

Volume 1 Number 3

A U.S. Department of Defense Information Analysis Center sponsored by the Defense Information Systems Agency, Defense Technical Information Center

Not Another Plan?!

The Department of Defense Chemical and Biological Defense Program Performance Plan

By Anna Johnson-Winegar, Ph.D. and David W. Evans

he Department of Defense (DoD) will submit a performance plan for the Chemical and Biological Defense Program (CBDP) to Congress along with its next annual report on the CBDP in

Summer 2000

2001. Over the next several months, the various stakeholders in the CBDP will be involved in the preparation of the performance plan. The purpose of this article is to provide an outline for (1) the underlying rationale and purpose for the performance plan, (2) the challenges in preparing a plan, and (3) suggestions for the preparation of the plan.

The CBDP Performance Plan: Rationale and Purpose

In 1993 Congress passed the Government Performance and Results Act (GPRA) (Ref. 1). One of the requirements of the GPRA is for agencies to submit an annual performance plan to Congress. Performance plans should provide a complete and clear picture of what an agency intends to accomplish with a given level of resources. At a minimum, the plans must include performance goals and measures, processes and resources required to meet the performance goals, and the means to validate the performance measures. The plans should be organized to be as useful as possible to all relevant Congressional committees, including authorizers, appropriators, and budgeteers (Ref. 2).

The General Accounting Office (GAO) outlined the information needed in the CBDP performance plan in its August 1999 report (Ref. 3). Specifically, the plan should:

- ♦ Establish explicit and outcome-oriented goals linked to warfighters' ability to survive, fight, and win in a CB environment:
- ♦ Identify quantitative or qualitative performance measures that can be used to assess progress toward goal achievement;
- ♦ Describe how performance data would be validated;
- ♦ Describe how [research, development, test and evaluation] activities of participating DOD and non-DOD organizations are coordinated to achieve program goals; and
- ♦ Identify human capital, financial, and resource challenges or external factors that limit the ability of the program to achieve its goals.

The performance plan is intended to provide a management tool that will focus program efforts on *outcomes*, rather than *outputs*.

Table 1 shows performance measures that illustrate the difference between the two terms. Performance measures are to focus on capabilities provided or demonstrated for the warfighter, rather than on the status of program execution. Performance measures provide an operational focus to supplement traditional management measures of cost, schedule, and technical performance.

Table 1: Performance Measures: Outcomes vs. Outputs

EXAMPLE 1:	OUTPUT: OUTCOME:	Number of training courses taught Number of students receiving certification
EXAMPLE 2:	OUTPUT: OUTCOME:	Number of systems acquired Percentage of 2 Major Theater War requirement fielded
EXAMPLE 3:	OUTPUT: OUTCOME:	Number of vaccine doses procured Number of forces vaccinated

Those involved in the preparation and implementation of the plan may be asking themselves, "Not another plan?! Aren't we doing enough planning already?" A new plan is required, yet it should not impose significant new reporting burdens. The performance plan will draw on information from the reports and plans already being prepared within the CBDP, including (1) the Modernization Plan, (2) the Research, Development, and Acquisition (RDA) Plan, (3) the Logistics Support Plan, (4) the Joint Warfighting Science and Technology Plan, (5) the Defense Technology Area Plan, and (6) the Annual Report to Congress. In addition, the performance plan will draw on the documents prepared in support of the PPBS, including Defense Planning Guidance, CBDP Program Strategy Guidance, the Program Objectives Memorandum (POM), and the President's Budget. Finally, the performance plan will identify the explicit linkage with overarching DoD guidance identified in the Defense Planning Guidance and the Quadrennial Defense Review, which serves as the strategic plan for the Department.

Even without specific GPRA guidance, the CBDP uses a well-established planning process — the Planning, Programming, and Budgeting System (PPBS), which translates strategic planning documents into programs and activities through which the plan can be accomplished. This reflects a rich tradition of planning that embraces both centralized and decentralized planning (Ref. 4).

See "Performance Plan"

Continued on page 3

Summer 2000



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5183 Blackhawk Road

Aberdeen Proving Ground, MD 21010-5424

U.S Government agencies and private industry under contract to the U.S. Government can contact the CBIAC for information products and services. CBIAC services also extend to all state and local governments and the first responder community – local emergency planners, firefighters, medics and law enforcement personnel.

