plus buckles and other small items • climb and descend ladders and tower structures, with 10-21+ inch risers • work at extreme heights (towers/ladders 10-1000+ feet tall) • be continuously and clearly aware of surroundings • walk, stand, kneel, stoop, and bend • use small and large hand and power tools • reach and use tools above shoulders and head • push and pull objects • read gauges, dials, and equipment	• slippery surfaces • uneven surfaces • heights (up to 1000 feet or more on structures) • altitudes (up to 12000 feet) • heat, cold, wet, dry (all with extremes) • wind • fog • high noise levels • variable lighting conditions • moving and stationery heavy equipment, machines, vehicles • wildlife (e.g., birds, bears, insects) • long distances from support or medical help • isolated, remote sites • hostile personnel/public • close living/working quarters • exposed, protruding bolts, braces • sharp metal objects	• high voltages • extreme heat and cold • noise • wildlife (e.g., birds, bears, insects) • gases, particulates, fumes • sleep disruption • falling objects, including bird droppings, tools, equipment • combustibles, corrosives, solvents, and other chemicals • bright sun, high UV light • welding fumes and light • open flame • dehydration • vibration

ESSENTIAL FUNCTIONS AND WORK CONDITIONS FOR THE JOB OF TOWER CLIMBER (continued)			
Time/Work Volume	**Physical Requirements**	**Environment**	**Physical Exposures**
	• tie and untie small and large ropes • work independently as well as on small teams • use writing implements, as well as computer keyboard and personal computer • communicate clearly with public and co-workers		

Medical Examination Services to be Provided for Climbers

HISTORIES

- General Medical History
- Occupational History

EXAMINATION ITEMS

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination, with Special Attention To:
  - Skin
  - Eyes, Ears (including TM mobility), Nose, Mouth, and Throat
  - Neck (including flexibility and rotation)
  - Thyroid
  - Respiratory System
  - Cardiovascular System
  - Back & Musculoskeletal System (including flexibility)
  - Extremities (including strength, range of motion, and joint stability)
  - Peripheral Vascular System
  - Abdomen
  - Gastrointestinal System
  - Genitourinary System
  - Central Nervous System (including cranial nerves I-XII, and cerebellar function)
  - Peripheral Nervous System (including reflexes, sensation, and position sense)
  - Mental Status Evaluation

DIAGNOSTIC TESTS/PROCEDURES

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision
- Depth perception
- Color Discrimination (including red, green, and yellow) (baseline/exit exam)
- Pulmonary Function Test-Spirometry (baseline/exit exam)
- Chest X-Ray, PA & Lateral (baseline/exit exam)
- Electrocardiogram-Resting (baseline/exit exam)
- TB (Mantoux) skin test (baseline/exit exam)
- Tetanus vaccination (to maintain as current)

LABORATORY

- CBC (hemoglobin, hematocrit, platelets, white blood count with differential)
- Dipstick urinalysis (baseline/exit exam only)
- Blood chemistries:
  - LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]
  - total cholesterol, LDL-C, HDL-C, triglycerides, blood sugar [each exam]

CLEARANCES

- Medical Clearance for Climbers

PSYCHIATRIC STANDARD

The applicant/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

(All diagnoses must be consistent with the diagnostic criteria as established by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, DSM-IV.)

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **KLEPTOMANIA**
8. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
7. **DEPRESSIVE, BIPOLAR,** or **OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
8. **PYROMANIA**
9. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
10. **ANTISOCIAL, PARANOID,** or **SCHIZOID PERSONALITY DISORDER**
11. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

PROSTHETICS, TRANSPLANTS, AND IMPLANTS STANDARD

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Note: In general, hand or arm amputations (with or without a prosthesis) are

incompatible with the functional requirements of the job. For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation ***for agency review*** from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

IMMUNE SYSTEM/ALLERGIC DISORDERS STANDARD

The applicant/incumbent must be free of communicable diseases, have a healthy immune system, and be free of significant allergic conditions in order to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A general physical exam of all major body systems that is within the range of normal variation, including:
  - no evidence of current communicable disease that would be expected to interfere with the safe and effective performance of the essential functions of the job; and
  - no evidence of current communicable disease that would be expected to pose a threat to the health of any co-workers or the public; and
  - normal nasopharynx, major sinuses, Eustachian tube, and pulmonary exam
- Normal complete blood count, including white blood count and differential; and
- Current vaccination status for tetanus; and
- No evidence by physical examination and medical history of infectious disease, immune system, or allergy conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3). Individuals with a history of anaphylaxis or major allergy problems may be required to carry a personal anaphylaxis kit (injectable epinephrine).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. Myasthenia gravis
2. Systemic lupus erythematosis
3. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

MEDICATION STANDARD

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out (see page 3). Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)
2. Potential drug side effects
3. Drug-drug interactions
4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use
6. Drug-environmental interactions
7. Drug-food interactions
8. History of patient compliance

EYE / VISION STANDARD

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job (see page 3). This requires binocular vision, near and far visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/20 in each eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Near visual acuity of at least 20/25 (Snellen equivalent) at 16 inches; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 70^{o} laterally in each eye; and
- Normal depth perception; and
- No ophthalmologic condition that would increase ophthalmic sensitivity to bright light, fumes, or airborne particulates, or susceptibility to sudden incapacitation.

Note: Contact lenses are acceptable for correction of visual acuity, but the user must be able to demonstrate that the corrective device(s) can be worn safely and for extended periods of time without significant maintenance.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC CONJUNCTIVITIS**
2. **CORNEAL ULCERS** This condition must be treated and cleared by an Ophthalmologist before a medical clearance can be granted.
3. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

HEAD, NOSE, MOUTH, THROAT AND NECK STANDARD

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
  - normal flexion, extension, and rotation of the neck; and

- open nasal and oral airways; and
- unobstructed Eustachian tubes; and
- no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and

- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MUTISM/APHONIA**
2. **NASAL POLYPS THAT SIGNIFICANTLY OBSTRUCT BREATHING**
3. **RESTRICTED RANGE OF MOTION IN THE NECK**
4. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

EAR / HEARING STANDARD

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- A current pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95); and
- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, 2000, and 3000 Hz in each ear; and
- No evidence by physical examination and medical history of ear conditions (external, middle, or internal) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

Note: The use of a hearing aid(s) to meet this standard is permitted.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MENIERE'S DISEASE**
2. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

DERMATOLOGY STANDARD

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ALBINISM**
2. **XERODERMA PIGMENTOSUM**
3. **CHRONIC DERMATITIS** (if it affects ability to use PPE and fall prevention and fall arrest gear)
4. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

VASCULAR SYSTEM STANDARD

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
  - no evidence of phlebitis or thrombosis; and
  - no evidence of venous stasis; and
  - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. **INTERMITTENT CLAUDICATION**
5. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CARDIAC STANDARD

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
  - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and
  - a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
  - no pitting edema in the lower extremities, and
  - normal cardiac exam.
- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **CORONARY ARTERY DISEASE**
3. **HYPERTENSION** that cannot be controlled to a level of 160/90 or less, or requires the use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.
4. History of **MYOCARDIAL INFARCTION**
5. **VALVULAR HEART DISEASE** such as mitral valve stenosis, symptomatic mitral valve regurgitation, aortic stenosis etc.
6. **DYSRHYTHMIAS:** Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
7. **ANGINA PECTORIS** or chest pain of unknown etiology.
8. **CONGESTIVE HEART FAILURE**
9. **CARDIOMYOPATHY**
10. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CHEST AND RESPIRATORY SYSTEM STANDARD

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- A pulmonary function test (baseline exam) showing:
  - forced vital capacity (FVC) of at least 70% of the predicted value; and
  - forced expiratory volume at 1 second (FEV1) of at least 70% of the predicted value; and
  - the ratio FEV1/FVC of at least 70% of the predicted value; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **SIGNIFICANT OBSTRUCTIVE** or **RESTRICTIVE PULMONARY DISEASE.**
2. **ASTHMA**
3. **ACTIVE PULMONARY TUBERCULOSIS (TB)**
4. **HISTORY OF CHRONIC BRONCHITIS ASSOCIATED WITH DECREASED PULMONARY FUNCTION**
5. **SPONTANEOUS PNEUMOTHORAX** (if recurrent)
6. **PNEUMONECTOMY** (if associated with impaired pulmonary function)
7. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

ENDOCRINE AND METABOLIC SYSTEM STANDARD

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result

of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ADRENAL DYSFUNCTION** (e.g., Addison's Disease or Cushing's Syndrome).
2. **THYROID DISEASE** (uncontrolled or associated with current complications).
3. **INSULIN DEPENDENT DIABETES MELLITUS**
4. **HYPERGLYCEMIA** without a history of diabetes will require additional tests, including but not limited to a glycohemoglobin (or hemoglobin A_{1C}) and fasting glucose before a final medical determination is made.
5. **DIABETES INSIPIDUS**.
6. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

THE CONDITION OF PREGNANCY

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

HEMATOPOIETIC SYSTEM STANDARD

The applicant/incumbent must have a hematopoietic (blood and blood-producing) system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- A complete blood count (including hemoglobin, hematocrit, platelets, and white blood count, with differential) that is within the normal range; and
- No evidence by physical examination (including laboratory testing) and medical history of hematopoietic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ANEMIA**
2. **THROMBOCYTOPENIA** or **CLOTTING DISORDER**
3. **HEMOPHILIA**
4. **CHRONIC LYMPHANGITIS**

5. **SICKLE CELL ANEMIA**
6. **SPENOMEGALY**
7. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

MUSCULOSKELETAL SYSTEM STANDARD

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **ANKYLOSING SPONDYLITIS**.
4. **LUMBOSACRAL INSTABILITY**: pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
5. **SCIATICA OR OTHER NEUROPATHIES**
6. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
7. A history of a **CHRONIC SPRAIN OR STRAIN OF THE NECK** limiting mobility or causing recurring cephalgia (headaches)
8. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
9. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CENTRAL AND PERIPHERAL NERVOUS SYSTEM STANDARD, AND VESTIBULAR SYSTEM STANDARD

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
  - intact cranial nerves, I-XII; and
  - normal proprioception of the major joints; and
  - normal sense of touch in the hands and feet; and
  - normal reflexes of the upper and lower extremities; and
  - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS**.
6. **EPILEPSY** (See the seizure standard, below)
7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **MIGRAINE**
10. **SEIZURES***
11. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

Between 40 and 70 percent of people with a single, brief, generalized tonic-clonic seizure, who are found to have a normal EEG and no identified underlying cause for the seizure, will go on to experience further seizures if untreated. Those most likely to remain seizure-free are those who: 1) have had no seizures for 2 to 4 years; 2) had few seizures before the condition was medically controlled; 3) required only one medication to obtain control; 4) have a normal neurologic examination; 5) have no identified structural lesion responsible for the seizures; and 6) have a normal electroencephalogram (EEG) at the end of the treatment period. An individual with a history of seizures must meet the following criteria before a medical clearance can be granted:

1. the individual must be seizure-free for two years, with or without medication; and
2. present for review at the end of that two year period the results of the individual's current electroencephalogram (EEG), showing normal findings; and
3. provide a written opinion from the individual's neurologist and, if necessary, a neurologist selected by the employing agency, regarding the ability of the individual to safely and efficiently carry out the specified essential functions of the job, under the anticipated work conditions, referencing the table on page 3.

*Harrison's Principles of Internal Medicine, 13th Edition, McGraw-Hill, Inc., San Francisco, page 2232

GASTROINTESTINAL SYSTEM STANDARD

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and
- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ACUTE AND CHRONIC ACTIVE HEPATITIS**.
2. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medical treatments, may be compatible with the job, and will be reviewed on a case-by-case basis.)
3. **COLOSTOMIES**, unless the precipitating condition has stabilized and the applicant/incumbent demonstrates successful management of the colostomy, considering the requirements of the function and the work conditions.
4. **ILEITIS** (chronic or recurring).
5. **CHOLECYSTITIS** (chronic or recurring).
6. **DIVERTICULITIS** (symptomatic).
7. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity and the etiology).

8. **INTESTINAL OBSTRUCTION** from any cause.
9. **ESOPHAGEAL VARICES**
10. **PANCREATITIS**
11. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
12. **ACTIVE GASTRIC OR DUODENAL ULCER**
13. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of post-treatment (current) pain, hemorrhage, fainting episodes or dietary restrictions that could interfere with the performance of the job.
14. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

GENITOURINARY SYSTEM STANDARD

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job (see page 3).

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **POLYCYSTIC KIDNEY DISEASE**
2. **ACUTE** or **CHRONIC RENAL FAILURE**
3. **NEPHROTIC SYNDROME**
4. **SYMPTOMATIC URINARY CALCULI**
5. **NEUROGENIC BLADDER**
6. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
7. **RENAL TOXICITY FROM ANY CAUSE**
8. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

SAMPLE ***DRAFT*** MEDICAL STANDARDS

And Review Criteria for Agency Medical Officers

These Standards Are Applicable to the Following Function:
CRANE OPERATORS

Under 5 CFR Part 339 Medical Qualifications Determinations, medical standards may be established for functions with duties that are arduous or hazardous in nature. The medical standards described in this section were established because of the hazardous occupational and environmental aspects of the function of crane operator. The medical standards are provided to aid the examining physician, the designated agency medical officer(s), and officials of other involved government agencies (e.g., the Office of Personnel Management, or OPM). They are to be used when determining whether there are medical conditions present that may affect an individual's ability to safely and efficiently perform the requirements of a crane operator without undue risk to himself/herself or others. The results of such determinations are to be used by an agency-based team (e.g., safety, personnel, management, peers, and medical) to consider whether waivers or reasonable accommodation may be appropriate when an individual is found to not meet a specified standard. In this way, the standards are intended to help insure consistency and uniformity in the medical evaluation of all applicants and incumbents.

These standards are based on those used by the U.S. Navy, and the State of Washington. They are to be considered drafts or working models by agencies wishing to establish formal standards for use in that agency. Each of the medical standards listed in this document are subject to clinical interpretation by an appropriate agency medical officer (AMO) who will incorporate his/her knowledge of the essential job functions and the environmental conditions under which an employee may work. Listed with the standards are examples of medical conditions and/or physical impairments that may be incompatible with safe and efficient performance of duties, or that may be aggravated by performing those duties. Individualized assessments will be made on a case-by-case basis to determine the individual's ability to meet the performance-related requirements of the crane operator's job. Final consideration and medical determination may require additional medical information and/or testing that is not routinely required during either the pre-placement or periodic medical examination process.

Rationale for Medical Evaluation and Review of Crane Operators

The essential functions of crane operators in supporting departmental and bureau missions are by nature hazardous, both for the worker directly, as well as co-workers and possibly the public. The intent of these standards is to help insure the following:

1. Crane operators will be able to perform the full range of essential functions of their jobs under the conditions under which those functions may be performed.

2. Existing/preexisting medical conditions of climbers and applicants will not be aggravated, accelerated, exacerbated, or permanently worsened as a result of carrying out the functions of the job.

3. Demonstration of the strong commitment of the agency to public and employee health and safety, and a strong commitment to maintaining the integrity of mission accomplishment.

Medical Evaluations

Medical evaluations are to be conducted both as a *pre-placement* exam for all individuals who are to be assigned to roles that involve the duties of climbers, and every three years thereafter. The AMO may determine that, due to health and safety risks, interval changes in health status, and possible medically-related performance concerns, the medical evaluation of individual climbers should be conducted more frequently.

The medical evaluation is to consist of those services summarized in the table on page 3. The evaluation is to be conducted by a qualified health care provider using the DOI Standard Medical History and Examination Form (or an alternative form that provides similar information). For assistance in arranging for physician services, please refer to Tab 5, "*Medical Services Providers*". The AMO will review the results of all examinations, and provide the final medical recommendation to the agency.

Medical Examination Services to be Provided for Crane Operators

HISTORIES

- General Medical History
- Occupational History

EXAMINATION ITEMS

- General Appearance and Vital Signs (height, weight, blood pressure, heart rate)
- General Physical Examination, with Special Attention To:
  - Eyes, Ears, Nose, Mouth, and Throat
  - Neck (including flexibility and rotation)
  - Respiratory System
  - Cardiovascular System
  - Back & Musculoskeletal System (including flexibility)
  - Extremities (including strength, range of motion, and joint stability)
  - Peripheral Vascular System
  - Central Nervous System (including cranial nerves I-XII, and cerebellar function)
  - Peripheral Nervous System (including reflexes, sensation, and position sense)
  - Mental Status Evaluation

DIAGNOSTIC TESTS/PROCEDURES

- Audiogram (including 500, 1000, 2000, 3000, 4000, 6000, 8000 Hertz in both ears)
- Visual Acuity, best near and far vision, corrected or uncorrected
- Peripheral Vision
- Depth perception
- Color Discrimination (including red, green, and yellow) (baseline/exit exam)

LABORATORY

- CBC (hemoglobin, hematocrit, platelets, white blood count with differential)
- Dipstick urinalysis (baseline/exit exam only)
- Blood chemistries:
  - LDH, SGOT/AST, SGPT/ALT, GGT, bilirubin [baseline/exit exam only]
  - Total cholesterol, LDL-C, HDL-C, triglycerides, blood sugar [each exam]

CLEARANCES

- Medical Clearance for Crane Operators

PSYCHIATRIC STANDARD

The applicant/incumbent must have judgement, mental functioning, and social interaction/behavior that will provide for the safe and efficient conduct of the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history of psychiatric conditions (including alcohol or substance abuse) likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

(All diagnoses must be consistent with the diagnostic criteria as established by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, DSM-IV.)

