



Epidemic
Intelligence
Service
opportunities
at NIOSH



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health



Epidemic Intelligence Service Assignments at NIOSH

Through the Epidemic Intelligence Service (EIS) program of the Centers for Disease Control and Prevention (CDC), NIOSH offers training and experience in all aspects of occupational epidemiology. During two-year assignments, NIOSH EIS officers gain unique experience in the principles and practice of occupational safety and health. NIOSH officers acquire expertise in surveillance and field investigation of occupational diseases and injuries and in epidemiologic research methods.

All EIS officers begin their training by attending a three-week introductory course in epidemiology and statistics held in Atlanta during July. EIS officers assigned to NIOSH through CDC's EIS program participate in all EIS activities. NIOSH EIS officers also participate in other EIS activities, including short courses in surveillance and prevention effectiveness and the annual EIS Conference, held in Atlanta each spring. In addition to their NIOSH projects, NIOSH EIS officers may also have an opportunity to participate in investigations of infectious disease outbreaks or other public health emergencies in the United States and internationally.

National Institute for Occupational Safety and Health



What is NIOSH?

The National Institute for Occupational Safety and Health (NIOSH) is the Public Health Service organization within the CDC that has primary responsibility for conducting epidemiologic and clinical investigations of occupational diseases and injuries. These investigations range from health hazard evaluations to long-term epidemiologic studies to conducting public health surveillance for work-related illnesses and injuries. EIS officers assigned to NIOSH can investigate the full variety of current occupational safety and health problems and can work in these areas with a broad group of scientists—including epidemiologists, physicians, nurses, industrial hygienists, safety engineers, statisticians, and others.



What Do EIS Officers Do at NIOSH?

Through the field collection and subsequent analysis of data describing workplace exposures and workers with occupational injury and disease problems, NIOSH EIS officers can become familiar with such facets of occupational health as:

- the design and implementation of epidemiologic investigations and of surveillance systems;
- the analysis and interpretation of epidemiologic and surveillance data;
- the principles of industrial safety, hygiene, and ergonomics;
- the methodologic approaches used for integrating industrial hygiene and medical data in dose-response analyses; and
- specific techniques used for classifying chest x-rays for

pneumoconiosis, for performing pulmonary function tests, for conducting standardized neurobehavioral tests, and for conducting immunotoxicity, genotoxicity, and biomarker tests.

The EIS officers' individual experiences are supplemented through short courses in occupational health, weekly seminars, and informal tutorials.

Examples of previous investigations conducted by NIOSH EIS officers include: peripheral neuropathy in workers exposed to newly introduced industrial chemicals; the occurrence of clusters of retinal detachment in welders; outbreaks of dermatitis in tanners and chemical workers; lung cancer among tire manufacturers; acute and chronic respiratory diseases associated with exposure to various agents including asbestos, silica, isocyanates, egg proteins, crab proteins, and proteolytic enzymes; musculoskeletal disorders of meatpackers, grocery store clerks, and video display terminal operators; tuberculosis among health care workers; electrocutions associated with hurricane damage; and health effects from dioxin exposure in the herbicide formulating industry.

What assignments are available at NIOSH?

EIS officers interested in a NIOSH experience may choose among assignments offered at several NIOSH facilities, including those in Anchorage, Alaska; Denver, Colorado; Cincinnati, Ohio; and Morgantown, West Virginia. EIS officers in Morgantown may develop professional contacts and gain clinical experience participating as adjunct faculty in occupational medicine, pulmonary medicine, or community medicine activities at the West Virginia University School of Medicine, which is adjacent to the NIOSH laboratory. EIS officers in Cincinnati can develop similar professional contacts and gain clinical experience participating as adjunct faculty in occupational medicine at the University of Cincinnati College of Medicine.

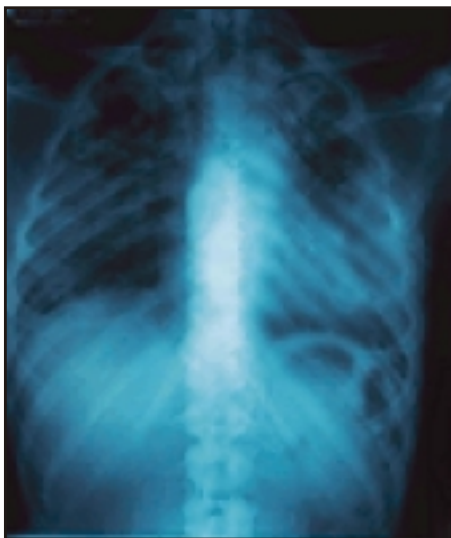
EIS Positions Offered by NIOSH

Specific EIS positions offered by NIOSH and specific activities in these assignments may vary from year to year, depending on circumstances, but assignments are generally available in the following areas:

Division of Respiratory Disease Studies (DRDS), Morgantown, West Virginia

■ **Field Studies Branch (FSB)**

The FSB conducts Health Hazard Evaluations of occupational lung disease and respiratory hazards. Additionally, FSB staff conduct research on methods for early identification of occupational lung disease, industrywide studies, and epidemiologic studies of occupational lung disease, including gene-environment interactions. Recent studies have investigated



occupational asthma in insectary workers, coal workers' pneumoconiosis, silicosis among rock drillers and granite workers, lung cancer associated with diesel exhaust, and early indicators of chronic beryllium disease. EIS officers assigned to DRDS have a primary mentor in FSB and have full access to opportunities in DRDS' Surveillance Branch (SB). DRDS SB is active in national and state-based surveillance of occupational respiratory diseases, as well as in identifying, assessing, and making recommendations concerning best practices for screening workers for occupational respiratory diseases. Additionally, DRDS SB staff administer several ongoing programs:

- the Coal Workers' X-ray Surveillance Program, a national screening and surveillance program for all underground coal miners;
- the National Coal Workers' Autopsy Study, which includes a large database regarding respiratory disease in coal miners; and
- the NIOSH B Reader Program, which certifies proficiency in radiographic classification of pneumoconiosis.



**Division of Safety
Research, (DSR)
Morgantown,
West Virginia**

■ ***Surveillance and Field
Investigations Branch
(SFIB)***

SFIB conducts occupational injury surveillance and other research to describe the nature and magnitude of the occupational injury problem in the United States, identify potential risk factors, generate hypotheses for further research, and set research and prevention priorities. A related effort is the Fatality Assessment and Control Evaluation (FACE) program, which involves on-site investigations and reports of fatal work incidents across the Nation associated with selected types of fatal occupational injuries, including those of the Nation's firefighters. The EIS officer can participate in various risk assessment and intervention evaluation research projects involving occupational traumatic injuries.

■ ***Alaska Activity,
Anchorage, Alaska***

Activities in Alaska concentrate on surveillance and prevention of the state's occupational injury problems, primarily in the fishing, logging, and aviation industries. Opportunities exist to participate in field investigations of occupational deaths, to design and conduct a variety of descriptive and analytic epide-

miological studies of occupational injuries and fatalities, and to work closely with collaborators in state and local government as well as in other Federal agencies like the U.S. Coast Guard and the Federal Aviation Administration.

**Division of Surveillance,
Hazard Evaluations, and
Field Studies (DSHEFS),
Cincinnati, Ohio**

■ ***Surveillance Branch***

The Surveillance Branch maintains surveillance over the occurrence of disease and of exposure to chemical and physical hazards in the Nation's workforce. The surveillance aims to provide early detection and continuous assessment of the magnitude and extent of job-related illness and hazardous exposures. A particular focus of the Surveillance Branch is the establishment of a nationwide system of state-based surveillance for occupational disease.





cardiovascular disease, reproductive effects, neurotoxic effects, ergonomics, and other occupationally related health outcomes. An additional function of IWSB is the development of new research methods in occupational epidemiology.

■ ***Health-Related Energy Research Branch (HERB)***

The Health-Related Energy Research Branch has the responsibility of conducting analytical epidemiologic studies of current and former workers at U.S. Department of Energy (DOE) facilities. Studies are underway concerning mortality and morbidity of some of the 600,000 workers who have worked at DOE facilities. Potentially, these workers have been exposed to a number of occupational hazards, including ionizing and non-ionizing radiation, metals, and solvents.

■ ***Hazard Evaluations and Technical Assistance Branch (HETAB)***

HETAB conducts epidemiologic, medical, and industrial hygiene evaluations, called health hazard evaluations (HHEs), at worksites throughout the country. HHEs usually are done in response to requests from employees, employers, or their representatives. HHEs address a wide range of chemical, physical, and biological exposures and a variety of health problems affecting all organs and systems. Due to the short response time and rapid nature of many HHEs, they are somewhat analogous to the epidemic-response in the Epidemiology Program Office at CDC. Additional HETAB assignments may be offered at the NIOSH Field Offices in Denver, Colorado, and Atlanta, Georgia.

■ ***Industrywide Studies Branch (IWSB)***

IWSB conducts detailed medical evaluations and comprehensive, often long-term, epidemiologic studies of disease in working populations. The studies are designed to answer specific research questions in the areas of occupational cancer, occupational



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Information is also available via the CDC-EPO Home Page at:

<http://www.cdc.gov/epo/dapht/eis/>

and via the NIOSH Home Page at:

<http://www.cdc.gov/niosh/eis.html>



*Delivering on the Nation's Promise:
Safety and health at work for all people
through research and prevention*

For information about occupational safety and health topics contact NIOSH at:

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