The CBIAC is located in Building E3330, Aberdeen Proving Ground - Edgewood Area, Maryland 21010. For further information or assistance, visit or contact the CBIAC.

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URL: http://www.cbiac.apgea.army.mil/





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"Performance Plan"

Continued from page 1

CBDP officials at all organizational levels should be able to answer GPRA-related questions regarding mission, goals, objectives, linkage to higher level command, and performance measurement, even if they are not familiar with GPRA terminology.

In March 2000, the CBDP prepared an annual report that established the first step in compliance with the Results Act (Ref. 5). The introduction of this report outlines the mission, vision, values, and goals of the DoD CBDP. These statements provide linkage with the overall mission and vision of the Department of Defense and provide the framework for the development of a performance plan consistent with GPRA principles (Ref. 6). The mission of the CBDP is to provide chemical and biological defense capabilities to allow the military forces of the United States to survive and successfully complete their operational missions. The mission of the CBDP is not to deter adversaries' use of chemical or biological weapons. However, the successful accomplishment of the program mission may have the effect of deterring the use of chemical and biological weapons by devaluing their utility as a tool of war.

Challenges in Preparing the Plan

There are numerous challenges in preparing a performance plan. As stated in its evaluation of other agencies performance plans, GAO noted that "it may take years to develop a sound set of performance measures" (Ref. 7, p. 23). When a performance plan is submitted as part of next year's annual report, the CBDP will be in full compliance with the GPRA. Full compliance with the GPRA can be defined as the establishment of a *process* to measure performance and progress towards goals. The performance plan will be updated annually and the content of the report (that is, the goals and performance measures) will be revised as needed. In itself, the completion of the performance plan will not guarantee a successful program. However, a performance plan will provide the means to demonstrate continued progress towards the goals of the CBDP.

No single measure in any one area may be adequate, and by itself a single performance measure may be uninformative and possibly misleading. However, when the measures are viewed together over a period of time, the value of the measures as a management tool becomes apparent. Within the CBDP, the performance plan may provide an effective management tool to measure — and hence manage — balance among the various areas. For example, performance measures may show the balance of funding among procurement, advanced development, and science and technology programs, which will help ensure that capabilities are fielded not only for the current force, but that advanced capabilities will be fielded for future forces through the far-term.

The performance plan will include a variety of performance measures. One of the challenges in the development of the performance plan will be identifying an appropriate balance between too many and too few performance measures. With the completion of a performance plan, the CBDP will be better able to address key program and budgeting questions such as "Does"

it make sense to field 100% of the new masks this year if only 75% of the new suits are being fielded?" or "Does meeting mask goal early make sense if warning system is not in place?"

Developing performance measures for individual programs will be the focus of the forthcoming performance plan. All programs will be measured to demonstrate that they support operational requirements and provide defense against validated or emerging threats. A key challenge will be to demonstrate the interaction among individual programs and performance measures. Table 2 illustrates potential types of interactions among CB defense programs and performance measures. Defining and validating these interactions will be an ongoing process.

Table 2: Interaction of Performance Measures

INTERACTION TYPE	CONCEPTUAL DESCRIPTION	EXAMPLE
Additive	0.5 + 0.5 = 1	Mask + Suit
Semi-Additive	0.5 + 0.5 = 0.75	Detection/Warning System + Mask
Synergistic	0.2 + 0.2 = 1	Mask + Vaccine
Potentiation	0 + 0.5 = 1	Pyridostigmine Bromide Tablets + (Atropine + Diazepam)

Another challenge in preparing the performance plan is the requirement for the validation of performance measures. There are three key aspects of validation. The first is the determination of data accuracy. This is the simplest aspect in which data may be verified as accurate by confirmation with program managers or, if necessary, inspections or audits of records. The second aspect is the determination of whether the performance measures are the appropriate measures. This is a more complex requirement of data validation. This requires performance measures be assessed to determine whether they actually measure progress towards a goal. Additionally, this aspect of validation will determine whether there are additional or more appropriate performance measures that will supplement or replace existing performance measures. For example, an existing performance measure may indicate the number or courses taught on the medical management in chemical and biological casualties. An assessment of this measure may indicate a better outcome-oriented measure would be the number of students who were certified in these courses, not just the number who attended.