1. **AMNESTIC** disorders
2. **DELIRIUM** (depending upon etiology and duration)
3. **DEMENTIAS** (depending upon etiology and duration)
4. **DISSOCIATIVE DISORDERS**
5. **PANIC DISORDER** and **OTHER ANXIETY DISORDERS** (including claustrophobia and acrophobia, depending upon etiology, duration and severity of clinical expression)
6. **DEPRESSIVE, BIPOLAR,** or **OTHER MOOD DISORDERS** (depending upon clinical course and status of current treatment and response)
7. **SCHIZOPHRENIA** (Exceptions may be may in cases of a single episode of schizophrenic reactions associated with an acute illness or toxic exposure capable of causing such reaction.)
8. **ANTISOCIAL, PARANOID,** or **SCHIZOID PERSONALITY DISORDER**
9. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

PROSTHETICS, TRANSPLANTS, AND IMPLANTS STANDARD

The presence or history of organ transplantation or use of prosthetics or implants are not of themselves disqualifying. However, the applicant/incumbent must be able to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- No evidence by physical examination and medical history that the transplant, the prosthesis, the implant, or the conditions that led to the need for these treatments are likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

Note: For individuals with any transplant, prosthetic, or implanted pump or electrical device, the examinee will have to provide documentation ***for agency review*** from his/her surgeon or physician that the examinee (and, if applicable, his/her prosthetic or implanted device) is considered to be fully compatible with the specified essential functions of the job.

MEDICATION STANDARD

The need for and use of prescribed or over-the-counter medications are not of themselves disqualifying. However, there must be no evidence by physical examination, laboratory tests, or medical history of any impairment of body function or mental function and attention due to medications if that impairment is likely to present a safety risk or to worsen as a result of carrying out the specified essential functions of the job, under the conditions in which those functions must be carried out. Each of the following points should be considered:

1. Medication(s) (type and dosage requirements)
2. Potential drug side effects
3. Drug-drug interactions
4. Adverse drug reactions
5. Drug toxicity or medical complications from long-term use
6. Drug-environmental interactions
7. Drug-food interactions
8. History of patient compliance

EYE / VISION STANDARD

The applicant/incumbent must be able to see well enough to safely and efficiently carry out the essential functions of the job. This requires binocular vision, visual acuity, depth perception, peripheral vision, and color vision, which may be demonstrated by:

- Far visual acuity of at least 20/30 in one eye, and 20/50 in the other eye; this may be achieved with corrective lenses (if necessary), including contact lenses or spectacles; and
- Color vision sufficient to distinguish at least red, green, and amber (yellow); and
- Peripheral vision of at least 70^{o} laterally in each eye; and
- Normal depth perception.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC CONJUNCTIVITIS**
2. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

HEAD, NOSE, MOUTH, THROAT AND NECK STANDARD

The applicant/incumbent must have structures and functions of the head, nose, mouth, throat, and neck that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the head, nose, mouth, throat, and neck that is within the range of normal variation, including:
  - normal flexion, extension, and rotation of the neck; and
  - no structural abnormalities that would prevent the normal use of a hard hat and protective eyewear; and
- Normal conversational speech; and
- No evidence by physical examination and medical history of head, nose, mouth, throat, or neck conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **MUTISM/APHONIA**
2. **RESTRICTED RANGE OF MOTION IN THE NECK**
3. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

EAR / HEARING STANDARD

The applicant/incumbent must be able to hear well enough to safely and efficiently carry out the essential functions of the job. This requires binaural hearing (to localize sounds) and auditory acuity, which may be demonstrated by:

- Documentation of hearing thresholds of no greater than 40 dB at 500, 1000, and 2000 Hz in each ear, based on a pure tone, air conduction audiogram, using equipment and a test setting which meet the standards of the American National Standards Institute (see 29 CFR 1910.95).

Note: The use of a hearing aid(s) to meet this standard <u>is</u> permitted.

DERMATOLOGY STANDARD

The applicant/incumbent must have skin that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin that is within the range of normal variation; and
- No evidence by physical examination and medical history of dermatologic conditions likely to present a safety risk or to worsen as a result of carrying out the essential

functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC DERMATITIS** (if it affects ability to use PPE)
2. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

VASCULAR SYSTEM STANDARD

The applicant/incumbent must have a vascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the vasculature of the upper and lower extremities that is within the range of normal variation, including:
  - no evidence of phlebitis or thrombosis; and
  - no evidence of venous stasis; and
  - no evidence of arterial insufficiency; and
- No evidence by physical examination and medical history of peripheral vasculature conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CHRONIC VENOUS INSUFFICIENCY**
2. **DEEP VEIN THROMBOSIS**
3. **CHRONIC THROMBOPHLEBITIS**
4. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CARDIAC STANDARD

The applicant/incumbent must have a cardiovascular system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cardiovascular system that is within the range of normal variation, including:
  - blood pressure of less than or equal to 140 mmHg systolic and 90 mmHg diastolic; and

- o a normal baseline electrocardiogram (minor, asymptomatic arrhythmias may be acceptable); and
- o no pitting edema in the lower extremities, and
- o normal cardiac exam.

- No evidence by physical examination and medical history of cardiovascular conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **PACEMAKERS or PROSTHETIC VALVES** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
2. **HYPERTENSION** that cannot be controlled to a level of 140/90 or less, or requires the use of any medication that affects the ability of the individual to safely carry out the essential functions of the job, may be disqualifying.
3. History of **MYOCARDIAL INFARCTION** may be disqualifying. Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions, will be necessary before a clearance can be granted.
4. **DYSRHYTHMIAS:** Documentation from the individual's cardiologist, stating that the individual is stable and can safely carry out the specified essential functions of the job, under the specified work conditions and without aggravating the condition, will be necessary before a clearance can be considered.
5. **ANGINA PECTORIS** or chest pain of unknown etiology.
6. **CONGESTIVE HEART FAILURE**
7. **CARDIOMYOPATHY**
8. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CHEST AND RESPIRATORY SYSTEM STANDARD

The applicant/incumbent must have a respiratory system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the respiratory system that is within the range of normal variation; and
- No evidence by physical examination and medical history of respiratory conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **SIGNIFICANT OBSTRUCTIVE** or **RESTRICTIVE PULMONARY DISEASE.**
2. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

ENDOCRINE AND METABOLIC SYSTEM STANDARD

Any excess or deficiency in hormonal production can produce metabolic disturbances affecting weight, stress adaptation, energy production, and a variety of symptoms or pathology such as elevated blood pressure, weakness, fatigue and collapse. The applicant/incumbent must have endocrine and metabolic functions that are sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the skin, thyroid, and eyes that is within the range of normal variation; and
- Normal fasting blood sugar level; and
- No evidence by physical examination (including laboratory testing) and history of endocrine/metabolic conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **INSULIN DEPENDENT DIABETES MELLITUS**
2. **HYPERGLYCEMIA** without a history of diabetes will require additional tests, including but not limited to a glycohemoglobin (or hemoglobin A_{1C}) and fasting glucose before a final medical determination is made.
3. **DIABETES INSIPIDUS**.
4. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

THE CONDITION OF PREGNANCY

If an applicant or incumbent is a woman, and she raises the issue of pregnancy as the basis for a request for a special benefit, a change in duty status, or job restrictions, then justification and clarifying information for that request must be provided by the applicant's obstetrician or primary care physician, along with the estimated time period the special conditions are expected to apply.

MUSCULOSKELETAL SYSTEM STANDARD

The applicant/incumbent must have a musculoskeletal system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the upper and lower extremities, neck, and back that is within the range of normal variation for strength (including grip strength), flexibility, range of motion, and joint stability; and
- No evidence by physical examination and medical history of musculoskeletal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ARTHRITIS** (any etiology) if there is a limitation of major joint motion, and/or pain that prevents the full range of required activities.
2. **AMPUTATIONS** (loss of digits will be evaluated on a case-by-case basis)
3. **LUMBOSACRAL INSTABILITY**: pain or limitation of flexibility and/or strength adversely affecting the ability to stand, bend, stoop, carry heavy objects or sit for long periods of time.
4. **SCIATICA OR OTHER NEUROPATHIES**
5. **CHRONIC LOW BACK PAIN** (by medical history) without demonstrable pathology must be considered on a case-by-case basis. Each case will be reviewed in context of the original history or etiology, the response to therapeutic regimes, frequency of recurrence, exacerbating factors, and lengths of disability associated with the recurrences combined with the current clinical presentation.
6. Any evidence of a **CERVICAL NEUROPATHY**, including numbness, tingling or loss of motor strength in the upper extremities
7. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

CENTRAL AND PERIPHERAL NERVOUS SYSTEM STANDARD, AND VESTIBULAR SYSTEM STANDARD

The applicant/incumbent must have a nervous system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the cranial and peripheral nerves and the vestibular and cerebellar system that is within the range of normal variation, including:
  - intact cranial nerves, I-XII; and
  - normal proprioception of the major joints; and
  - normal sense of touch in the hands and feet; and
  - normal reflexes of the upper and lower extremities; and
  - normal balance (e.g., heel-toe walk; Romberg; balance on one foot); and
- Normal basic mental status evaluation (e.g., person, place, time, current events); and
- No evidence by physical examination and medical history of nervous, cerebellar, or vestibular system conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ATAXIA** from any etiology
2. **VESTIBULAR NEURONITIS**
3. **VERTIGO**
4. **PHYSIOLOGIC VERTIGO (MOTION SICKNESS)**
5. **CEREBROVASCULAR ACCIDENT** or **TRANSIENT ISCHEMIC ATTACKS**.
6. **EPILEPSY** (See the seizure standard, below)
7. **NARCOLEPSY**
8. **SENSORY DYSFUNCTION** (smell, touch, proprioception)
9. **SEIZURES***
10. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

*Between 40 and 70 percent of people with a single, brief, generalized tonic-clonic seizure, who are found to have a normal EEG and no identified underlying cause for the seizure, will go on to experience further seizures if untreated. Those most likely to remain seizure-free are those who: 1) have had no seizures for 2 to 4 years; 2) had few seizures before the condition was medically controlled; 3) required only one medication to obtain control; 4) have a normal neurologic examination; 5) have no identified structural lesion responsible for the seizures;

and 6) have a normal electroencephalogram (EEG) at the end of the treatment period.* An individual with a history of seizures must meet the following criteria before a medical clearance can be granted:

1. the individual must be seizure-free for two years, with or without medication; and
2. present for review at the end of that two year period the results of the individual's current electroencephalogram (EEG), showing normal findings; and
3. provide a written opinion from the individual's neurologist and, if necessary, a neurologist selected by the employing agency, regarding the ability of the individual to safely and efficiently carry out the specified essential functions of the job, under the anticipated work conditions, referencing the table on page 3.

*Harrison's Principles of Internal Medicine, 13th Edition, McGraw-Hill, Inc., San Francisco, page 2232

GASTROINTESTINAL SYSTEM STANDARD

The applicant/incumbent must have a gastrointestinal tract that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A physical exam of the abdomen that is within the range of normal variation; and
- Normal liver function tests (baseline exam); and
- No evidence by physical examination (including laboratory testing) and medical history of gastrointestinal conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **CROHN'S DISEASE / ULCERATIVE COLITIS / REGIONAL ENTERITIS / SPRUE / IRRITABLE BOWEL SYNDROME** (these conditions, if controlled with surgical, dietary, and/or medical treatments, may be compatible with the job, and will be reviewed on a case-by-case basis.)
2. **ILEITIS** (chronic or recurring).
3. **CHOLECYSTITIS** (chronic or recurring).
4. **DIVERTICULITIS** (symptomatic).
5. **CIRRHOSIS OF THE LIVER** (depending upon the degree of severity

and the etiology).

6. **INTESTINAL OBSTRUCTION** from any cause.
7. **PANCREATITIS**
8. **UNTREATED (OR UNSUCCESSFULLY TREATED) INGUINAL, INCISIONAL OR VENTRAL HERNIA** that is associated with symptoms
9. **ACTIVE GASTRIC OR DUODENAL ULCER**
10. **GASTRIC OR BOWEL RESECTION**, if there is any evidence (historical or physical) of post-treatment (current) pain, hemorrhage, or fainting episodes that could interfere with the performance of the job.
11. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

GENITOURINARY SYSTEM STANDARD

The applicant/incumbent must have a genitourinary system that is sufficient for the individual to safely and efficiently carry out the essential functions of the job. This may be demonstrated by:

- A normal clean catch urinalysis (baseline exam); and
- No evidence by physical examination and medical history of genitourinary conditions likely to present a safety risk or to worsen as a result of carrying out the essential functions of the job.

CONDITIONS WHICH MAY RESULT IN DISQUALIFICATION INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING EXAMPLES:

1. **ACUTE** or **CHRONIC RENAL FAILURE**
2. **NEPHROTIC SYNDROME**
3. **SYMPTOMATIC URINARY CALCULI**
4. **NEUROGENIC BLADDER**
5. **UNCORRECTED OBSTRUCTIVE UROPATHIES**
6. **RENAL TOXICITY FROM ANY CAUSE**
7. Any other condition not otherwise listed that may adversely effect safe and efficient job performance will be evaluated on a case-by-base basis.

Medical Clearance for Respirator Use **Attachment - E 1**

What follows is a comprehensive guide to the medical examination and review of information related to the use of respirators. It may be used for general reference on the subject, or the materials may be used to implement a full program acceptable to DOI.

Medical Clearance for Respirator Use - Clinical Protocol

1.0 Scope

This protocol covers medical evaluations of Department of the Interior (DOI) employees for activities involving the use of a respirator.

2.0 Frequency of Evaluation

2.1 Medical evaluations must be performed prior to beginning respirator fitting, use, or training, and thereafter according to the table in section 2.3, below.

2.2 If a new employee or new respirator user ***has not*** had a medical evaluation within the previous six months, such an evaluation must be performed by a licensed health care provider (ref. 29 CFR 1910.134; Respiratory Protection; Final Rule, Federal Register 63:1152-1300) before a medical clearance disposition is to be formulated regarding the use of a respiratory protective device.

If a new employee or new respirator user ***has*** had a medical evaluation within the previous six months, the results of that evaluation may be reviewed by a licensed health care provider so that a medical clearance disposition may be formulated regarding the use of a respiratory protective device.

2.3 Subsequent medical evaluations to support recommendations regarding the use of a respirator shall occur **periodically** per NIOSH recommendations, as follows:

	Employee Age (yrs)		
	<35	**35-45**	**>45**
Most work conditions requiring a respirator	Every 5 yrs	Every 2 years	1 - 2 years
Strenuous work conditions with an SCBA	Every 3 years	Every 2 years	Annually

2.4 Medical evaluations shall be performed **more frequently:**

- if required by OSHA standards for specific hazards; or
- for workers with medical conditions that do not preclude the use of a respirator, but for whom safe use is relatively more problematic (in such cases, the frequency of medical evaluations should be set

according to prudent medical judgment); or

- if the employee reports signs or symptoms of problems related to the ability to wear and use a respirator; or
- if management determines it is necessary; or
- if a change in workplace conditions substantially increases the physiological burden placed on the employee; or
- if significant changes in health status occur, such as returning to work following prolonged absence due to serious illness or injury.

NOTE: If an employee is enrolled in another medical surveillance or clearance program, the medical evaluation for respirator use can occur concomitantly with physical examinations conducted for these other purposes.

3.0 Evaluation Steps

3.1 A signed and dated request, consistent with the "*Request for Respirator Clearance*" form (see Attachment E 1 (b)), is to be prepared by the employee's supervisor or higher manager. Other forms may be used as long as the following items are covered. This information is to be provided to the examining facility or licensed health care provider at the time of the medical examination, or the review of the Respirator Medical Evaluation Questionnaire:

- the name and social security number (or other identifying number) of the employee to be evaluated
- the employee's phone number and the best time to call at that number
- the job title of the employee to be evaluated
- the type of respirator to be worn
- the duration and frequency of respirator use
- other personal protective equipment to be used concurrent with respiratory protection
- the job activity in which the respirator is to be worn, including the reason(s) for its use
- known or anticipated toxic substances to which the employee may be exposed and for which the protective device is to be worn

Please refer to Tab 12, Attachment E 1 (a) for a description of the various types of respirators, their uses, and the physiological effects of their use. *Examiners and reviewing health care professionals should read and be familiar with this material.*

3.2 A copy of the *DOI Respirator Medical Evaluation Questionnaire* (see Appendix E 1 (c)) is to be completed by the employee and reviewed by the AMO or other licensed health care professional prior to initial use of a respirator IF the medical evaluation does not include a physical examination. Subsequently, either a physical examination, or the *Questionnaire* (plus a physical examination, if the *Questionnaire* indicates to the health care professional that this is necessary), are to be carried out periodically (see sections 2.3 and 2.4, above).

3.3 When a physical examination is to be conducted, a medical/occupational history questionnaire which addresses at least the following topics is to be completed by the employee, signed and dated, and then made available to the examining physician at or before that exam. The *DOI Standard Medical History and Examination Form* is appropriate for this purpose.