A *third* aspect of data validation is the demonstration of the performance measure through models, simulations, or exercises. This poses some challenges since the effects of chemical or biological agents must usually be simulated. Exercises typically are expensive, labor intensive, and can take years of planning. Also, the process of data validation faces a Catch-22 since the models and simulations that may be used to validate the performance measures may themselves need to be validated.

CBD CONTRACT AWARDS

By Mary Frances Tracy

Support for Federal, Military, NATO, and the Technical Cooperation Program

Science Applications International Corp. San Diego, CA \$1,675,000. March 22, 2000 By Defense Threat Reduction Agency

Soft Shelters for Chemical Biological Incidence Response Force (CBIRF)

TVI Corporation Glenn Dale, MD \$178,000. March 28, 2000 By USMC CBIRF

Construction Contract for the CBIRF Relocation

Barclay White/Coakley Williams Construction (Joint Venture) Gaithersburg, MD \$10,615,000. April 5, 2000 By Engineering Field Activity Chesapeake, Naval Facilities Engineering Command, Washington, DC

Remote Biological Olfactory Sensing

RDSS Inc.
59 Marnel Drive
Severna Park, MD
\$424,000. April 6, 2000
By SPAWARSYSCEN, San Diego

M18A3 Detector Kit and M30A2 Refill Kit

Trutech Inc. 680 Elton Avenue Riverhead, NY 11901 \$158,176. April 12, 2000 By TACOM

Award of M9 Chemical Paper

Trutech Inc. 680 Elton Avenue Riverhead, NY 11901 \$1,666,500. April 14, 2000 By TACOM

Neuronal Network Responses to Neuroactive Agents

University of North Texas Research Services P.O. Box 305250 Denton, Texas 76203 \$429,335. April 25, 2000 By SPAWARSYSCEN, San Diego

Chemical Warfare Protective Suits [Selfcontained Toxic Environmental Protective Outfit (STEPO)]

Versar, Inc. Springfield, VA \$14,500,000. May 1, 2000 By U.S. Army Material Command

Biodefense Research Contract

Hadron, Inc. Alexandria, VA \$3,300,000. May 4, 2000 By Defense Advanced Research Projects Agency

Topical Skin Protectant (TSP)

Manufacturing Development McKesson Bioservices 14665 Rothgeb Drive Rockville, MD 20850 \$732,530. May 11, 2000 By U.S. Army Medical Research Acquisition Activity, Frederick, MD

Camouflage Cold Weather Parkas and Camouflage Cold Weather Trousers

Tennier Industries, Inc. Pomona, NY \$16,528,241. May 31, 2000 By Defense Supply Center Philadelphia

Camouflage Cold Weather Parkas and Desert Camouflage Cloth and Cut/Make Trim of Parka

Tennessee Apparel Corp Tullahoma, TN \$11,732,188. May 31, 2000 By Defense Supply Center Philadelphia

Design and Production of an Organophosphorous Bioscavenger via Protein Engineering of Human Acetylcholinesterase

Israel Institute for Biological Research P.O. Box 19 70450 Ness Ziona, Israel \$596,752. June 1, 2000 By U.S. Army Medical Research Acquisition Activity, Frederick, MD

Research and Development on Detection of Chemical Warfare Agents

Temple University 3400 North Broad Street Philadelphia, PA 19140 \$1,249,975. June 8, 2000 By SPAWARSYSCOM, San Diego

Training Kit, Nerve Agent Antidote, Mark I

Meridian Medical Technologies Inc. 10240 Old Columbia Road Columbia, MD 21046 \$44,240. June 13, 2000 By Defense Personnel Support Center, Philadelphia

Integration of the Selective Availability Anti-Spoofing Module (SAASM) into the Joint Standoff Weapon (JSOW) System

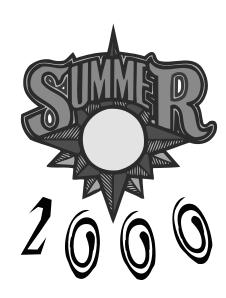
Raytheon Company Tucson, AZ \$5,069,914. June 23, 2000 By Naval Air Systems Command, Patuxent River, MD

Conduct Studies on Low Level Chemical Toxicity, Relevance to Chemical Agent Defense

Wright State University Dayton, OH \$5,831,000. June 23, 2000 By U.S. Army Medical Research Acquisition Activity, Frederick, MD

Remediation of Various Hazardous Waste Sites within the North Atlantic Division

Roy F. Weston Inc. Manchester, NH \$50,000,000. June 23, 2000 By U.S. Army Corps of Engineers, Concord, MA



CBD IN THE NEWS

By Mary Frances Tracy

Chem Weapon Destruction

Emergency Preparedness News

May 9, 2000

Four chemical weapon stockpile sites are being considered as pilot facilities to test technologies to destroy stockpiled chemical weapons. They are: Anniston Chemical Activity, AL; Blue Grass Chemical Activity, KY; Pine Bluff Chemical Activity, AR; and Pueblo Chemical Depot, CO. Technologies to be considered as alternatives to incineration are chemical neutralization followed by supercritical water oxidation, neutralization and biological treatment.

USA ahead of schedule in destroying chemical arms Gourley. Scott

Janes Defence Weekly

May 17, 2000

The U.S. Army's Program Manager for Chemical Demilitarization (PMCD) has far surpassed the Chemical Weapons Convention's (CWC) milestone of having 1% of the nation's "Category One" chemical weapons destroyed by April 29. The U.S. has reportedly destroyed 15% of the targeted stockpile. This milestone has been accomplished due to the facilities at the Johnston Atoll Chemical Agent Disposal System (JACADS) and the disposal facility at Tooele, UT.

The Portal Shield Biological Warfare Agent Detection System David, Brian

Army AL&T

May-June 2000

Developed in 1996 as an Advanced Concept Technology Demonstration (ACTD), the Portal Shield Biological Warfare Agent Detection System has become the DOD's first automated biological detection system to protect overseas fixed-site facilities such as airfields and ports. The Portal Shield System has a variable number of fully automated biological sensors that are under the command and control of a centralized command-post computer. This network of sensors reduces the false positives and enables the detection of up to eight threat agents simultaneously in less than 25 minutes.

Adapting the DoD Acquisition Process to the Dynamic Environment of Biological Defense Vaccine Acquisition Cain, Eddie, BG; Paul, Richard B.; Prior, Stephen D., M.D.

Army AL&T

May-June 2000

The ultimate goal of the Joint Vaccine Acquisition Program (JVAP) is to field safe and effective biological defense (BD) vaccines to protect U.S. military forces. This is also of major importance to the DOD. To accomplish this goal, the Army established a project management office (PMO) to work closely with the prime systems contractor (PSC) to ensure timely licensing of all promising vaccines by the U.S. Food and Drug Administration (FDA). The prime systems contract approach is the very center of the JVAP, with DynPort Limited Liability Co. (LLC) as the current PSC. DynPort LLC is a joint venture between

DynCorp in Reston, VA, and Porton International in London, UK. DynPort LLC, as the PSC, is responsible for all aspects of developing the assigned BD vaccines.

France Offers Help in Destruction of Russian Weapons http://my.cnn.com

May 31, 2000

With grave concern over the fact that chemical and bacteriological weapons are sought out by terrorists, France has offered assistance to Russia for the destruction of chemical and bacteriological weapons. France also offered to assist Russia with the conversion of bacteriological laboratories into medical facilities. A working group between Russia and France has also been proposed to improve ties between French and Russian parliamentarians and to deal with non-proliferation issues as well.

Chemical Weapons Left by Japanese Troops Found in Nanjing G http://my.cnn.com

June 21, 2000

In Nanjing, the capital city of the Jiangsu Province in eastern China, more than 17,600 chemical weapons have been discovered. Included in the weapons discovered are ten kinds of toxic gas canisters. Left by Japanese troops during World War II, the Chinese and Japanese governments are presently negotiating on detailed measures to destroy the weapons. The chemical weapons were discovered at a construction site in Xiaguan District along the Yangtze River. The Japanese government sent a special investigation team to deal with the matter and has since clearly accepted the obligation to destroy them.