- smoking history
- general health status
- hearing or ear conditions or symptoms, including sense of smell
- cardiovascular or pulmonary conditions or symptoms
- diabetes, or impairment of visual or auditory function
- musculoskeletal, rheumatological (joint), or neurological conditions or symptoms
- skin condition that might interfere with wearing a respirator
- facial surgery or disfiguring illness or injury
- presence of dentures
- vision or eye conditions or symptoms
- requirement for corrective lenses and the type worn (contacts or glasses)
- current medications and allergies
- psychological (mental health) conditions or symptoms
- presence of or problems with claustrophobia
- past and present job duties, including potential and actual hazardous exposures and personal experience with respiratory protective devices

3.4 When a physical examination is to be conducted, it should be directed at the areas of concern to the health care professional upon review of the *Respirator Medical Evaluation Questionnaire*, or a general examination that that includes the following areas:

3.4.1 **vital signs** (blood pressure, pulse, height, and weight; also, temperature, if clinically indicated)

3.4.2 **visual acuity** (utilizing an automated vision screener, such as Titmus™ or Optec™ machines, if available); a clinical evaluation by the examiner also may be conducted

3.4.3 **hearing** (audiogram); a clinical evaluation by the examiner also should be conducted

3.4.4 examination of the **head** (tympanic membranes, eyes, scalp, nose, oral cavity), **neck**, **lungs** and **heart**

3.4.5 **musculoskeletal** and **neurological** evaluation relevant to use of a respirator

3.4.6 **spirometry** (FEV1 and FVC, actual and % predicted) (baseline exam only, unless history other examination findings indicate further need)

3.4.7 **resting 12 lead electrocardiogram** if client is > 40 years of age (baseline only)

3.4.8 **additional testing** as warranted by the medical history and/or physical exam findings; examples of such testing are a serum chemistry profile, chest radiograph, or an exercise tolerance test (e.g., a treadmill ECG).
(NOTE: performance of exercise tolerance testing is to be approved by a DOI occupational medicine consultant.)

3.4.9 a **respirator use test**, if clinically indicated, e.g., the examiner has reservations regarding the examinee using a respirator due to physical and/or psychological conditions

Definition of a Respirator Use Test: a procedure in which the examinee dons the respirator that is to be used at the worksite, and wears it in a safe environment for 15 - 30 minutes. During this interval, exertional efforts approximating actual work tasks are simulated and observed by the examiner.

Procedure: Once the examinee dons the respirator, a health care professional should carefully monitor the examinee for signs of distress. Monitoring should include serial measurements (every 5 - 10 minutes) and recordings of pulse, blood pressure, respiratory rate, and, as appropriate, auscultation of the lungs and heart, and observation for signs of claustrophobia. A progress note describing the results of the Use Test should be placed in the medical record.

3.4.10 the **printed name** and **signature** of the **examiner**, the **date** of the evaluation, and the **location** of the facility in which the evaluation occurred shall appear on the examination form.

3.5 A **written disposition** based on available information (signed and dated by the examiner) shall be provided to the designated DOI supervisor or manager regarding the medical clearance for respirator use by the examinee (see Section 7.0 of this document).

4.0 Clinical Considerations

4.1 General Job Duties

The proper approach to medical evaluation of a respirator user includes initial verification that, from a physical/cognitive/emotional perspective, the examinee is physically qualified to perform assigned duties without the respirator in place. Therefore, as a general rule, and with the exception of using respiratory protection during heavy exertion (particularly with an SCBA), an employee who physically can perform assigned duties without donning a respirator likely will be able from a functional perspective to do the work with a respirator in place.

If such a conclusion has not been properly reached, then the scope of the evaluation to evaluate the examinee for the potential for safe/unsafe use of a respirator should be appropriately expanded.

4.2 Medical Conditions - Stable

A variety of medical disorders, if sufficiently severe, may limit or contraindicate safe and effective use of a respiratory protective device. However, if the various medical conditions/diagnoses have not limited the respirator candidate in the past in jobs at least as taxing as the proposed/existing position, then such conditions usually will not preclude respirator use for the proposed duties.

Consistent with this concept is the corollary that during periodic evaluations of respirator users, disorders which have remained stable and heretofore have not interfered with safe and effective respirator use will likely not do so in the near term future.

4.3 Medical Conditions - New, Evolving or Intermittent

Medical conditions can change, and new diagnoses which are not

documented in the medical record and which can impact respirator use may appear. Thus, the examining physician must be familiar with and consider those medical conditions that are relevant to respirator use (and other job functions).

Another important issue is the approach to disorders which become symptomatic or which are exacerbated on an intermittent basis (e.g., asthma, diabetes, seizure disorders, etc.). Obviously, the clinical evaluation of individuals with such conditions depends heavily on a detailed medical and work history to address the frequency and severity of symptoms. At the time of the medical evaluation, the clinical manifestations of these conditions may underestimate (or overestimate!) the functional limitations and risks imposed on the examinee when using a respirator.

A closely-related consideration is the nature of the worksite at which respiratory protection is needed. If a worker becomes ill while using a respirator and must exit the work area, he/she must be able to leave quickly enough to avoid personal injury. Also, the health and safety of fellow workers must not be jeopardized by the respirator user's absence or need for evacuation, and all of these factors must be taken into consideration by the examiner.

4.4 Target Organ Damage

Under most circumstances, a respirator is a form of worker protection resorted to when airborne hazards cannot be sufficiently controlled by engineering, work practices, and/or administrative controls. Thus, it is often appropriate in such environments to monitor respirator users for evidence of target organ damage or indicator-organ response, both as a backup to industrial hygiene techniques as well as an indication of the effectiveness of respiratory protection. Thus, the hospital worker who wears a HEPA respirator for protection against exposure to tuberculosis will also undergo periodic PPD testing, or the lead exposed worker will undergo blood lead monitoring, or the asbestos worker will receive periodic chest x-rays and pulmonary function tests. Therefore, the examiner who evaluates the respirator user should utilize such information and, if it is not being collected, recommend surveillance testing as appropriate.

4.5 Use Test

Occasionally, even after a complete and appropriate medical evaluation a question may remain as to whether or not a particular examinee is able to utilize a form of respiratory protection safely and effectively. In such circumstances, it is appropriate for the medical evaluation to include a respirator use test. A use test not only represents an individualized assessment of the appropriateness of use of a particular respirator when a concern has arisen, but it also provides the opportunity to observe the examinee for claustrophobia not otherwise uncovered.

NOTE: A Use Test **does not** substitute for a required, formal Fit Test as defined in various OSHA regulations.

5.0 Responsibilities

5.1 It is the responsibility of **DOI** to provide the examiner with job and respirator use information, such as that indicated on the Request for Respirator Clearance form.

5.2 It is the responsibility of the **examinee** to provide the historical data requested in an occupational and medical questionnaire.

5.3 It is the responsibility of the **examiner** to review the historical medical and occupational data and conduct the clinical evaluation according to generally accepted community medical standards.

5.4 Unless **DOI** requests an occupational medical consultant to make a medical disposition, or the employee being examined is enrolled in a medical surveillance program (such that a second-level review is to be conducted by an AMO), it is the responsibility of the **examiner** at the service provision site to render a written medical disposition regarding the use of a respirator if an adequate basis for doing so has been developed during the evaluation. (See Section 6.1 below.)

5.5 It is the responsibility of **DOI** or its occupational medicine consultant to review this protocol annually and make changes if warranted.

6.0 Communication with DOI, the Employer

6.1 If the examiner determines that additional information is needed prior to issuing a medical disposition, then this request should be forwarded in writing to the agency safety office or other designated agency official. In such cases, the health record should be flagged for review in a few weeks by the requesting examiner, such that if the requested information is not received a written report can be issued noting that a recommendation can not be made due to lack of sufficient information.

6.2 Following completion of the written medical disposition by either the examiner or the occupational medicine consultant, the original of the written disposition should be forward to the agency.

6.3 Guidelines Regarding Content of the Disposition

6.3.1 The disposition should not contain specific examination findings (including laboratory results) or specific medical diagnoses.

6.3.2 The disposition should contain information in the form of a *recommendation***.**

6.3.3 Information forwarded to DOI should answer the following question: "*Is it the recommendation of the examiner that the employee be considered capable of safely wearing the indicated respirator while performing the indicated job duties?"*

6.3.4 The response to the question, i.e., the recommendation, should either be

- to place **no limitation** on respirator use **-OR-**
- to **limit respirator use** according to specifically stated circumstances (if respirator use is limited, the specific limitation is to be addressed in the recommendation) **-OR-**
- to **preclude any respirator use** at the worksite **-OR-**
- to state that **no disposition** can be issued due to lack of information (e.g., non-compliant employee, inability to obtain information from employee or DOI, etc.; see Sections 6.1 and 7.3).

6.3.5 If suggested by the results of the medical examination, a **restriction** is recommended that would allow the examinee to function more safely and/or effectively while using respiratory protection, such a recommendation is to be included in the summary.

Example: "The employee is not medically cleared to wear a negative pressure respirator; a PAPR is recommended."

7.0 Communication with the Employee

7.1 If the employee requests copies of all or part of the physical evaluation (copies to be given directly to the examinee), this request is to be honored; a consent form generally is not required for this transaction (the policies of the individual examining facility may vary).

7.2 Communication with the employee is required to explain fully any abnormal findings of an examination.

7.3 If additional medical information is needed from the employee for adequate evaluation of a medical condition, a letter requesting the needed information can be issued to the examinee for completion by the employee's personal physician or health care provider.

In such cases, the health record should be flagged for review in a few weeks by the requesting examiner, such that if the requested information is not received, a written report can be issued noting that a recommendation can not be made due to lack of sufficient information.

Attachment E 1 (a)
Types of Respirators

The following information should be provided to the servicing examination site to assist the health care providers as they conduct the respirator medical clearance examinations. Engineering descriptions of the various types of respiratory protective devices are inadequate by themselves for guiding examining providers who conduct respirator medical clearance examinations. Factors related to the physiologic effects and consequences of the various devices for the wearer are more important considerations than are the internal mechanical characteristics of the device in use or to be used. All respirators used at Federal worksites should be NIOSH/MSHA approved.

A1 Air-Purifying, Negative Pressure (non-powered) Respirator

This category includes several types of devices. All have a **face piece (either full or partial)** which provides a tight seal against the face. Inhalation of toxic substances is prevented either by direct filtration through the face piece material, through filters/cartridges attached to the face piece, or by a remote assembly typically worn on the belt and involving a chemical reaction. An **air-purifying** respirator, as the name implies, can only be used in an environment with an adequate supply of oxygen, since the respirator only filters/ purifies and, to some extent, prevents physical contact with ambient gas. The **negative pressure** designation relates to the method of air delivery and removal, i.e., the wearer creates a negative pressure inside the face piece in order to inhale. This type of device may be completely disposable or may contain replaceable parts.

The hazard eliminating mechanism is specific for the physical state of the hazard, i.e., some devices protect only against particulates while others protect only against gases or vapors. (Some devices protect against both.)

A negative pressure respirator is not appropriate for certain hazards and for concentrations of hazards exceeding its protective capacity. If the means of respiratory protection is via particulate filtration, the resistance to breath will increase as the filter becomes saturated. Since the major limiting factor to using this type of device is breathing resistance, particularly for workers with obstructive airway conditions (predominately on inhalation if there is an exhalation valve), this factor should be considered during medical clearance examinations, especially if a "use test" is conducted with a "clean" respirator. The cloth **h**igh **e**fficiency **p**articulate **a**ir (HEPA) filter mask, commonly used for `protection against exposure to tuberculosis, is an example of this type of respiratory protective device.

A2 Air-Purifying, Positive Pressure (powered) Respirator (PAPR)

This variant of the air-purifying type of respirator utilizes a **blower** worn on a belt at the

waist to move ambient air through the filtering mechanism. Consequently, respirable air is presented to the wearer under slightly positive pressure. Because the blower operates continuously, i.e., air is constantly flowing into and out of the face piece, resistance both to inhalation and exhalation is negligible as is the physiologic dead space. This feature may be helpful to workers with mild to moderate disease who are otherwise able to meet their job requirements.

Some PAPRs rely on high air flow rates to prevent toxic substances from entering the mask rather than forming a seal against the face. Variants of these devices utilize a hood or helmet which fits over the entire head with respirable air supplied to the entire space beneath the hood/helmet. This alternative is particularly useful for workers with beards or other facial features that interfere with forming a tight seal with a face piece. A PAPR is not appropriate for IDLH (**i**mmediately **d**angerous to **l**ife and **h**ealth) environments or other situations requiring a high level of respiratory protection.

A3 Self-Contained Breathing Apparatus (SCBA)

An SCBA is a device for which the wearer carries his/her source of respirable air in a compressed gas cylinder typically positioned in a back harness. The gas flow path conforms to either an open or closed circuit, i.e., expired air is either exhausted through a valve to the ambient environment or returned to a bag of pooled gas at ambient pressure, respectively. Carbon dioxide is scrubbed in the closed circuit and inhalations are drawn directly from the bag.

An SCBA is worn with a mask (usually a full face piece) which is supposed to provide a tight seal against the face. If the wearer uses lenses, specially configured lenses that can fit entirely within the face piece must be worn, i.e., temples (sidebars) cannot penetrate the seal between the mask and the face.

SCBAs provide air to the wearer under positive pressure. They usually operate in demand or pressure demand mode. In the demand mode, respirable air is available when inspiratory effort lowers the pressure in the face piece below ambient pressure. In the pressure demand mode, positive pressure is in the face piece throughout the respiratory cycle, i.e., gas is supplied when inspiratory effort lowers mask pressure, but not all the way to ambient pressure. Consequently, in a pressure demand device, exhalation is accomplished against greater resistance than in a demand device. (This drawback is counterbalanced by the greater protection offered by a pressure demand device, since continuously positive mask pressure suppresses inward leaking during the entire respiratory cycle.)

The **considerable weight of an SCBA (up to 35 pounds) may limit functional (exertional) capacity during performance of heavy work, especially for workers with**

certain cardiovascular conditions. Exertional capacity while wearing an SCBA may also be limited by the inability of the device to support very high ventilatory rates, either through limited maximal air supply rates or, in the case of the pressure demand device, working against increased exhalation resistance. It is also noteworthy that attempts to breathe at ventilation rates greater than the device's maximal flow rates may lead to inward air/gas leakage from the ambient environment (mask pressure can be forcefully driven below ambient pressure by extreme ventilatory efforts).

SCBAs can operate in a continuous mode (air is flowing regardless of inspiratory effort). In this type of device, resistance during exhalation is less than with demand mode devices, since the exhalation valve essentially is held open. SCBAs with pressure demand regulators are used in oxygen deficient atmospheres (< 19.5% O_2) or other environments which are immediately dangerous to life or health (IDLH), i.e., they require a high level of respiratory protection (e.g., fire fighting).

A4 Supplied Air Respirator

Some respirators are designed to provide the wearer with non-ambient, respirable air from a remote source. The air/gas reaches the user's breathing apparatus through a flexible pressurized hose, which usually is tethered at the waist. Air is delivered to the wearer's face piece either through a demand or pressure demand type regulator, similar to an SCBA, or through a flow system, similar to a PAPR.

Attachment E 1 (b)

Sample of Request for Respirator Clearance form

DEPARTMENT OF THE INTERIOR

REQUEST FOR RESPIRATOR CLEARANCE

Employee Name:_____ SS#:_____
Job Title:_____ Work Phone Extension:_____
Best Time to Phone:_____

Instructions to Safety Officer or Supervisor: Please check all respirators and other applicable items which apply to the employee's job functions, sign and print your name and the date of the request. **Forward** this form to the servicing examination facility such that a medical evaluation of the employee can be scheduled.

Request for NIOSH-approved respirator:

☐ single use, filter mask (four attachment points)	☐ half-faced cartridge-type, negative pressure
☐ full-faced cartridge-type, negative pressure	☐ half-faced powered cartridge-type (PAPR)
☐ full-faced powered cartridge-type (PAPR)	☐ self-contained breathing apparatus (SCBA)
☐ hood/helmet powered cartridge-type (PAPR) (not positive pressure)	☐ half faced/full faced/hood/helmet positive pressure airline respirator

Frequency of Use:

☐ daily ☐ weekly
☐ monthly ☐ yearly
☐ emergency use only
☐ other:_____

Duration of Use:

☐ < 30 min per work day
☐ 30 - 60 min per work day
☐ 1 - 4 hours per work day
☐ 4 - 8 hours per work day, or more

Other Personal Protective Equipment (PPE) to be Used:

☐ barrier clothing (Tyvek´, etc., coveralls, chemical splash suit) ☐ fully encapsulated suit
☐ safety glasses/splash goggles ☐ other:_____

Job Functions While the Employee Will be Wearing the Respirator (check all that apply) :

☐ **regular job duties** require use of respirator; please refer to position description for these activities
☐ **light** physical activity (sitting or standing to control machines, performing hand or arm work)
☐ **moderate** physical activity (walking about with moderate lifting/carrying/pushing)
☐ **heavy** physical activities
(lifting/carrying greater than 25 lbs, sustained effort requiring whole body movements)
☐ **HAZMAT** Team Activities: Level: ☐ A ☐ B ☐ C ☐ D (as per 29 CFR 1910.120)
☐ **confined space** activities or work in awkward small spaces
☐ **solitary/isolated** duty
☐ **unusual environmental conditions** (excessive heat, cold, humidity, high altitude, etc.)
☐ **toxic substances** (describe substance(s), and the exposure level, frequency, and duration):

_____

_____

_____
Signature of Requesting Safety Officer or Supervisor Date

_____
Printed Name of Requesting Safety Officer or Supervisor (phone # with area code)

Original of this document to remain with employee's occupational health record.
2-1-2000

Attachment E 1 (c)

DOI Respirator Medical Evaluation Questionnaire form

U.S. DEPARTMENT OF THE INTERIOR

Respirator Medical Evaluation Questionnaire
(Reflects OSHA's Mandatory Questionnaire in Appendix C to 29 CFR 1910.134)

To the employer: Employees who are to use a respirator in the course of their official duties are to have an annual medical evaluation. The evaluation must either include a physical examination by a licensed health professional, or completion of this form by the employee and its review by an agency health care professional (see "Medical Clearance for Respirator Use – Clinical Protocol" in the DOI Occupational Medicine Program Handbook). Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination. However, certain responses, or patterns of response, may lead the reviewer to request further information, or a medical examination, in order to reach a conclusion regarding the employee's ability to safely use a respirator.