Army Offers Computer-Based System To Help Respond To a CBR Incident

Emergency Preparedness News

June 6, 2000

U.S. Army Soldier and Biological Chemical Command (SBCCOM) is offering a license for the Automated Decision-Aid System for Hazardous Incidents (ADASHI). The ADASHI is a computer-based integrated decision-aid support system that can improve tactical response to a hazardous incident involving chemical, biological or radiological materials. ADASHI integrates functions required to control a hazardous event and automatically monitors most aspects. ADASHI can also be used as an over-the-shoulder system to aid commanders in processing information in a timely manner.

Pulling down a deadly soviet legacy

http://www.msnbc.com/news/407687.asp

Lewis, Dana

Stepnagorsk, in Kazakhstan, has been abandoned since 1992, but the threat it poses to the world has barely diminished. Stepnagorsk possesses a plant the size of two football fields and four stories high which experimented with and produced tons of anthrax and other biological weapons on a daily basis. The plant is closed but the complex is still home to live viruses and is a potential target for terrorists seeking destructive weapons. Entrance to the complex is only allowed when visitors suit up in protective masks, suits and gloves. In order to keep the complex from falling into terrorists hands, the U.S. will raze the entire structure and catalog everything from doors to valves to prevent

usable equipment from being sold to countries pursuing bioweapons programs.

CALENDAR OF EVENTS

The CBIAC highlights conferences, symposia, meetings, exhibitions and workshops of interest to the CBD community both on our website and in every issue of our newsletter. If you would like to have a CBD-related event posted on the CBIAC Calendar of Events, submit the pertinent information via Email to cbiac@battelle.org. Due to space limitations, the CBIAC will accept submissions on a first-come, first-served basis and reserves the right to reject submissions

2000 MEETINGS

September 9-15, 2000

COURSE: In-House Medical Management of Chemical and Biological **Casualties**

(MCBC) #6H-F26

US Army Medical Research Institute of Chemical Defense

(USAMRICD)

Aberdeen Proving Ground, Maryland and

US Army Medical Research Institute of Infectious Diseases

(USAMRIID)

Fort Detrick, Maryland

(Advance registration required)

POC: Chemical Casualty Care Division, USAMRICD

Tel: (410) 436-2230 DSN: 584-2230 Fax: (410) 436-3086 Fax DSN: 584-3086

Email: roger.baxter@amedd.army.mil URL: http://ccc.apgea.army.mil

September 19-21, 2000

DOD Chemical Biological Advance Planning Briefing for Industry (APBI)

(Event #037)

Aberdeen Proving Ground-Edgewood Area, Maryland

POC: Kanzada Douglass Tel: (703) 247-2586 Email: kdouglass@ndia.org URL: http://www.ndia.org/

September 24-27, 2000

The 3rd International Workshop on BC-Detection

Stenungsbaden Yacht Club Stenungsbaden, Sweden POC: Ms. Gerd Karlsson Tel: 46-90-10 67 67 Fax: 46-90-10 68 03

September 25-29, 2000

COURSE: Field Management of Chemical and Biological Casualties

(FCBC) #6H-F27/322-F27

US Army Medical Research Institute of Chemical Defense

(USAMRICD)

Aberdeen Proving Ground-Edgewood Area, Maryland POC: Chemical Casualty Care Division, USAMRICD

Tel: (410) 436-2230 DSN: 584-2230 Fax: (410) 436-3086 Fax DSN: 584-3086

Email: roger.baxter@amedd.army.mil URL: http://ccc.apgea.army.mil

September 26-28, 2000

LIVE SATELLITE BROADCAST: Biological Warfare and Terrorism:

Medical Issues and Response

US Army Medical Research Institute for Infectious Diseases (USAMRIID)