To the employee: Can you read? (select one): Yes ☐ No ☐

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date _____

2. Your name:_____

3. Your age (to nearest year):_____

4. Sex (circle one): Male/Female

5. Your height: _____ ft. _____ in.

6. Your weight: _____ lbs.

7. Your job title:_____

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):

_____

9. The best time to phone you at this number: _____

10. Has your employer told you how to contact the health care professional who will review this questionnaire? (select one) Yes ☐ No ☐

11. Check the type of respirator you will use (you can check more than one category; check all that apply):

a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).

b. _____ Other types: ____ half- or full-facepiece type; ____ powered-air purifying; ____ supplied-air; ____ self-contained breathing apparatus (SCBA).

12. Have you worn a respirator? (select one) Yes ☐ No ☐

If "yes," what type(s):_____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please select "yes"' or "no"').

1. **Do you currently smoke tobacco, or have you smoked tobacco in the last month?** Yes ☐ No ☐

2. **Have you ever had any of the following conditions?**
   a. Seizures (fits): Yes ☐ No ☐
   b. Diabetes (sugar disease): Yes ☐ No ☐
   c. Allergic reactions that interfere with your breathing: Yes ☐ No ☐
   d. Claustrophobia (fear of closed-in places): Yes ☐ No ☐
   e. Trouble smelling odors: Yes ☐ No ☐

3. **Have you ever had any of the following pulmonary or lung problems?**
   a. Asbestosis: Yes ☐ No ☐
   b. Asthma: Yes ☐ No ☐
   c. Chronic bronchitis: Yes ☐ No ☐
   d. Emphysema: Yes ☐ No ☐
   e. Pneumonia: Yes ☐ No ☐
   f. Tuberculosis: Yes ☐ No ☐
   g. Silicosis: Yes ☐ No ☐
   h. Pneumothorax (collapsed lung): Yes ☐ No ☐
   i. Lung cancer: Yes ☐ No ☐
   j. Broken ribs: Yes ☐ No ☐
   k. Any chest injuries or surgeries: Yes ☐ No ☐
   l. Any other lung problem that you've been told about: Yes ☐ No ☐

4. **Do you currently have any of the following symptoms of pulmonary or lung illness?**
   a. Shortness of breath: Yes ☐ No ☐
   b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes ☐ No ☐
   c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes ☐ No ☐
   d. Have to stop for breath when walking at your own pace on level ground: Yes ☐ No ☐
   e. Shortness of breath when washing or dressing yourself: Yes ☐ No ☐
   f. Shortness of breath that interferes with your job: Yes ☐ No ☐
   g. Coughing that produces phlegm (thick sputum): Yes ☐ No ☐
   h. Coughing that wakes you early in the morning: Yes ☐ No ☐
   i. Coughing that occurs mostly when you are lying down: Yes ☐ No ☐
   j. Coughing up blood in the last month: Yes ☐ No ☐
   k. Wheezing: Yes ☐ No ☐
   l. Wheezing that interferes with your job: Yes ☐ No ☐
   m. Chest pain when you breathe deeply: Yes ☐ No ☐
   n. Any other symptoms that you think may be related to lung problems: Yes ☐ No ☐

5. **Have you ever had any of the following cardiovascular or heart problems?**
   a. Heart attack: Yes ☐ No ☐
   b. Stroke: Yes ☐ No ☐
   c. Angina: Yes ☐ No ☐
   d. Heart failure: Yes ☐ No ☐
   e. Swelling in your legs or feet (not caused by walking): Yes ☐ No ☐
   f. Heart arrhythmia (heart beating irregularly): Yes ☐ No ☐
   g. High blood pressure: Yes ☐ No ☐
   h. Any other heart problem that you've been told about: Yes ☐ No ☐

6. **Have you ever had any of the following cardiovascular or heart symptoms?**
   a. Frequent pain or tightness in your chest: Yes ☐ No ☐

Employee Name:_____

b. Pain or tightness in your chest during physical activity: Yes ☐ No ☐
c. Pain or tightness in your chest that interferes with your job: Yes ☐ No ☐
d. In the past two years, have you noticed your heart skipping or missing a beat: Yes ☐ No ☐
e. Heartburn or indigestion that is not related to eating: Yes ☐ No ☐
f. Any other symptoms that you think may be related to heart or circulation problems: Yes ☐ No ☐

7. **Do you currently take medication for any of the following problems?**
a. Breathing or lung problems:
b. Heart trouble: Yes ☐ No ☐
c. Blood pressure: Yes ☐ No ☐
d. Seizures (fits): Yes ☐ No ☐

8. **If you've used a respirator, have you ever had any of the following problems?** (If you've never used a respirator, check the following space and go to question 9:)
a. Eye irritation: Yes ☐ No ☐
b. Skin allergies or rashes: Yes ☐ No ☐
c. Anxiety: Yes ☐ No ☐
d. General weakness or fatigue: Yes ☐ No ☐
e. Any other problem that interferes with your use of a respirator: Yes ☐ No ☐

9. **Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire?** Yes ☐ No ☐

Questions 10 to 15 below must be answered by every employee who has been selected to use either a **full-facepiece** respirator *or* a **self-contained breathing apparatus (SCBA)**. For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. **Have you ever lost vision in either eye (temporarily or permanently)?** Yes ☐ No ☐

11. **Do you currently have any of the following vision problems?**
a. Wear contact lenses: Yes ☐ No ☐
b. Wear glasses: Yes ☐ No ☐
c. Color blind: Yes ☐ No ☐
e. Any other eye or vision problem: Yes ☐ No ☐

12. **Have you ever had an injury to your ears, including a broken ear drum?** Yes ☐ No ☐

13. **Do you currently have any of the following hearing problems?**
a. Difficulty hearing: Yes ☐ No ☐
b. Wear a hearing aid: Yes ☐ No ☐
c. Any other hearing or ear problem: Yes ☐ No ☐

14. **Have you ever had a back injury?** Yes ☐ No ☐

15. **Do you currently have any of the following musculoskeletal problems?**
a. Weakness in any of your arms, hands, legs, or feet: Yes ☐ No ☐
b. Back pain: Yes ☐ No ☐
c. Difficulty fully moving your arms and legs: Yes ☐ No ☐
d. Pain or stiffness when you lean forward or backward at the waist: Yes ☐ No ☐
e. Difficulty fully moving your head up or down: Yes ☐ No ☐
f. Difficulty fully moving your head side to side: Yes ☐ No ☐
g. Difficulty bending at your knees: Yes ☐ No ☐
h. Difficulty squatting to the ground: Yes ☐ No ☐
i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes ☐ No ☐
j. Any other muscle or skeletal problem that interferes with using a respirator: Yes ☐ No ☐

Employee Name:_____

Part B Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. **In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen?** Yes ☐ No ☐

If ``yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes ☐ No ☐

2. **At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals?** Yes ☐ No ☐

If ``yes," name the chemicals if you know them:_____

_____

3. **Have you ever worked with any of the materials, or under any of the conditions, listed below?**

a. Asbestos: Yes ☐ No ☐
b. Silica (e.g., in sandblasting): Yes ☐ No ☐
c. Tungsten/cobalt (e.g., grinding or welding this material): Yes ☐ No ☐
d. Beryllium: Yes ☐ No ☐
e. Aluminum: Yes ☐ No ☐
f. Coal (for example, mining): Yes ☐ No ☐
g. Iron: Yes ☐ No ☐
h. Tin: Yes ☐ No ☐
i. Dusty environments: Yes ☐ No ☐
j. Any other hazardous exposures: Yes ☐ No ☐

If ``yes," describe these exposures:_____

_____

4. **List any second jobs or side businesses you have:** _____

_____

5. **List your previous occupations:** _____

_____

6. **List your current and previous hobbies:** _____

_____

7. **Have you been in the military services?** Yes ☐ No ☐
If ``yes," were you exposed to biological or chemical agents (either in training or combat): Yes ☐ No ☐

8. **Have you ever worked on a HAZMAT team?** Yes ☐ No ☐

9. **Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications)?** Yes ☐ No ☐

If ``yes," name the medications if you know them:_____

Employee Name:_____

10. **Will you be using any of the following items with your respirator(s)?**

a. HEPA Filters: Yes ☐ No ☐
b. Canisters (for example, gas masks): Yes ☐ No ☐
c. Cartridges: Yes ☐ No ☐

11. **How often are you expected to use the respirator(s) (select ``yes'' or ``no'' for all answers that apply to you)?:**

a. Escape only (no rescue): Yes ☐ No ☐
b. Emergency rescue only: Yes ☐ No ☐
c. Less than 5 hours per week: Yes ☐ No ☐
d. Less than 2 hours per day: Yes ☐ No ☐
e. 2 to 4 hours per day: Yes ☐ No ☐
f. Over 4 hours per day: Yes ☐ No ☐

12. **During the period you are using the respirator(s), what is your work effort?**

Light (less than 200 kcal per hour): Yes ☐ No ☐

If ``yes,'' how long does this period last during the average shift:_____ hrs. _____ mins.
Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines

Moderate (200 to 350 kcal per hour): Yes ☐ No ☐

If ``yes,'' how long does this period last during the average shift:_____ hrs. _____ mins.
Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

Heavy (above 350 kcal per hour): Yes ☐ No ☐

If ``yes,'' how long does this period last during the average shift:_____ hrs. _____ mins.
Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. **Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator?** Yes ☐ No ☐

If ``yes,'' describe this protective clothing and/or equipment: _____

_____

14. **Will you be working under hot conditions (with the temperature exceeding 77 degrees F)?** Yes ☐ No ☐

15. **Will you be working under humid conditions?** Yes ☐ No ☐

16. **Describe the work you'll be doing while you're using your respirator(s):** _____

_____

Employee Name:_____

17. **Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):**

_____

_____

18. **Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):**

Name of Toxic Substance	Estimated maximum exposure level per shift	Duration of exposure per shift

Also list the name(s) of any other toxic substance(s) that you'll be exposed to while using your respirator:

_____

19. **Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):**

_____

_____

_____

To the best of my knowledge, the information I have provided is true and accurate.

_____ _____

Employee Name Date

_____

Employee Signature

Deliver this form to the examiner or the reviewer who has been designated to complete the Summary and Recommendations form.

Employee Name:_____

Department of the Interior
RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE
SUMMARY AND RECOMMENDATIONS

To Be Completed By The Examiner or Designated Reviewer:

Employee name:_____ Age____ Sex____ Date of birth:_____
Agency:_____ Work location:_____ Job Title:_____
Supervisor's name:_____ Supervisor's phone: _____ Fax:_____
Type of respirator use requested: __disposable, __ negative pressure (cartridge), __PAPR, __airline, __SCBA

I. The recommendations/clearances provided here are based on a review of (check all that apply)*:*
__ Mandatory OSHA-based Respirator Medical Evaluation Questionnaire
__ Records of a medical evaluation, including a physical exam, done on:_____
__ Additional information supplied by employee's personal physician.
__ Other information (specify):

II. Recommendations on medical clearance for respirator use: *(Choose A, B or C below)*

☐ **A. The employee is given medical clearance to use the following respirator(s) under the conditions noted** *(choose all that apply)*

___N, R or P disposable respirator (filter-mask, non-cartridge type only)	___Supplied air (air line) respirator
___Half face negative pressure air-purifying cartridge-type respirator	___Powered air purifying respirator (PAPR) -- either half or full face
___Full face negative pressure air-purifying cartridge-type respirator	___Self-contained breathing apparatus (SCBA)

When using respirators, the employee is approved to perform the following (Choose one)

__ Mild exertion /low heat stress
__ Moderate exertion
__ Heavy exertion
__ Escape only
__ Normal job duties
__Other Activity _____

Mild exertion *(2-3 mets) e.g. lifting up to 10 lbs, extended walking on a flat surface, extended standing*
Moderate exertion *(4-5 mets) e,g, lifting 10 lbs, 5 lifts per min, fast walking (4 mph), gardening/digging, pushing, pulling*
Heavy exertion *(5-10 mets) e.g. jogging (10 min/mi), chopping wood, climbing hills, life-saving activities, fire fighting*

This respirator clearance expires (circle one) *1 2 3 4 5 years from the date below (*If not marked, clearance expires in 1 year*)*

☐ **B. The employee is not given medical clearance for respirator use because more information is needed** *(Specify what is needed to make a decision)*

☐1. A medical evaluation, including a physical exam, is needed to make a decision.

☐.2. The following additional information is needed for review (*specify what):*

_____

☐ **C. The employee is not given medical clearance for respirator use because of the health problems as noted below** *(choose one below)*

☐.1. A temporary health problem (which should be reevaluated in _____ months)

☐.2. A health problem that appears permanent (routine re-evaluation is not needed)

_____ _____
Examiner / Reviewer Name (Print) Phone number for questions

_____ _____
Examiner / Reviewer Signature Date:

Hearing Conservation **Attachment - E 2**

What follows is a copy of 29 CFR 1910.95, *Occupational Noise Exposure*, to provide specific information and guide the manager in providing an appropriate Hearing Conservation Program for his or her employees. Consult your AMO if you have questions about the adequacy of your program, or about interpretation and response to any of the findings from the program.

[reformatted, original content from the OSHA Web Page; 8/12/97]

1910.95 - Occupational noise exposure.

* Standard Number: 1910.95
* Standard Title: Occupational noise exposure.
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

Produced by USDOL OSHA - Directorate of Safety Standards
& Directorate of Health Standards
Maintained by USDOL OSHA - OCIS

(a) Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in Table G-16 when measured on the A scale of a standard sound level meter at slow response. When noise levels are determined by octave band analysis, the equivalent A-weighted sound level may be determined as follows:

FIGURE G-9 - Equivalent A-Weighted Sound Level

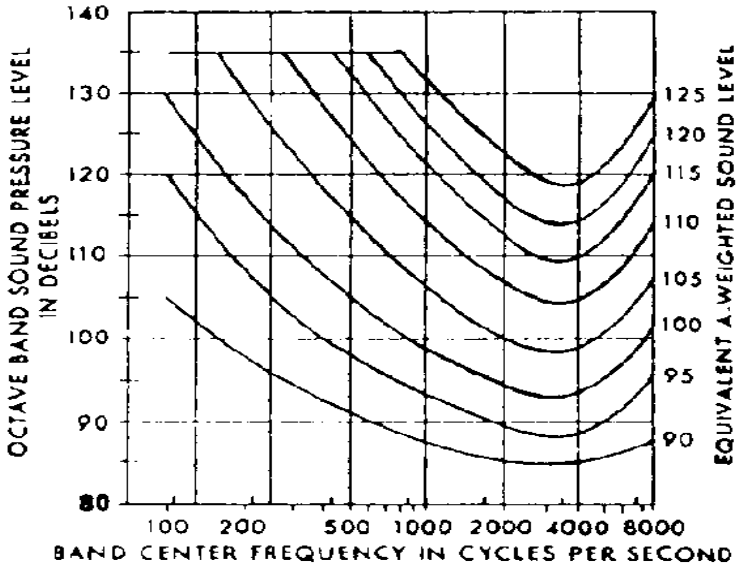


FIGURE G-9

Equivalent sound level contours. Octave band sound pressure levels may be converted to the equivalent A-weighted sound level by plotting them on this graph and noting the A-weighted sound level corresponding to the point of highest penetration into the sound

level contours. This equivalent A-weighted sound level, which may differ from the actual A-weighted sound level of the noise, is used to determine exposure limits from Table 1.G-16.

(b) (1) When employees are subjected to sound exceeding those listed in Table G-16, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of Table G-16, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table.

(2) If the variations in noise level involve maxima at intervals of 1 second or less, it is to be considered continuous.

TABLE G-16 - PERMISSIBLE NOISE EXPOSURES (1)

Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

Footnote(1) When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each. If the sum of the following fractions: C(1)/T(1) + C(2)/T(2) C(n)/T(n) exceeds unity, then, the mixed exposure should be considered to exceed the limit value. Cn indicates the total time of exposure at a specified noise level, and Tn indicates the total time of exposure permitted at that level. Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

(c) "Hearing conservation program."

(1) The employer shall administer a continuing, effective hearing conservation program, as described in paragraphs (c) through (o) of this section, whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent. For purposes of the hearing conservation program, employee noise exposures shall be computed in accordance with appendix A and Table G-16a, and without regard to any attenuation provided by

the use of personal protective equipment.

(2) For purposes of paragraphs (c) through (n) of this section, an 8-hour time-weighted average of 85 decibels or a dose of fifty percent shall also be referred to as the action level.

(d) "Monitoring."

(1) When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the employer shall develop and implement a monitoring program.

(i) The sampling strategy shall be designed to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors.

(ii) Where circumstances such as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, the employer shall use representative personal sampling to comply with the monitoring requirements of this paragraph unless the employer can show that area sampling produces equivalent results.

(2)(i) All continuous, intermittent and impulsive sound levels from 80 decibels to 130 decibels shall be integrated into the noise measurements.

(ii) Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

(3) Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures to the extent that:

(i) Additional employees may be exposed at or above the action level; or

(ii) The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements of paragraph (j) of this section.