Tel: (301) 619-4880

URL: http://www.biomedtraining.org/

September 27 - 30, 2000

5th Asia-Pacific Conference on Disaster Medicine

Vancouver, British Columbia, Canada

Headquarters: Department of Emergency & Critical Care Medicine,

Nippon Medical School Tel: +81-3-5814-6199 Email: dprc@interchange.ubc.ca

URL: http://www.safety.ubc.ca/5apcdm/

September 27-30, 2000

Weapons of Mass Destruction: The Continuum From Response to

Management

Hilton St. Petersburg St. Petersburg, Florida URL: http://www.va.gov/wmd

October 2-3, 2000

Jane's Weapons of Mass Destruction

Washington, DC

Tel: (703) 683-3700 ext. 295

Fax: (703) 836-0118

Email: conference@janes.com

URL: http://www.janes.com/security/conference/wmd/wmd.html

October 8-12, 2000

Remediation of Contaminated Soil

Munster, Germany Tel: 49-5192-136400 Email: expo@munster.de

URL: http://munster.de/e2_engl/expo/f_termin.htm

October 9-11, 2000

4th International NBC Defence Symposium

Royal Military College of Science Shrivenham, United Kingdom POC: Andrea Harrison

Tel: 44 1793 785648

Email: andrea.harrison@rmmcs.cranfield.ac.uk

October 21-27, 2000

COURSE: In-House Medical Management of Chemical and Biological

Casualties

(MCBC) #6H-F26 (See September 9-15, 2000)

October 23-27, 2000

Joint Conference on Point Detection for Chemical and Biological Defense

Williamsburg Hospitality House

Williamsburg, Virginia

POC: Science and Technology Corporation, Meeting Services

International

Tel: (757) 766-5858

Email: meetings@stcnet.com

URL: http://www.1jcpd.com/

November 6-9, 2000

DTIC 2000

DoubleTree Hotel Rockville

Rockville, Maryland POC: Julia Foscue

Tel: (703) 767-8222/DSN 427-8222

Email: jfoscue@dtic.mil

URL: http://www.dtic.mil/dtic/conferences.html

November 12-15, 2000

International Society for Respiratory Protection (ISRP) 10th International Conference: "Respiratory Protection for First Response, Domestic Preparedness and Anti-Terrorism Personnel"

The Manly Pacific Parkroyal Hotel

Sydney, Australia POC: Goran Berndtsson Telephone: 61 2 9910 7500 E-mail: goran@isrp.com.au POC: Dana Lundmark Tel: 61 2 9261 5746

E-mail: sydney2K@isrp.com.au

URL: http://www.llnl.gov/isrp/conf00.html

November 28-29, 2000

Second National Symposium on Medical and Public Health Response to Bioterrorism

Marriott Wardman Park Hotel

Washington, DC

URL: http://www.hopkins-biodefense.org

December 5, 6, and 7, 2000

LIVE SATELLITE BROADCAST: "Medical Response to Chemical Warfare and Terrorism 2000"

POC: Chemical Casualty Care Division, USAMRICD

Tel: (410) 436-2230 DSN: 584-2230 Fax: (410) 436-3086 Fax DSN: 584 -3086

Email: ccc@apg.amedd.army.mil URL: http://ccc.apgea.army.mil

December 12-13, 2000

22nd Army Science Conference (ASC) "Accelerating the Pace of the Transformation to the Objective Force."

Renaissance Harborplace Hotel

Baltimore, MD Tel: (757) 357-4011 Email: asc2000info@aol.com URL: http://www.asc-2000.com/

2001 MEETINGS

June 15-19, 2001

The Seventh International CBW Protection Symposium and Exhibition of CBW Defence Equipment

Stockholm City Conference Centre Norra Latin, Stockholm, Sweden

POC: Kurt Persson (scientific programme)

Tel: +46-90-106 773 Email: persson@ume.foa.se POC: Asa Lundvall (exhibition)

Tel: +46-90-106 698

Email: lundvall@ume.foa.se

POC: Marianne Olofsson (registration)

Tel: +46-90-106 602

Email: molofsson@ume.foa.se URL: http://www.cbwsymp.foa.se/



he Defense Technical Information Center (DTIC) will host **DTIC 2000**, its Annual Users Meeting and Training Conference, from 6-9 November 2000 at the DoubleTree Hotel Rockville, MD.

This year's theme, "Information Solutions for the 21st Century," reflects DTIC's primary objective: to assist its customer community in meeting tomorrow's challenges by providing the most relevant information in the most appropriate format as quickly as possible.

DTIC 2000 provides a unique opportunity for attendees to explore in detail new developments not only at DTIC, but throughout the federal technical information network. As in past years, the conference will feature a number of presentations and sessions that focus on the most current issues relative to the research, development and acquisition communities.