(e) "Employee notification." The employer shall notify each employee exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring.

(f) "Observation of monitoring." The employer shall provide affected employees or their representatives with an opportunity to observe any noise measurements conducted pursuant to this section.

(g) "Audiometric testing program."

(1) The employer shall establish and maintain an audiometric testing program as provided in this paragraph by making audiometric testing available to all employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels.

(2) The program shall be provided at no cost to employees.

(3) Audiometric tests shall be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining and checking calibration and proper functioning of the audiometers being used. A technician

who operates microprocessor audiometers does not need to be certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

(4) All audiograms obtained pursuant to this section shall meet the requirements of Appendix C: "Audiometric Measuring Instruments."

(5) "Baseline audiogram."

(i) Within 6 months of an employee's first exposure at or above the action level, the employer shall establish a valid baseline audiogram against which subsequent audiograms can be compared.

(ii) "Mobile test van exception." Where mobile test vans are used to meet the audiometric testing obligation, the employer shall obtain a valid baseline audiogram within 1 year of an employee's first exposure at or above the action level. Where baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees shall wearing hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

(iii) Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

(iv) The employer shall notify employees of the need to avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

(6) "Annual audiogram." At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels.

(7) "Evaluation of audiogram."

(i) Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift as defined in paragraph (g)(10) of this section has occurred. This comparison may be done by a technician.

(ii) If the annual audiogram shows that an employee has suffered a standard threshold shift, the employer may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.

(iii) The audiologist, otolaryngologist, or physician shall review problem audiograms and shall determine whether there is a need for further evaluation. The employer shall provide to the person performing this evaluation the following information:

(A) A copy of the requirements for hearing conservation as set forth in paragraphs (c) through (n) of this section;

(B) The baseline audiogram and most recent audiogram of the employee to be evaluated;

(C) Measurements of background sound pressure levels in the audiometric test room as required in Appendix D: Audiometric Test Rooms.

(D) Records of audiometer calibrations required by paragraph (h)(5) of this section.

(8) "Follow-up procedures."

(i) If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift as defined in paragraph (g)(10) of this section has occurred, the employee shall be informed of this fact in writing, within 21 days of the determination.

(ii) Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the employer shall ensure that the following steps are taken when a standard threshold shift occurs:

(A) Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.

(B) Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.

(C) The employee shall be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the employer suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.

(D) The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

(iii) If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA of 90 decibels indicates that a standard threshold shift is not persistent, the employer:

(A) Shall inform the employee of the new audiometric interpretation; and

(B) May discontinue the required use of hearing protectors for that employee.

(9) "Revised baseline." An annual audiogram may be substituted for the baseline audiogram when, in the judgment of the audiologist, otolaryngologist or physician who is evaluating the audiogram:

(i) The standard threshold shift revealed by the audiogram is persistent; or

(ii) The hearing threshold shown in the annual audiogram indicates significant improvement over the baseline audiogram.

(10) "Standard threshold shift."

(i) As used in this section, a standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

(ii) In determining whether a standard threshold shift has occurred, allowance may be made for the contribution of aging (presbycusis) to the change in hearing

level by correcting the annual audiogram according to the procedure described in Appendix F: "Calculation and Application of Age Correction to Audiograms."

(h) "Audiometric test requirements."

(1) Audiometric tests shall be pure tone, air conduction, hearing threshold examinations, with test frequencies including as a minimum 500, 1000, 2000, 3000, 4000, and 6000 Hz. Tests at each frequency shall be taken separately for each ear.

(2) Audiometric tests shall be conducted with audiometers (including microprocessor audiometers) that meet the specifications of, and are maintained and used in accordance with, American National Standard Specification for Audiometers, S3.6-1969, which is incorporated by reference as specified in Sec. 1910.6.

(3) Pulsed-tone and self-recording audiometers, if used, shall meet the requirements specified in Appendix C: "Audiometric Measuring Instruments."

(4) Audiometric examinations shall be administered in a room meeting the requirements listed in Appendix D: "Audiometric Test Rooms."

(5) "Audiometer calibration."

(i) The functional operation of the audiometer shall be checked before each day's use by testing a person with known, stable hearing thresholds, and by listening to the audiometer's output to make sure that the output is free from distorted or unwanted sounds. Deviations of 10 decibels or greater require an acoustic calibration.

(ii) Audiometer calibration shall be checked acoustically at least annually in accordance with Appendix E: "Acoustic Calibration of Audiometers." Test frequencies below 500 Hz and above 6000 Hz may be omitted from this check. Deviations of 15 decibels or greater require an exhaustive calibration.

(iii) An exhaustive calibration shall be performed at least every two years in accordance with sections 4.1.2; 4.1.3.; 4.1.4.3; 4.2; 4.4.1; 4.4.2; 4.4.3; and 4.5 of the American National Standard Specification for Audiometers, S3.6-1969. Test frequencies below 500 Hz and above 6000 Hz may be omitted from this calibration.

(i) "Hearing protectors."

(1) Employers shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.

(2) Employers shall ensure that hearing protectors are worn:

(i) By an employee who is required by paragraph (b)(1) of this section to wear personal protective equipment; and

(ii) By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater, and who:

(A) Has not yet had a baseline audiogram established pursuant to paragraph (g)(5)(ii); or

(B) Has experienced a standard threshold shift.

(3) Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer.

(4) The employer shall provide training in the use and care of all hearing protectors provided to employees.

(5) The employer shall ensure proper initial fitting and supervise the correct use of all hearing protectors.

(j) "Hearing protector attenuation."

(1) The employer shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The employer shall use one of the evaluation methods described in Appendix B: "Methods for Estimating the Adequacy of Hearing Protection Attenuation."

(2) Hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted average of 90 decibels as required by paragraph (b) of this section.

(3) For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposure to an 8-hour time-weighted average of 85 decibels or below.

(4) The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. The employer shall provide more effective hearing protectors where necessary.

(k) "Training program."

(1) The employer shall institute a training program for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels, and shall ensure employee participation in such program.

(2) The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.

(3) The employer shall ensure that each employee is informed of the following:

(i) The effects of noise on hearing;

(ii) The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and

(iii) The purpose of audiometric testing, and an explanation of the test procedures.

(l) "Access to information and training materials."

(1) The employer shall make available to affected employees or their representatives copies of this standard and shall also post a copy in the workplace.

(2) The employer shall provide to affected employees any informational materials pertaining to the standard that are supplied to the employer by the Assistant Secretary.

(3) The employer shall provide, upon request, all materials related to the employer's training and education program pertaining to this standard to the Assistant Secretary and the Director.

(m) "Recordkeeping"

(1) "Exposure measurements." The employer shall maintain an accurate record of all employee exposure measurements required by paragraph (d) of this section.

(2) "Audiometric tests."

(i) The employer shall retain all employee audiometric test records obtained pursuant to paragraph (g) of this section:

(ii) This record shall include:

(A) Name and job classification of the employee;

(B) Date of the audiogram;

(C) The examiner's name;

(D) Date of the last acoustic or exhaustive calibration of the audiometer; and

(E) Employee's most recent noise exposure assessment.

(F) The employer shall maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms.

(3) "Record retention." The employer shall retain records required in this paragraph (m) for at least the following periods.

(i) Noise exposure measurement records shall be retained for two years.

(ii) Audiometric test records shall be retained for the duration of the affected employee's employment.

(4) "Access to records." All records required by this section shall be provided upon request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary. The provisions of 29 CFR 1910.20 (a)-(e) and (g)-(i) apply to access to records under this section.

(5) "Transfer of records." If the employer ceases to do business, the employer shall transfer to the successor employer all records required to be maintained by this section, and the successor employer shall retain them for the remainder of the period prescribed in paragraph (m)(3) of this section.

(n) "Appendices."

(1) Appendices A, B, C, D, and E to this section are incorporated as part of this section and the contents of these appendices are mandatory.

(2) Appendices F and G to this section are informational and are not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

(o) "Exemptions." Paragraphs (c) through (n) of this section shall not apply to employers engaged in oil and gas well drilling and servicing operations.

(p) "Startup date." Baseline audiograms required by paragraph (g) of this section shall be completed by March 1, 1984. [39 FR 23502, June 27, 1974, as amended at 46 FR 4161, Jan. 16, 1981; 46 FR 62845, Dec. 29, 1981; 48 FR 9776, Mar. 8, 1983; 48 FR 29687,

June 28, 1983; 54 FR 24333, June 7, 1989; 61 FR 5507, Feb. 13, 1996; 61 FR 9227, March 7, 1996].

1910.95 Appendix A - Noise exposure computation

* Standard Number: 1910.95 App A
* Standard Title: Noise exposure computation
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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This Appendix is Mandatory

I. Computation of Employee Noise Exposure

(1) Noise dose is computed using Table G-16a as follows:
(i) When the sound level, L, is constant over the entire work shift, the noise dose, D, in percent, is given by: D=100 C/T where C is the total length of the work day, in hours, and T is the reference duration corresponding to the measured sound level, L, as given in Table G-16a or by the formula shown as a footnote to that table.
(ii) When the workshift noise exposure is composed of two or more periods of noise at different levels, the total noise dose over the work day is given by:

$$D = 100 (C(1)/T(1) + C(2)/T(2) + ... + C(n)/T(n)),$$

where C(n) indicates the total time of exposure at a specific noise level, and T(n) indicates the reference duration for that level as given by Table G-16a. (2) The eight-hour time-weighted average sound level (TWA), in decibels, may be computed from the dose, in percent, by means of the formula: $TWA = 16.61 \log(10) (D/100) + 90$. For an eight-hour workshift with the noise level constant over the entire shift, the TWA is equal to the measured sound level. (3) A table relating dose and TWA is given in Section II.

TABLE G-16A

A-weighted sound level, L (decibel)	Reference duration, T (hour)
80	32
81	27.9
82	24.3
83	21.1
84	18.4
85	16
86	13.9
87	12.1
88	10.6
89	9.2
90	8
91	7.0
92	6.1
93	5.3
94	4.6
95	4
96	3.5
97	3.0
98	2.6
99	2.3
100	2
101	1.7
102	1.5
103	1.3
104	1.1
105	1
106	0.87
107	0.76
108	0.66
109	0.57
110	0.5
111	0.44
112	0.38

113.....	0.33
114.....	0.29
115.....	0.25
116.....	0.22
117.....	0.19
118.....	0.16
119.....	0.14
120.....	0.125
121.....	0.11
122.....	0.095
123.....	0.082
124.....	0.072
125.....	0.063
126.....	0.054
127.....	0.047
128.....	0.041
129.....	0.036
130.....	0.031

In the above table the reference duration, T, is computed by

$$T = \frac{8}{2^{((L - 90) / 5)}}$$

where L is the measured A-weighted sound level.

II. Conversion Between "Dose" and "8-Hour Time-Weighted Average" Sound Level Compliance with paragraphs (c)-(r) of this regulation is determined by the amount of exposure to noise in the workplace. The amount of such exposure is usually measured with an audiodosimeter which gives a readout in terms of "dose." In order to better understand the requirements of the amendment, dosimeter readings can be converted to an "8-hour time-weighted average sound level." (TWA). In order to convert the reading of a dosimeter into TWA, see Table A-1, below. This table applies to dosimeters that are set by the manufacturer to calculate dose or percent exposure according to the relationships in Table G-16a. So, for example, a dose of 91 percent over an eight hour day results in a TWA of 89.3 dB, and, a dose of 50 percent corresponds to a TWA of 85 dB. If the dose as read on the dosimeter is less than or greater than the values found in Table A-1, the TWA may be calculated by using the formula: TWA = 16.61 log(10) (D/100) + 90 where

TWA=8-hour time-weighted average sound level and D = accumulated dose in percent exposure.

TABLE A-1 - CONVERSION FROM "PERCENT NOISE EXPOSURE" OR "DOSE" TO "8-HOUR TIME-WEIGHTED AVERAGE SOUND LEVEL" (TWA)

Dose or percent noise exposure	TWA
10	73.4
15	76.3
20	78.4
25	80.0
30	81.3
35	82.4
40	83.4
45	84.2
50	85.0
55	85.7
60	86.3
65	86.9
70	87.4
75	87.9
80	88.4
81	88.5
82	88.6
83	88.7
84	88.7
85	88.8
86	88.9
87	89.0
88	89.1
89	89.2
90	89.2
91	89.3
92	89.4
93	89.5
94	89.6

95	89.6
96	89.7
97	89.8
98	89.9
99	89.9
100	90.0
101	90.1
102	90.1
103	90.2
104	90.3
105	90.4
106	90.4
107	90.5
108	90.6
109	90.6
110	90.7
111	90.8
112	90.8
113	90.9
114	90.9
115	91.1
116	91.1
117	91.1
118	91.2
119	91.3
120	91.3
125	91.6
130	91.9
135	92.2
140	92.4
145	92.7
150	92.9
155	93.2
160	93.4
165	93.6
170	93.8
175	94.0
180	94.2
185	94.4
190	94.6
195	94.8
200	95.0

210	95.4
220	95.7
230	96.0
240	96.3
250	96.6
260	96.9
270	97.2
280	97.4
290	97.7
300	97.9
310	98.2
320	98.4
330	98.6
340	98.8
350	99.0
360	99.2
370	99.4
380	99.6
390	99.8
400	100.0
410	100.2
420	100.4
430	100.5
440	100.7
450	100.8
460	101.0
470	101.2
480	101.3
490	101.5
500	101.6
510	101.8
520	101.9
530	102.0
540	102.2
550	102.3
560	102.4
570	102.6
580	102.7
590	102.8
600	102.9
610	103.0
620	103.2

630	103.3
640	103.4
650	103.5
660	103.6
670	103.7
680	103.8
690	103.9
700	104.0
710	104.1
720	104.2
730	104.3
740	104.4
750	104.5
760	104.6
770	104.7
780	104.8
790	104.9
800	105.0
810	105.1
820	105.2
830	105.3
840	105.4
850	105.4
860	105.5
870	105.6
880	105.7
890	105.8
900	105.8
910	105.9
920	106.0
930	106.1
940	106.2
950	106.2
960	106.3
970	106.4
980	106.5
990	106.5
999	106.6

1910.95 Appendix B - Methods for estimating the adequacy of hearing protector attenuation

* Standard Number: 1910.95 App B
* Standard Title: Methods for estimating the adequacy of hearing protector attenuation
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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For employees who have experienced a significant threshold shift, hearing protector attenuation must be sufficient to reduce employee exposure to a TWA of 85 dB. Employers must select one of the following methods by which to estimate the adequacy of hearing protector attenuation.

The most convenient method is the Noise Reduction Rating (NRR) developed by the Environmental Protection Agency (EPA). According to EPA regulation, the NRR must be shown on the hearing protector package. The NRR is then related to an individual worker's noise environment in order to assess the adequacy of the attenuation of a given hearing protector. This appendix describes four methods of using the NRR to determine whether a particular hearing protector provides adequate protection within a given exposure environment. Selection among the four procedures is dependent upon the employer's noise measuring instruments.

Instead of using the NRR, employers may evaluate the adequacy of hearing protector attenuation by using one of the three methods developed by the National Institute for Occupational Safety and Health (NIOSH), which are described in the "List of Personal Hearing Protectors and Attenuation Data," HEW Publication No. 76-120, 1975, pages 21-37. These methods are known as NIOSH methods No. 1, No. 2 and No. 3. The NRR described below is a simplification of NIOSH method No. 2. The most complex method is NIOSH method No. 1, which is probably the most accurate method since it uses the largest amount of spectral information from the individual employee's noise environment. As in the case of the NRR method described below, if one of the NIOSH methods is used, the selected method must be applied to an individual's noise environment to assess the adequacy of the attenuation. Employers should be careful to take a sufficient number of measurements in order to achieve a representative sample for each time segment.

NOTE: The employer must remember that calculated attenuation values reflect realistic

values only to the extent that the protectors are properly fitted and worn.

When using the NRR to assess hearing protector adequacy, one of the following methods must be used:

(i) When using a dosimeter that is capable of C-weighted measurements:

(A) Obtain the employee's C-weighted dose for the entire workshift, and convert to TWA (see appendix A, II).

(B) Subtract the NRR from the C-weighted TWA to obtain the estimated A-weighted TWA under the ear protector.

(ii) When using a dosimeter that is not capable of C-weighted measurements, the following method may be used:

(A) Convert the A-weighted dose to TWA (see appendix A).

(B) Subtract 7 dB from the NRR.

(C) Subtract the remainder from the A-weighted TWA to obtain the estimated A-weighted TWA under the ear protector.

(iii) When using a sound level meter set to the A-weighting network:

(A) Obtain the employee's A-weighted TWA.

(B) Subtract 7 dB from the NRR, and subtract the remainder from the A-weighted TWA to obtain the estimated A-weighted TWA under the ear protector.

(iv) When using a sound level meter set on the C-weighting network:

(A) Obtain a representative sample of the C-weighted sound levels in the employee's environment.

(B) Subtract the NRR from the C-weighted average sound level to obtain the estimated A-weighted TWA under the ear protector.

(v) When using area monitoring procedures and a sound level meter set to the A-weighing network.

(A) Obtain a representative sound level for the area in question.

(B) Subtract 7 dB from the NRR and subtract the remainder from the A-weighted sound level for that area.

(vi) When using area monitoring procedures and a sound level meter set to the C-weighting network:

(A) Obtain a representative sound level for the area in question.

(B) Subtract the NRR from the C-weighted sound level for that area.

1910.95 Appendix C - Audiometric measuring instruments

* Standard Number: 1910.95 App C
* Standard Title: Audiometric measuring instruments
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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1. In the event that pulsed-tone audiometers are used, they shall have a tone on-time of at least 200 milliseconds.
2. Self-recording audiometers shall comply with the following requirements:
   (A) The chart upon which the audiogram is traced shall have lines at positions corresponding to all multiples of 10 dB hearing level within the intensity range spanned by the audiometer. The lines shall be equally spaced and shall be separated by at least 1/4 inch. Additional increments are optional. The audiogram pen tracings shall not exceed 2 dB in width.
   (B) It shall be possible to set the stylus manually at the 10-dB increment lines for calibration purposes.
   (C) The slewing rate for the audiometer attenuator shall not be more than 6 dB/sec except that an initial slewing rate greater than 6 dB/sec is permitted at the beginning of each new test frequency, but only until the second subject response.
   (D) The audiometer shall remain at each required test frequency for 30 seconds (+ or - 3 seconds). The audiogram shall be clearly marked at each change of frequency and the actual frequency change of the audiometer shall not deviate from the frequency boundaries marked on the audiogram by more than + or - 3 seconds.
   (E) It must be possible at each test frequency to place a horizontal line segment parallel to the time axis on the audiogram, such that the audiometric tracing crosses the line segment at least six times at that test frequency. At each test frequency the threshold shall be the average of the midpoints of the tracing excursions.

1910.95 Appendix D - Audiometric test rooms

* Standard Number: 1910.95 App D
* Standard Title: Audiometric test rooms
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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Rooms used for audiometric testing shall not have background sound pressure levels exceeding those in Table D-1 when measured by equipment conforming at least to the Type 2 requirements of American National Standard Specification for Sound Level Meters, S1.4-1971 (R1976), and to the Class II requirements of American National Standard Specification for Octave, Half-Octave, and Third-Octave Band Filter Sets, S1.11-1971 (R1976).

TABLE D-1 - MAXIMUM ALLOWABLE OCTAVE-BAND SOUND PRESSURE LEVELS FOR AUDIOMETRIC TEST ROOMS

Octave-band center frequency (Hz).....	500	1000	2000	4000	8000
Sound pressure level (dB) ...	40	40	47	57	62

1910.95 Appendix E - Acoustic calibration of audiometers

* Standard Number: 1910.95 App E
* Standard Title: Acoustic calibration of audiometers
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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Audiometer calibration shall be checked acoustically, at least annually, according to the procedures described in this appendix. The equipment necessary to perform these measurements is a sound level meter, octave-band filter set, and a National Bureau of Standards 9A coupler. In making these measurements, the accuracy of the calibrating equipment shall be sufficient to determine that the audiometer is within the tolerances permitted by American Standard Specification for Audiometers, S3.6-1969.

(1) "Sound Pressure Output Check"

A. Place the earphone coupler over the microphone of the sound level meter and place the earphone on the coupler.
B. Set the audiometer's hearing threshold level (HTL) dial to 70 dB.
C. Measure the sound pressure level of the tones at each test frequency from 500 Hz through 6000 Hz for each earphone.
D. At each frequency the readout on the sound level meter should correspond to the levels in Table E-1 or Table E-2, as appropriate, for the type of earphone, in the column entitled "sound level meter reading."

(2) "Linearity Check"

A. With the earphone in place, set the frequency to 1000 Hz and the HTL dial on the audiometer to 70 dB.
B. Measure the sound levels in the coupler at each 10-dB decrement from 70 dB to 10 dB, noting the sound level meter reading at each setting.
C. For each 10-dB decrement on the audiometer the sound level meter should indicate a corresponding 10 dB decrease.
D. This measurement may be made electrically with a voltmeter connected to the

earphone terminals.

(3) "Tolerances"

When any of the measured sound levels deviate from the levels in Table E-1 or Table E-2 by + or - 3 dB at any test frequency between 500 and 3000 Hz, 4 dB at 4000 Hz, or 5 dB at 6000 Hz, an exhaustive calibration is advised. An exhaustive calibration is required if the deviations are greater than 15 dB or greater at any test frequency.

TABLE E-1 - REFERENCE THRESHOLD LEVELS FOR TELEPHONICS - TDH-39 EARPHONES

Frequency, Hz	Reference threshold level for TDH-39 earphones, dB	Sound level meter reading, dB
500	11.5	81.5
1000	7	77
2000	9	79
3000	10	80
4000	9.5	79.5
6000	15.5	85.5

TABLE E-2 - REFERENCE THRESHOLD LEVELS FOR TELEPHONICS - TDH-49 EARPHONES

Frequency, Hz	Reference threshold level for TDH-49 earphones, dB	Sound level meter reading, dB
500	13.5	83.5
1000	7.5	77.5
2000	11	81.0
3000	9.5	79.5

4000	10.5	80.5
6000	13.5	83.5

1910.95 Appendix F - Calculations and application of age corrections to audiograms

* Standard Number: 1910.95 App F
* Standard Title: Calculations and application of age corrections to audiograms
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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This Appendix Is Non-Mandatory

In determining whether a standard threshold shift has occurred, allowance may be made for the contribution of aging to the change in hearing level by adjusting the most recent audiogram. If the employer chooses to adjust the audiogram, the employer shall follow the procedure described below. This procedure and the age correction tables were developed by the National Institute for Occupational Safety and Health in the criteria document entitled "Criteria for a Recommended Standard . . . Occupational Exposure to Noise," ((HSM)-11001).

For each audiometric test frequency;

(i) Determine from Tables F-1 or F-2 the age correction values for the employee by:

(A) Finding the age at which the most recent audiogram was taken and recording the corresponding values of age corrections at 1000 Hz through 6000 Hz;

(B) Finding the age at which the baseline audiogram was taken and recording the corresponding values of age corrections at 1000 Hz through 6000 Hz.

(ii) Subtract the values found in step (i)(B) from the value found in step (i)(A).

(iii) The differences calculated in step (ii) represented that portion of the change in hearing that may be due to aging.

EXAMPLE: Employee is a 32-year-old male. The audiometric history for his right ear is shown in decibels below.

Employee's age	Audiometric test frequency (Hz)				
	1000	2000	3000	4000	6000
26.....	10	5	5	10	5
*27.....	0	0	0	5	5

28.....	0	0	0	10	5
29.....	5	0	5	15	5
30.....	0	5	10	20	10
31.....	5	10	20	15	15
*32.....	5	10	10	25	20

The audiogram at age 27 is considered the baseline since it shows the best hearing threshold levels. Asterisks have been used to identify the baseline and most recent audiogram. A threshold shift of 20 dB exists at 4000 Hz between the audiograms taken at ages 27 and 32. (The threshold shift is computed by subtracting the hearing threshold at age 27, which was 5, from the hearing threshold at age 32, which is 25). A retest audiogram has confirmed this shift. The contribution of aging to this change in hearing may be estimated in the following manner: Go to Table F-1 and find the age correction values (in dB) for 4000 Hz at age 27 and age 32.

	Frequency (Hz)				
	1000	2000	3000	4000	6000
Age 32.....	6	5	7	10	14
Age 27.....	5	4	6	7	11
Difference	1	1	1	3	3

The difference represents the amount of hearing loss that may be attributed to aging in the time period between the baseline audiogram and the most recent audiogram. In this example, the difference at 4000 Hz is 3 dB. This value is subtracted from the hearing level at 4000 Hz, which in the most recent audiogram is 25, yielding 22 after adjustment. Then the hearing threshold in the baseline audiogram at 4000 Hz (5) is subtracted from the adjusted annual audiogram hearing threshold at 4000 Hz (22). Thus the age-corrected threshold shift would be 17 dB (as opposed to a threshold shift of 20 dB without age correction).

TABLE F-1 - AGE CORRECTION VALUES IN DECIBELS FOR MALES

	Audiometric Test Frequency (Hz)

Years	1000	2000	3000	4000	6000
20 or younger....	5	3	4	5	8
21	5	3	4	5	8
22	5	3	4	5	8
23	5	3	4	6	9
24	5	3	5	6	9
25	5	3	5	7	10
26	5	4	5	7	10
27	5	4	6	7	11
28	6	4	6	8	11
29	6	4	6	8	12
30	6	4	6	9	12
31	6	4	7	9	13
32	6	5	7	10	14
33	6	5	7	10	14
34	6	5	8	11	15
35	7	5	8	11	15
36	7	5	9	12	16
37	7	6	9	12	17
38	7	6	9	13	17
39	7	6	10	14	18
40	7	6	10	14	19
41	7	6	10	14	20
42	8	7	11	16	20
43	8	7	12	16	21
44	8	7	12	17	22
45	8	7	13	18	23
46	8	8	13	19	24
47	8	8	14	19	24
48	9	8	14	20	25
49	9	9	15	21	26
50	9	9	16	22	27
51	9	9	16	23	28
52	9	10	17	24	29
53	9	10	18	25	30
54	10	10	18	26	31
55	10	11	19	27	32
56	10	11	20	28	34
57	10	11	21	29	35
58	10	12	22	31	36

59	11	12	22	32	37
60 or older	11	13	23	33	38

TABLE F-2 - AGE CORRECTION VALUES IN DECIBELS FOR FEMALES

Years	Audiometric Test Frequency (Hz)				
	1000	2000	3000	4000	6000
20 or younger....	7	4	3	3	6
21	7	4	4	3	6
22	7	4	4	4	6
23	7	5	4	4	7
24	7	5	4	4	7
25	8	5	4	4	7
26	8	5	5	4	8
27	8	5	5	5	8
28	8	5	5	5	8
29	8	5	5	5	9
30	8	6	5	5	9
31	8	6	6	5	9
32	9	6	6	6	10
33	9	6	6	6	10
34	9	6	6	6	10
35	9	6	7	7	11
36	9	7	7	7	11
37	9	7	7	7	12
38	10	7	7	7	12
39	10	7	8	8	12
40	10	7	8	8	13
41	10	8	8	8	13
42	10	8	9	9	13
43	11	8	9	9	14
44	11	8	9	9	14
45	11	8	10	10	15
46	11	9	10	10	15
47	11	9	10	11	16
48	12	9	11	11	16
49	12	9	11	11	16

50	12	10	11	12	17
51	12	10	12	12	17
52	12	10	12	13	18
53	13	10	13	13	18
54	13	11	13	14	19
55	13	11	14	14	19
56	13	11	14	15	20
57	13	11	15	15	20
58	14	12	15	16	21
59	14	12	16	16	21
60 or older	14	12	16	17	22

1910.95 Appendix G - Monitoring noise levels non-mandatory informational appendix

* Standard Number: 1910.95 App G
* Standard Title: Monitoring noise levels non-mandatory informational appendix
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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This appendix provides information to help employers comply with the noise monitoring obligations that are part of the hearing conservation amendment.

WHAT IS THE PURPOSE OF NOISE MONITORING?

This revised amendment requires that employees be placed in a hearing conservation program if they are exposed to average noise levels of 85 dB or greater during an 8 hour workday. In order to determine if exposures are at or above this level, it may be necessary to measure or monitor the actual noise levels in the workplace and to estimate the noise exposure or "dose" received by employees during the workday.

WHEN IS IT NECESSARY TO IMPLEMENT A NOISE MONITORING PROGRAM?

It is not necessary for every employer to measure workplace noise. Noise monitoring or measuring must be conducted only when exposures are at or above 85 dB. Factors which suggest that noise exposures in the workplace may be at this level include employee complaints about the loudness of noise, indications that employees are losing their hearing, or noisy conditions which make normal conversation difficult. The employer should also consider any information available regarding noise emitted from specific machines. In addition, actual workplace noise measurements can suggest whether or not a monitoring program should be initiated.

HOW IS NOISE MEASURED?

Basically, there are two different instruments to measure noise exposures: the sound level meter and the dosimeter. A sound level meter is a device that measures the intensity of sound at a given moment. Since sound level meters provide a measure of sound intensity

at only one point in time, it is generally necessary to take a number of measurements at different times during the day to estimate noise exposure over a workday. If noise levels fluctuate, the amount of time noise remains at each of the various measured levels must be determined. To estimate employee noise exposures with a sound level meter it is also generally necessary to take several measurements at different locations within the workplace. After appropriate sound level meter readings are obtained, people sometimes draw "maps" of the sound levels within different areas of the workplace. By using a sound level "map" and information on employee locations throughout the day, estimates of individual exposure levels can be developed. This measurement method is generally referred to as "area" noise monitoring.

A dosimeter is like a sound level meter except that it stores sound level measurements and integrates these measurements over time, providing an average noise exposure reading for a given period of time, such as an 8-hour workday. With a dosimeter, a microphone is attached to the employee's clothing and the exposure measurement is simply read at the end of the desired time period. A reader may be used to read-out the dosimeter's measurements. Since the dosimeter is worn by the employee, it measures noise levels in those locations in which the employee travels. A sound level meter can also be positioned within the immediate vicinity of the exposed worker to obtain an individual exposure estimate. Such procedures are generally referred to as "personal" noise monitoring.

Area monitoring can be used to estimate noise exposure when the noise levels are relatively constant and employees are not mobile. In workplaces where employees move about in different areas or where the noise intensity tends to fluctuate over time, noise exposure is generally more accurately estimated by the personal monitoring approach.

In situations where personal monitoring is appropriate, proper positioning of the microphone is necessary to obtain accurate measurements. With a dosimeter, the microphone is generally located on the shoulder and remains in that position for the entire workday. With a sound level meter, the microphone is stationed near the employee's head, and the instrument is usually held by an individual who follows the employee as he or she moves about.

Manufacturer's instructions, contained in dosimeter and sound level meter operating manuals, should be followed for calibration and maintenance. To ensure accurate results, it is considered good professional practice to calibrate instruments before and after each use.

HOW OFTEN IS IT NECESSARY TO MONITOR NOISE LEVELS?

The amendment requires that when there are significant changes in machinery or production processes that may result in increased noise levels, remonitoring must be conducted to determine whether additional employees need to be included in the hearing conservation program. Many companies choose to remonitor periodically (once every year or two) to ensure that all exposed employees are included in their hearing conservation programs.

WHERE CAN EQUIPMENT AND TECHNICAL ADVICE BE OBTAINED?

Noise monitoring equipment may be either purchased or rented. Sound level meters cost about $500 to $1,000, while dosimeters range in price from about $750 to $1,500. Smaller companies may find it more economical to rent equipment rather than to purchase it. Names of equipment suppliers may be found in the telephone book (Yellow Pages) under headings such as: "Safety Equipment," "Industrial Hygiene," or "Engineers-Acoustical." In addition to providing information on obtaining noise monitoring equipment, many companies and individuals included under such listings can provide professional advice on how to conduct a valid noise monitoring program. Some audiological testing firms and industrial hygiene firms also provide noise monitoring services. Universities with audiology, industrial hygiene, or acoustical engineering departments may also provide information or may be able to help employers meet their obligations under this amendment.

Free, on-site assistance may be obtained from OSHA-supported state and private consultation organizations. These safety and health consultative entities generally give priority to the needs of small businesses.

[61 FR 9227, March 7, 1996]

1910.95 Appendix H - Availability of referenced documents

* Standard Number: 1910.95 App H
* Standard Title: Availability of referenced documents
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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Paragraphs (c) through (o) of 29 CFR 1910.95 and the accompanying appendices contain provisions which incorporate publications by reference. Generally, the publications provide criteria for instruments to be used in monitoring and audiometric testing. These criteria are intended to be mandatory when so indicated in the applicable paragraphs of 1910.95 and appendices.

It should be noted that OSHA does not require that employers purchase a copy of the referenced publications. Employers, however, may desire to obtain a copy of the referenced publications for their own information.

The designation of the paragraph of the standard in which the referenced publications appear, the titles of the publications, and the availability of the publications are as follows:

Paragraph designation	Referenced publication	Available from --
Appendix B	"List of Personal Hearing Protectors and Attenuation Data," HEW Pub. No. 76-120, 1975. NTIS-PB267461.	National Technical Information Service, Port Royal Road, Springfield, VA 22161.
Appendix D	"Specification for Sound Level Meters," S1.4-1971 (R1976).	American National Standards Institute, Inc., 1430 Broadway, New York, 10018.
1910.95(k)(2), Appendix E ...	"Specifications for Audiometers," S3.6-1969.	American National Standards Institute, Inc.,

		1430 Broadway, New York, NY 10018
Appendix D	"Specification for Octave, Half-Octave and Third-Octave Band Filter Sets," S1.11-1971 (R1976).	Back Numbers Department, Dept. STD, American Institute of Physics, 333 E. 45th St., New York, NY 10017;
		American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

The referenced publications (or a microfiche of the publications) are available for review at many universities and public libraries throughout the country. These publications may also be examined at the OSHA Technical Data Center, Room N2439, United States Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210, (202) 219-7500 or at any OSHA Regional Office (see telephone directories under United States Government - Labor Department). [61 FR 9227, March 7, 1996]

1910.95 Appendix I - Definitions

* Standard Number: 1910.95 App I
* Standard Title: Definitions
* SubPart Number: G
* SubPart Title: Occupational Health and Environmental Control

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These definitions apply to the following terms as used in paragraphs (c) through (n) of 29 CFR 1910.95.

Action level - An 8-hour time-weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of fifty percent.

Audiogram - A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency.

Audiologist - A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech-Language-Hearing Association or licensed by a state board of examiners.

Baseline audiogram - The audiogram against which future audiograms are compared.

Criterion sound level - A sound level of 90 decibels.

Decibel (dB) - Unit of measurement of sound level.