These sessions are designed to acquaint the participants with the latest policy and operational developments, and will provide practical details on valuable and diverse domestic and foreign information resources. They will also address security issues, the World Wide Web, copyright laws and the storage and dissemination of electronic documents.

"Information Solutions for the 21st Century" will provide timely, accurate information which will enable users to better meet the challenges of the future. It also promises to provide the tools needed to expand participants' horizons to meet these challenges.

For more information, please contact Ms. Julia Foscue, DTIC 2000 Conference Coordinator, or access the DTIC Homepage on the World Wide Web.

Comm: (703) 767-8236 Email: jfoscue@dtic.mil

DTIC Homepage: http://www.dtic.mil/dtic/annualconf

NEW CBIAC PRODUCTS

Susceptibility of Aircraft Materials to Chemical Warfare

Agents (Reprint)

CBIAC Product Number: DBK-99-02

Product Category:

Databook

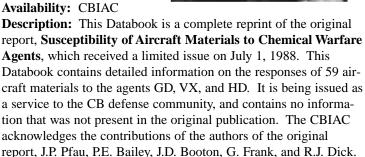
Media: Paperback **Price:** \$125.00

Distribution Limitation: U.S. Government Agencies and

their contractors

Classification: Unclassified **Publication Date:** May 1999

Availability: CBIAC



The Battelle Memorial Institute staff, including the Polymer Center, made this reissue possible.

CB Terminology Handbook

CBIAC Product Number: HB-99-03

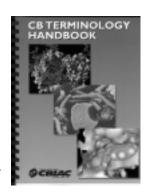
Product Category: Handbook

Media: Paperback **Price:** \$75.00

Distribution Limitation: Distribution Unlimited Classification: Unclassified **Publication Date:** June 1999

Availability: CBIAC

Description: This handbook, consisting of over 400 pages, provides identifying properties and characteristics of biological agents, chemical



agents, and toxins that are of concern within the chemical and biological defense (CBD) community. This handbook was compiled to provide an overall description and quick reference of the subject matter covered. The biological agent section contains information on the diseases associated with biological agents, classification of the biological agents, routes of infection, untreated mortality, incubation period, infective dose, and treatment for the biological agents. The chemical agent section contains information on the agent characteristics and effects, its chemical formula, chemical structure, Chemical Abstracts Service (CAS) Number, classification, chemical symbol, physical properties, and synonyms. The toxin section describes the toxin, the source of the toxin, its physical and chemical properties, route of entry, rate of action, toxicity, and treatment for the toxin.

Determination of Optimum Sorbent Material for Collection and Air Desorption of Chemical Warfare Agents

CBIAC Product Number: CR-99-09 Product Category: Critical Review

Media: Paperback **Price:** \$20.00

Distribution Limitation: Distribution

Unlimited

Classification: Unclassified **Publication Date:** January 1999

Availability: CBIAC

Description: This Critical Review addresses the properties of sorbent materials that are critical to a successful detection, including collecting the chemical warfare agent efficiently from the air and successfully desorbing the agent upon heating for subsequent detection by gas chromatography. This product contains both a detailed review of sorbent technologies and the results of experimental studies on chemical warfare agent sorbents.

Wide Area Decontamination: CB Decontamination

Technologies, Equipment and Projects

Distribution Limitation: Unlimited; Unclassified

CBIAC Product Number: CR-99-10

Price: \$60.00

Publication Date: April 1999

Availability: CBIAC Product Category: Critical

Review

Media: Paperback **Description:** This report

provides the reader with the results of a worldwide Chemical and

Biological Wide Area

Decontamination literature search and market survey along with a

detailed assessment of existing equipment and technologies that may meet the needs of both military and domestic preparedness communities. The assessment also includes a detailed examination of the possible benefits of combining the equipment and technologies identified in order to create hardware solutions for immediate implementation.



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"Performance Plan"

Continued from page 3

An additional challenge in the completion of the performance plan will be the identification of the human capital, financial, and resource challenges or external factors that limit the ability of the program to achieve its goals. As provided by public law, the CBDP has direct control over research, development, and acquisition (RDA) funds only. The CBDP does not control the operations and maintenance (O&M) budgets of the Services. O&M funds are used to support training, logistics, and acquisition of some CB defense equipment items, such as all medical chemical defense products. Also, the CBDP does not control the funding for the laboratory infrastructure that supports the research programs of the CBDP. This lack of complete budgetary control thus requires the continuing support and coordination with the military departments to ensure the data is provided in the performance plan.