Hertz (Hz) - Unit of measurement of frequency, numerically equal to cycles per second.

Medical pathology - A disorder or disease. For purposes of this regulation, a condition or disease affecting the ear, which should be treated by a physician specialist.

Noise dose - The ratio, expressed as a percentage, of (1) the time integral, over a stated time or event, of the 0.6 power of the measured SLOW exponential time-averaged, squared A-weighted sound pressure and (2) the product of the criterion duration (8 hours) and the 0.6 power of the squared sound pressure corresponding to the criterion sound level (90 dB).

Noise dosimeter - An instrument that integrates a function of sound pressure over a period of time in such a manner that it directly indicates a noise dose.

Otolaryngologist - A physician specializing in diagnosis and treatment of disorders of the ear, nose and throat. Representative exposure - Measurements of an employee's noise dose or 8-hour time-weighted average sound level that the employers deem to be representative of the exposures of other employees in the workplace.

Sound level - Ten times the common logarithm of the ratio of the square of the measured A-weighted sound pressure to the square of the standard reference pressure of 20 micropascals.

Unit: decibels (dB). For use with this regulation, SLOW time response, in accordance with ANSI S1.4-1971 (R1976), is required.

Sound level meter - An instrument for the measurement of sound level.

Time-weighted average sound level - That sound level, which if constant over an 8-hour exposure, would result in the same noise dose as is measured.

[39 FR 23502, June 27, 1974, as amended at 46 FR 4161, Jan. 16, 1981; 46 FR 62845, Dec. 29, 1981; 48 FR 9776, Mar. 8, 1983; 48 FR 29687, June 28, 1983; 54 FR 24333, June 7, 1989; 61 FR 5507, Feb. 13, 1996; 61 FR 9227, March 7, 1996]

General Considerations

The following information is provided to assist DOI managers and employees when the examining physician, AMO, or DOI MO make recommendations for individual employees regarding exertion and heat stress. These recommendations are based on information gathered in the medical history, the physical examination, and other tests that may suggest an increased risk for health problems when engaging in certain physically stressful activities. It should be noted that, because of variations in individual responses to medical conditions and work tasks, the physician likely will err on the side of caution. Further, the examples presented below are intended to serve only as a general guide to types of activities and levels of stress that may be referenced in the recommendations provided following an evaluation. Other job tasks and activities may be compared to these examples when making specific adjustments in work activities for an individual employee.

Some factors that need to be considered when using these examples include: 1) **physical demands** of the job or tasks (both maximal exertion and endurance); 2) the total **length of time** an employee is engaged in the activity; 3) the **temperature and humidity** of the work environment; 4) type of **personal protective equipment** and clothing used (e.g., cartridge respirators, SCBA, Tyvek suits, etc.); 5) **other hazards** associated with the task (besides exertion and heat stress); 6) the **ergonomics** of the task (e.g., how much reaching or bending is necessary); 7) **other tasks** that are being conducted concurrently with the listed task; 8) the **skill and training** of the employee in carrying out the task in an energy-efficient manner; and 9) the **availability of assistance** from co-workers or mechanical devices to reduce the effort necessary to carry out the tasks, or if reserve capacity may be needed in emergencies.

Finally, the employee's own perception of how much strain or effort is necessary to carry out a task is also very important. If an employee feels that a task requires too much of a physical strain, or causes symptoms such as shortness of breath, rapid pulse, light-headedness, or pain or discomfort in the chest, that work activity (or the conditions under which the work is carried out) likely is too much for that employee. In these situations, the employee may need work restrictions or job modifications for doing these tasks, regardless of how the activity or heat factors are listed here.

Developed with the assistance of information provided in Ergonomic Design for People at Work, Suzanne Rogers, et.al., Van Nostrand Reinhold, New York, 1986

Exertion Examples

The examples in the lists presented below are grouped as light, moderate, and arduous depending on the fitness and medical condition required of the person performing the task. To gauge physical fitness status, maximal oxygen consumption (Max VO2) may be measured or estimated. Max VO2 is expressed in milliliters of oxygen per kilogram of body weight per minute. This assessment may be done with a standard test of fitness, such as a "step test," or by the "pack test" (see Tab 12, Attachment D 5, for more detail on the pack test). For DOI purposes, Max VO2 levels for the specified levels of exertion are: 1) *arduous* (Max VO2 of 45); 2) *moderate* (Max VO2 of 40); and 3) *light, or low* (Max VO2 of 35).

The examples are intended to provide a general overview of the types of work activities that might be expected to fall within the specified groups, but they require the use of reasonable judgement in interpreting or applying them to specific work settings. For additional information, a rough *estimate* of the time that might be expected to be spent in "uninterrupted" performance of the activity is shown for each example. These time estimates include the usual breaks, such as for lunch (e.g., "full shift" of work at a given task would be expected to include a lunch break and two or more other brief rest periods).

Task	Usual Time Spent
I. Light	
Crouching, kneeling	15 minutes
Sitting; work involving feet and hands; desk work; typing; drafting	Full shift
Sitting in a vehicle	Full shift
Standing, work involving hands	2 or more hours
Light assembly or repair work	Full shift
Sitting, monitoring equipment	Full shift
Inspecting materials	Full shift
II. Moderate	
Driving a truck or other large equipment	Full shift
Finishing carpentry, woodworking	2 or more hours
Stocking, warehouse work	Full shift
Use of hand tools, chest high	15 minutes or more
Lifting 20 pounds, chest/head high	Up to an hour
Sign painting	2 or more hours
Gardening/lawn maintenance	Full shift
Painting/sandblasting with air hood and coveralls	2 or more hours
Walking, level ground, ~3 mph	2 or more hours

Operating a crane	Full shift
Moderate (continued):	
Laying brick	2 or more hours
Sorting scrap	2 or more hours
Welding/cutting	2 or more hours
Pulling fish screens	2 or more hours

III. Arduous

Asbestos abatement	Up to 2 hours
Hazardous spill response	Up to 1 hour
Carpentry, building structures	2 or more hours
Emptying trash cans	2 or more hours
Digging with hand tools	Up to an hour
Painting buildings/structures	2 or more hours
Lifting 40 pounds, chest/head high	15 minutes or more
Climbing ladder, without load, 36 ft./min.	15 minutes or more
Overhead cleaning/scraping	Up to 2 hours
Use of a sledgehammer, 12 cycles/min.	15 minutes or more
Chopping wood	Up to an hour
Use of a jackhammer	15 minutes or more
Mixing cement	15 minutes or more
Shoveling; ditch digging	Up to 2 hours
Tree planting	Up to 2 hours

Heat Stress Factors

The recommendations below reflect estimates of lengths of time that may be spent working at the specified temperatures and the specified levels of exertion, for a healthy person who has no medical conditions that would be expected to place that individual at an increased risk of complications. Employees with certain medical conditions may be given a recommendation to limit their activity and heat stress to reduce the risk of problems. Please see the previous section for examples of work tasks that may fall within the levels of exertion used below.

It is important to remember when using the following information that humidity has a major impact on the ability of the body to cool itself. In periods of high humidity, or in work settings in which humidity cannot be lowered below approximately 60%, the length of time spent at given levels of exertion, or the level of exertion required, must be reduced to avoid potentially dangerous heat stress. This is particularly important for workers who have medical conditions that tend to reduce their ability to tolerate heat and exertion safely. Other important factors that will affect safe working times include the amount of occlusive or protective clothing that is worn (e.g., Tyvek, rubber, or other chemical-

protective clothing), air movement over and around the worker, and the availability of assistance from co-workers or mechanical devices to reduce the effort necessary to carry out the tasks. These factors may increase or decrease the amount of time that can be worked safely, depending on their presence or absence and the relative impact of each factor.

In general, the use of occlusive clothing (e.g., Tyvek, or heavy leathers, rubber suits) should lead to a further restriction by management of a person's activities. For example, someone otherwise cleared for heavy exertion generally should be limited to moderate exertion if using occlusive clothing under the various heat stress categories noted below. Similarly, if otherwise cleared for moderate exertion, an individual should be restricted to light exertion if using occlusive clothing.

Heat Stress Factors:

I. Low Heat Stress
Temperatures up to 75°F
- **Light** and **Moderate Exertion** for full shift or the usual period for the task
- **Arduous Exertion** for up to one to two hours

II. Moderate Heat Stress
Temperatures of 75°F to 85°F
- **Light Exertion** for full shift
- **Moderate Exertion** for 3/4 of the full shift or the usual period for the task
- **Arduous Exertion** for an hour or less

III. High Heat Stress
Temperatures of 86°F or more
- **Light Exertion** for up to a full shift or the usual period for the task, with less time for temperatures above 96°F
- **Moderate Exertion** for up to two hours, with less time for temperatures above 96°F
- **Arduous Exertion** for less than an hour, and severely restricted for temperatures above 96°F

Biological Stressors **Attachment - E 4**

The following biological stressors or threats to employee health have been addressed in this attachment:

Lyme Disease **Attachment - E 4 (a)**

What follows is the text of MRPS Policy Bulletin 99-001, dated October 14, 1999.

This Bulletin provides background information and current recommendations on Lyme Disease for DOI employees who may be exposed to the disease as a result of their work.

Lyme Disease is most common in the northeast and the Midwest states, but has been found in at least 47 states. It is diagnosed in over 11,000 people per year, mostly in the summer months when outdoor work and recreation activities are more common. The disease is caused by *Borrelia burgdorferi*, a spirochete bacteria that was first identified in 1982. That bacteria may be found in several species of small ticks, including *Ixodes dammini, I. pacificus, I. ricinus,* and *I. persulcatus*. The preferred host for most infected ticks is one of several species of animals, particularly rodents and deer. Humans may become infected when bitten by an infected tick, though the risk of infection usually is low and treatment for Lyme Disease at the time of a tick bite generally is not indicated (see the following sections for further information regarding treatment). The risk of contracting Lyme Disease is increased when individuals live or work in areas prone to tick infestation, especially when engaged in activities involving exposure to woods, brush, or tall grass. Disease prevention involves measures to avoid tick bites, immunization with the Lyme Disease vaccine when the risk of exposure warrants its use, and receipt of appropriate treatment for infection, as necessary.

SYMPTOMS

A common symptom of Lyme Disease is the appearance of a characteristic rash, called erythema migrans. This target or bulls-eye shaped rash may appear 3 to 32 days after the bite of an infected tick, and appears at the site of the bite. Headache, fever, mild neck stiffness, and muscle aches and pains may follow the onset of the rash. Medical evaluation should be sought if these conditions occur, or if an employee has concern after a known tick bite. If an infection is diagnosed, prompt antibiotic treatment is important to avoid potentially-significant further complications of the infection.

PREVENTION

Prevention of tick bites should be attempted through such measures as avoiding known areas of tick infestation or, when this is not practical, the use of personal barriers and repellants. Wearing long pants (tucked in to socks or boots) and long sleeve shirts helps limit tick access to the skin. The correct use of an effective insect repellant (e.g., N,N-Diethyl-m-toluamide, or DEET) also will help prevent ticks from reaching the skin. Pyrethroid insecticides may be used as appropriate in limited areas of known high tick

infestation. Careful examination of all areas of the skin (including exposed areas as well as those covered by clothing) should be carried out every 3 to 4 hours while in tick infested areas to detect and remove ticks. The small size of some tick species (some as small as the period at the end of this sentence) requires that such examinations be carried out carefully and completely.

VACCINATION

When the risk of bites from *B. burgdorferi*-infected ticks is high, consideration may be given to immunization with the Lyme Disease vaccine. One vaccine is currently licensed (Lymerix, from SmithKline Beecham), and is provided by a series of three intramuscular injections. Its long-term effectiveness is not known, and booster vaccinations may be necessary (possibly as often as once per year). The vaccine should not be considered sufficient to prevent infection in all cases, and basic preventive measures (see above paragraph) should be used despite vaccination status.

TESTING

Laboratory tests to screen individuals for infection are sometimes used, though the medical history and physical exam are the most important tools in diagnosing Lyme disease, with antibody tests used primarily for confirmation. Antibody titers (ELISA or IFA, with Western blot confirmatory tests) generally will rise within the first several weeks of infection, but the tests must be interpreted with caution. False negative tests may be due to the frequently slow rise in the antibody titers following infection, and positive tests may reflect prior Lyme disease that is unrelated to current symptoms that may be due to other infectious agents. If a screening program is being considered, consultation should be sought first with local health authorities, infectious disease specialists, or occupational health physicians.

REFERENCES

Harrison's Principles of Internal Medicine, Isselbacher, Kurt J., et.al., 13th edition, 1994 (pages 745-747)

Occupational Medicine, Zenz, Carl, ed., 3rd edition, 1994 (page 1098)

Control of Communicable Diseases Manual, Benenson, Abram, ed., 16th edition, 1995 (pages 275-279)

Lymerix Prescribing Information, SmithKline Beecham, December 1998.

This Bulletin will remain in effect until October 14, 2000, or until superseded by revision of 485 DM chapters.

The point of contact is Robert Garbe, 303-236-7128, x230.

FREQUENTLY ASKED QUESTIONS

1. Q. How do I determine high-risk employees relative to endemic areas?

A. Contact your State Health Department or Cooperative Extension Service to determine the number of confirmed cases in your area. Additional information can be obtained from the Centers for Disease Control and Prevention (CDC) (www.cdc.gov) - Atlanta or from your local, regional, and national bureau safety officers.

2. Q. How safe is the vaccine?

A. The vaccine (LYMErix™) has been proven safe and is generally well tolerated. It is proven to be 80% effective when all three doses are received.

3. Q. How is the vaccine administered?

A. The vaccine is given in 3 doses. To ensure effectiveness, it is important to receive all three doses. The doses are administered over a 6 month period.

4. Q. What are the vaccine's side affects?

A. In clinical studies, the most common side effects were mild fever and chills, achiness, and local injection-site reactions such as slight swelling and redness.

5. Q. What is the cost of the vaccine series?

A. The U.S. Public Health Service, Federal Occupational Health Program's "Take A Shot At Lyme" program offers vaccinations at any one of their 200 health centers, and will also conduct on-site vaccination clinics. Typical cost for the vaccinations are approximately $60 per dose. The vaccine is available directly from the manufacturer for approximately $40 per dose if a local source for providing injection service is available (www.sb.com).

6. Q. Can non-employee, on-station residents (spouses and children of employees required to reside in Government-provided Station housing) be offered the vaccine?

A. Non-employees cannot be offered the vaccine at government expense but should be offered information on exposure risk so that they can make an

informed decision on seeking vaccination. Individual health care plans may or may not cover all or part of the cost depending on their policies.

7. Q. Should anyone *not* receive the vaccinations?

A. The vaccinations should not be given to children under the age of 15, anyone over 70, pregnant or lactating women, and those with a history of treatment-resistant Lyme arthritis (although it **can** be given to those with Rheumatoid arthritis and lupus).

8. Q. Can you catch Lyme disease from the vaccine?

A. No. There is no risk of getting Lyme disease from the vaccine.

9. Q. Can the vaccinations be given to someone who has had Lyme disease?

A. Yes. Even if someone has had Lyme disease, they are still at risk (no resistance to Lyme is developed after infection).

10. Q. Are Volunteers and YCC enrollees entitled to the vaccine?

A. Yes. YCC enrollees and volunteers are considered to be employees of the United States, and are entitled to receive the vaccine, if the risk of exposure dictates.

Vaccine-Preventable Diseases **Attachment - E 4 (b)**

The following reflects MRPS Policy Bulletin 96-01, providing background information and current recommendations on vaccine-preventable diseases for DOI employees who may be exposed to such diseases as a result of their work.

The recommendations are based on the current "Guide for Adult Immunization" (3rd edition, 1994, American College of Physicians), and are generic in nature. More detailed, site-specific recommendations can be provided on request from the AMO or DOI MO, or may be obtained from local health department or public health service officials.

- All employees at risk of field-work-related cuts, scrapes, or other open injuries, or those exposed to potentially contaminated or unsanitary water, such as those personnel working in outdoor water or wildlife research, should be provided with an up to date vaccination for tetanus (given as a combination tetanus/diphtheria vaccine).

- Hepatitis A vaccination is addressed by guidelines from the Centers for Disease Control and Prevention. Their recommendations include consideration of this vaccine for the following: 1) travelers to developing countries or other areas of know high endemicity of hepatitis A; 2) men who have sex with men; 3) injection drug users; and 4) persons who work with non-human primates. Hepatitis A has not been recognized as a significant occupational hazard in other settings where known outbreaks are not taking place.

- Vaccination for cholera, yellow fever, typhoid, and other more "exotic" diseases is not necessary in this country at this time, but could be if personnel are traveling to endemic areas elsewhere in the world.

- Optional consideration may be given to vaccines for Pneumococcal pneumonia (for elderly persons, and those with chronic diseases or reduced resistance to disease), rubella (for non-immune women in their child-bearing years), and possibly polio (for those previously unimmunized or as a booster in those who have not already had a booster dose as an adult and may travel to polio endemic areas).

The following reflects a draft directive prepared by DOI that provides background information and current recommendations on Rabies for DOI employees who may be exposed to vectors of the disease as a result of their work.

Background

It is the intent of the Department of the Interior that all DOI employees be protected from rabies virus exposure, infection, or disease. Within each operating division, an assessment should be made of the likelihood of exposure for individuals or groups of employees to animals or conditions in which rabies virus might be transmitted. Appropriate action, as indicated in the following bulletin, should be taken or offered to affected employees.

Wild (93%) and domestic (7%) animals are the primary sources of rabies in the United States. There were 7,084 cases reported for wild animals in the US in 1998, and all states except Hawaii have reported cases. The distribution of wild animal cases are as follows: raccoons (50%), skunks (24%), bats (11%), foxes (5%), and others (including rodents and rabbits, 2%). There were 610 cases reported for domestic animals in the US for 1997, and Iowa and Pennsylvania account for about 20% of those cases. Cats, dogs, and cattle are the most common domestic animals affected.

Humans are at risk when exposed to rabid animals, primarily by bites or scratches, but aerosols (in bat caves) or medical procedures (such as corneal transplants) may be sources of infection (2 reported cases each). There were 37 human rabies cases reported in the US for the years 1981-1998. These cases were reported from 22 states across the country, though Texas and California had seven cases each. There has been an average of 2 cases per year (range 0-6) over this time period, and the source of these human cases has been bats (22), dogs (14), and skunks (1).

High risk jobs (involving “Continuous” potential exposure) include rabies research lab workers, and rabies biologic production workers. High-medium risk jobs (“Frequent” potential exposure) include rabies diagnostic lab workers, spelunkers (cave explorers), veterinarians and staff, and animal control or wildlife workers in high rabies risk areas. Medium-low risk (“Infrequent” potential exposure) jobs include veterinarians and staff, and animal control or wildlife workers in low rabies risk areas, as well as travelers to high risk areas where access to medical care is limited. Low risk jobs (“Rare” potential exposure) include the general US population.

POST EXPOSURE TREATMENT (PROPHYLAXIS)

Prevention of rabies first involves avoidance of exposure to potential vectors. If a possible exposure occurs, an assessment of the risk of infection must be conducted. According to the Centers for Disease Control and Prevention, the following provides a guide for this assessment:

SOURCE ANIMAL	ANIMAL EVALUATION	RESPONSE
Dog/cat/ferret	If animal appears to be healthy and 10-day observation is possible	No Post Exposure Prophylaxis (PEP)** unless animal develops signs of infection
	If animal is known or suspected to be rabid	Provide PEP
	If animal's condition is unknown	Consult local public health officials (PHO)
Other carnivore	Consider it to be rabid (until proven otherwise)	Consider PEP (consult with PHO)
Cattle/rodents***	Consider on a case-by-case basis	Consult with PHO

**Post-exposure prophylaxis, or PEP, involves the following:
1 - thoroughly clean the wound mechanically (scrubbing and, if necessary, debridement) and with soap or a virucidal agent such as a detergent (benzalkonium chloride) or povidine-iodine solution
2 - inject human rabies immune globulin into the tissue around the wound or exposure site
3 - provide vaccination (see below)

***While exposure to rabies theoretically is possible from these sources, no known cases have occurred.

From 16,000 to 39,000 people in the US receive PEP each year. This process is highly effective: there have been no PEP failures in the US, and none elsewhere when all of the above steps have been applied correctly.

VACCINATION

Vaccination for post-exposure prophylaxis may involve both passive and active measures. The passive vaccine is rabies immune globulin (RIG), which is given only to individuals who have **not** previously been immunized. The products available include Imogram®

Rabies HT and BayRab™. Passive vaccines are used at the time the wound is initially treated by a physician, and may be infiltrated around the wound and/or intramuscularly. One of the active vaccines also should be used for post-exposure prophylaxis. The products available include Imovax® Rabies - Human diploid cell vaccine (given intramuscularly, or IM, in the deltoid muscle); Imovax® Rabies I.D. - Human diploid cell vaccine (given intradermally, or ID); Rabies Vaccine Adsorbed -- Fetal rhesus lung vaccine (IM in the deltoid); and RabAvert™ - Purified chick embryo cell vaccine (IM in the deltoid). Whichever active vaccine is used, it is to be given on days 0, 3, 7, 14, and 28, for a total of five doses.

Using the risk categories noted above, those individuals who should receive these vaccinations on a pre-exposure basis include:

Risk Category	Vaccinations and Testing
High risk	Primary course of vaccine, followed by serologic testing every 6 months, and booster vaccination if the antibody titer is low (<1:5)
High-medium risk	Primary course of vaccine, followed by serologic testing every 2 years, and booster vaccination if antibody titer is low
Medium-low risk	Primary course of vaccine, no follow up testing or booster vaccination
Low risk	No vaccination or testing

An excellent source of further information on rabies may be found on the Internet at:

http://www.cdc.gov/ncidod/dvrd/rabies/

*The above information is based on "Control of Communicable Diseases Manual," Benenson, Abram, ed., 16th edition, 1995 (pages 382-390); Morbidity and Mortality Weekly Reports, Table II, Provisional cases of selected notifiable diseases, United States, week ending January 2, 1999 (Week 52); "Harrison's Principles of Internal Medicine," Isselbacher, Kurt J., et.al., 13th edition, 1994 (pages 832-835); and the CDC web site noted above.

Hantavirus **Attachment - E 4 (d)**

The following reflects the text of a draft directive prepared by DOI that provides background information and current recommendations on a recently-recognized disease that is caused in the United States by a hantavirus. The directive is intended for the use of DOI employees who may be exposed to vectors of the disease as a result of their work.*

It is the intent of the Department of the Interior that all DOI employees be protected from exposure, infection, or disease due to a hantavirus. Within each operating division, an assessment should be made of the likelihood of exposure for individuals or groups of employees to conditions in which hantavirus infection may occur. Appropriate action, as indicated in the following directive, should be taken or offered to effected employees.

The primary hantavirus disease in the United States is hantavirus pulmonary syndrome (HPS), which is caused by a hantavirus called the Sin Nombre Virus (SNV). Several other types of hantavirus are known from around the world, and most cause a syndrome of hemorrhagic fever and kidney disease that generally are not found in the U.S. The SNV was first recognized in the United States in 1993 following a cluster of deaths in the southwest. As a result of the investigation of this cluster, other hantaviruses have been identified, but most cases of HPS have been due to the SNV. A total of 19 cases had been reported as of January 2, 1999, for the year 1998 and, since the initial outbreak in 1993, more than 225 cases have been reported. Persons in most states appear to be at risk, but the disease has been rare in the northeast, and the southeast. Most cases have been in the southwest, west, northwest, upper Midwest, and mid-Atlantic states.

Hantavirus generally is transmitted through aerosols of mouse urine or feces. It also may be transmitted by bites, or ingestion of food contaminated with mouse urine, feces, or saliva. The animal most commonly responsible for transmission of hantavirus in the southwestern U.S. is the deer mouse (*Peromyscus maniculatus*). In rare cases, it also is known to have been transmitted by the cotton rat (*Sigmodon hispidus*) and the rice rat (*Oryzomus palustris*).

The incubation period after exposure may vary from about one to five weeks. The clinical disease starts with non-specific symptoms, including fever, muscle aches, headache, and chills, which may last for up to a week. Gastrointestinal symptoms also are frequently present, including nausea, vomiting, diarrhea, and abdominal pain. Rapid respiration, non-productive cough, and a rapid heart rate are commonly found upon initial evaluation by a health care provider. The disease may progress rapidly once these cardiac and respiratory symptoms develop. Employees developing these symptoms should be encouraged to seek medical attention. Treatment of the disease is supportive, and usually requires hospitalization and intensive care. Approximately 50% of individuals who develop HPS

die of the disease. Because there are no specific treatments or vaccines for hantavirus infection, prevention is critical.

Humans are at most risk when doing things that stir up or put them in contact with mouse droppings and waste. These activities include such things as cleaning or maintaining cabins, barns, or other buildings that have been infested with deer mice. Because the disease may be transmitted by aerosols, any activity that stirs up dust in buildings with mouse infestations may present a risk of infection.

Preventing exposure begins with taking steps to avoid infestation with mice, both inside and out. Elimination of food, nesting material, and nesting sites for mice in buildings or other structures used by humans is necessary. In settings where mouse infestation is apparent, avoiding aerosols by thoroughly wetting the area with detergent or a hypochlorite solution is effective because the hantavirus is surrounded by a lipid (fatty) coat that makes it susceptible to these agents. Mopping or sponging, while wearing latex or other barrier gloves, should be used to remove contaminated materials.

Rodents should be prevented from entering buildings by sealing cracks in foundations and closing gaps in walls with concrete or metal barriers. Removal of rodents may necessitate the assistance of a pest control service. A DOI manual is available, entitled *Mechanical Rodent Proofing Techniques: A Training guide for National Park Service Employees*, that may be of value in preventing rodent problems.

An excellent source for specific guidance and further information on hantavirus may be found on the Internet at:

http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm

*Morbidity and Mortality Weekly Reports, Table I, Summary - provisional cases of selected notifiable diseases, United States, cumulative, week ending January 2, 1999 (Week 52); Centers for Disease Control and Prevention, National Center for Infectious Diseases, Internet web site: http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm

DOT Vehicle Operators (i.e., Medical Clearance for Holders of a Commercial Driver's License) Attachment - E 5

The Department of Transportation has established regulations (49 CFR 391.41 (b)(1) through (b)(13)) governing the medical examination requirements for individuals who need a Commercial Driver's License to operate trucks, buses, or other heavy equipment on public highways. In order to drive such a vehicle, a driver must: 1) have the technical skills to operate the equipment (this subject is not covered further in this *Handbook*); 2) meet the requirements of the physical examination; and 3) comply with drug and alcohol testing requirements. Drug and alcohol testing is covered in Tab 9 (*Special Emphasis Program Guides*). The physical examination requirements are the subject of this Attachment. A list of the basic services to be provided for a CDL medical clearance is presented at the end of this attachment. As specified in 49 CFR 391.41 and subsequent DOT clarifying publications in the Federal Register, the results of the examination must demonstrate the employee has:

- no impairment of :
  - a hand or finger which interferes with prehension or power grasping;
  - an arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a motor vehicle; or has been granted a waiver, as provided for in the regulations; or
  - any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a motor vehicle; or
  - the employee has been granted a waiver, as provided for in the regulations;

- no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control;

- no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse, or congestive cardiac failure (Note: if an employee has had one of these conditions, before they are medically certified they should have had a normal resting and stress electrocardiogram, have no residual complications, no physical limitations, and not be taking medication that is likely to interfere with safe driving);

- no established medical history or clinical diagnosis of a respiratory dysfunction likely to interfere with the driver's ability to control and drive a motor vehicle safely;

- no current clinical diagnosis of high blood pressure likely to interfere with the driver's ability to operate a motor vehicle safely (Note: for an unrestricted clearance, the

employee must have blood pressure of less than or equal to 160/90; for pressures of 161-180 systolic and 91-104 diastolic, a single 3-month clearance may be granted to allow the employee to have the hypertension reduced to a level of less than or equal to 160/90; for pressures of greater than 180/104, no clearance is allowed until the pressure is reduced to less than 181/105, at which time a single 3-month clearance may be granted to allow the employee to reduce the pressure to less than or equal to 160/90);

- no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular, or vascular disease which interferes with the driver's ability to control and operate a motor vehicle safely;

- no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a motor vehicle (Note: a diagnosis of epilepsy is considered permanently disqualifying; an individual who has a non-epileptic seizure or loss of consciousness of unknown cause may be considered for clearance following a 6-month seizure-free period during which no anticonvulsant medication is required);

- no mental, nervous, organic, or functional disease or psychiatric disorder likely to interfere with the driver's ability to drive a motor vehicle safely;

- distant visual acuity of at least 20/40 (Snellen) in each eye with or without corrective lenses, **and** distant binocular visual acuity of at least 20/40 with or without corrective lenses; **and** a field of vision of at least 70 degrees in the horizontal meridian in each eye, **and** the ability to recognize the colors of traffic signals and devices showing standard red, green, and amber (Note: no specific color vision test is required, as long as this basic color perception can be demonstrated to the examiner);

- perception of a forced whispered voice in the better ear at not less than 5 feet with or without the use of a hearing aid or, if tested by use of an audiometric device, does not have an average hearing loss in the better ear greater than 40 decibels at 500 Hz, 1000 Hz, and 2000 Hz;

- no current clinical diagnosis of a drug dependency of a Scheduled drug or other substance identified in the regulations, including opiates, opium derivatives, hallucinogenic substances, depressants, and stimulants; and

- no current clinical diagnosis of alcoholism (Note: a past diagnosis of alcoholism is not considered disqualifying, as long as the employee has stopped drinking, is currently without any withdrawal effects, and is no longer physically or mentally impaired).

For further information, the reader may contact the AMO, the DOI MO, or the Department of Transportation.

Medical Services to be Provided for a CDL Medical Clearance

SERVICES, BY CATEGORY	ONLY BY DISCRETION OF EXAMINING PHYSICIAN*
« HISTORIES »	
General Medical History	
Occupational History	
« EXAMINATION ITEMS »	
General Physical Examination	
General Appearance and Vital Signs	
Special Attention To:	
• Habitus (obesity)	
• Eyes	
• Cardiovascular System	
• Respiratory System	
• Abdomen (Hernia)	
• Gastrointestinal System	
• Genitourinary Tract Exam	
• Central Nervous System	
• Peripheral Nervous System	
• Extremities (upper and lower)	
• Back & Musculoskeletal System	
• Anus (Hemorrhoids)	
« DIAGNOSTIC TESTS/PROCEDURES »	
Audiogram, Current (or whisper test)	
Vision Test, Best Far Vision Acuity (corrected and uncorrected)	
Vision Test, Peripheral	
Vision Test, Color Discrimination (Red/Green/Yellow)	
Chest X-Ray, PA & Lateral	Y
Electrocardiogram-Resting	Y
Stress Electrocardiogram	Y (requires AMO clearance)
« LABORATORY »	
Lab Panel (CBC, UA, Chemistry Panel)	

« CLEARANCES »
Commercial Driver's Med. Clearance

*These tests (noted with a "Y" in the right side column) are to be ordered only after consideration by the examining physician of the occupational and medical histories and the findings of the physical examination.

Department of Labor forms CA-1 (Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation) and CA-2 (Notice of Occupational Disease and Claim for Compensation), are to be used to file claims for work related injury or illness compensation. The Department has established the Safety Management Information System (SMIS) as the official Administrative System for electronic entry of accident and illness claims data. SMIS is a Internet based data system and can be found on the World Wide Web at http://www.smis.doi.gov

The following reflects a draft bulletin prepared by DOI that provides information and current recommendations on Automatic External Defibrillation for cardiac arrest.

Background

Cardiac arrest is defined as the "abrupt cessation of cardiac [heart] pump function which may be reversible by a prompt intervention but will lead to death in its absence." There are about 22.2 million heart disease cases reported each year in the United States, and over 700,000 deaths from heart disease. It is ranked as the #1 cause of death overall in this country. Of those individuals with heart disease, there are approximately 250-350,000 deaths each year due to cardiac arrest, or about 700-1000 deaths each day.

While prevention is the most important way to avoid heart disease and cardiac arrest, there is a "chain of survival" that is vital when cardiac arrest occurs. The chain of survival includes:

- early access to care (including citizen-provided cardiopulmonary resuscitation, or CPR, emergency medical technicians, and other health care providers)
- early provision of CPR (to get oxygen to the tissues)
- early defibrillation (if this abnormal heart rhythm condition is present)
- and early advanced care (for more definitive treatment).

Death is almost certain unless appropriate intervention is provided, including, automatic external defibrillation, or AED. AED was first developed in the 1980s, and became available about 6 years ago for out-of-hospital use. When connected to a victim's chest, the device senses the heart's electrical activity and, if fibrillation is present, provides a shock to the heart at the correct time in the electrical cycle. The current generation of these devices are portable, light weight, and simple to use, costing $3,000-$4,000 for each machine.

CPR continues to be the most important first procedure to be provided for a person with a cardiac arrest if defibrillation cannot be provided within about 4 minutes. It also is important to provide CPR, if possible, while AED equipment is being set up for a patient. Survival of cardiac arrest in cases where the time of onset of arrest is witnessed, when CPR and AED are provided, has been reported as 37-45% in some studies.

POLICY

DOI managers are encouraged to carefully consider the relative value and need for AED before setting up an program for their employees or the public that may be served by the agency. AED programs are ONLY permitted as part of a complete "chain of survival" program. This includes designation and training of sufficient staff to manage cardiac arrest cases including initial first aid/CPR as well as the AED. Furthermore, formal medical oversight and equipment maintenance programs are essential. Factors to consider include:

- **RISKS (of cardiac arrest) and AVAILABLE SERVICES, including**:

  - location (remote; city; traffic patterns; near EMS; services not available)

  - activities (office; power plant)

  - population (elderly; young; many; few; general public; only federal workers)

  - previous work force experience and employee expectations

- **IMPLEMENTATION FACTORS, including**:

  - local state laws on emergency medical care

  - initial costs

  - administration factors (medical oversight, maintenance/security of device, assigned personnel)

  - training (initial and on-going) for first responders, program administrators, medical personnel

REFERENCES

Harrison's Principles of Internal Medicine, Isselbacher, Kurt J., et.al., 13th edition, 1994 (pages 193-5)

American Heart Association, Cardiopulmonary Resuscitation (CPR) Statistics (Internet web site: http://www.americanheart. org)

Centers for Disease Control and Prevention, National Center for Health Statistics (Internet web site: http://www.cdc.gov/nchs)

Influence of Cardiopulmonary Resuscitation Prior to Defibrillation in Patients With Out-of-Hospital Ventricular Fibrillation, Cobb, Leonard A., et.al., JAMA, Vol. 281, No. 13, April 7, 1999, pp. 1182-1188

Automatic External Defibrillator, Policy M.72, Federal Occupational Health