Finally, the development of qualitative performance measures will present a challenge. The science and technology base program includes basic and applied research efforts which cannot always be measured in a quantitative way. The useful outcomes of basic research cannot be measured directly on an annual basis, because the usefulness of new basic knowledge is inherently too unpredictable. However, that does not mean that there are no meaningful measures of performance of basic research while the research is in progress (Ref. 8). As stated by the National Academies of Science, the most effective means of evaluating federally funded research programs is expert review. Expert review—which includes quality review, relevance review, and benchmarkingshould be used to assess both basic research and applied research programs. The CBDP uses an expert review process through an annual Technology Area Review and Assessment. The National Science Foundation (Ref. 9) and the National Institutes of Health (Ref. 10) have established qualitative performance measures for its programs. For the various parts of the CBDP science and technology base programs, performance measures will provide qualitative assessments that describe (1) when they are minimally effective, and (2) when they are successful. Thus an example of a qualitative performance measure for the science and technology base may state that an applied research program is minimally effective when it increases the knowledge base about agent effects and defense countermeasures, and that it is successful when it demonstrates new defensive countermeasures and transitions them to advanced development.

Doctrine development is another area suitable for qualitative performance measures. For example, doctrine development may be considered minimally effective when all doctrine documents are updated to support current strategy. It may be considered successful when documents identify areas for enhancing joint cooperation among the Services and develop doctrine to incorporate new technologies or concepts to counter emerging threats.

Preparing the Plan

The key to a successful plan will be the participation by all key stakeholders of the DoD Chemical and Biological Defense Program. An effective performance plan cannot be prepared solely within the Office of the Secretary of Defense, or any one organization. An effective plan will require the contributions,

reviews, and assessments of the Military Departments, the Joint Staff, Defense Agencies, and the Commanders-in-Chief of the Combatant Commands. Each organization will play different and important roles, including the development, review, and validation of (1) mission and goals, (2) program priorities, (3) mission priorities, (4) performance measures, and (5) performance data.

Programs are in place to respond to user needs and shortfalls. Oversight and management of the DoD CB Defense Program continue to improve. Significant progress has been made in implementation of management initiatives required. The Department is on the right track for progress in fielding needed improved CB defense equipment to our forces. The continued support of Congress and implementation of current plans will continue to improve joint force readiness.

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are welcome (evansd@anser.org).

NEW CBD INFORMATION RESOURCES

By Richard M. Gilman

Books

Geissler, Erhard and John Ellis, eds. **Biological and Toxin Weapons—Research, Development and Use from the Middle Ages to 1945.** London: Oxford University Press, 1999, pp. 276.

"This interdisciplinary book analyzes the origins of biological warfare planning and preparation up to the end of World War II. In the period between the world wars, growing understanding of the propagation of disease lead to the fear that potential enemies might be developing biological weapons, with several countries ultimately developing major biological warfare programs during World War II. The relevance of these programs to contemporary concerns is addressed and sheds light on arguments for adoption of a verification protocol to strengthen the 1972 Biological and Toxin Weapons Convention."

CB-172277 ISBN 0-19-829579-0 Order Department Oxford University Press 2001 Evans Road Cary, NC 27513 Phone: 1-800-451-7556

National Research Council. **Strategies to Protect the Health of Deployed U.S. Forces: Force Protection and Decontamination.** Washington, D.C.: National Academy Press, 1999, pp. 238.

This study was prepared as part of a response to the need for an evaluation of the U.S. military's ability to carry out missions in chemical/biological weapons environments. The U.S. Department of Defense commissioned the National Academy of Sciences to carry out four parallel studies in order to: (1) develop an analytical basis for assessing the risks to deployed troops; (2) review and assess technologies and techniques for detecting and tracking exposures to those risks; (3) review and assess physical protection and decontamination technologies; and (4) to evaluate and analyze "...medical protection protection, health consequences and treatment, and medical record keeping."

The focus of this report is on the physical protection and decontamination of deployed forces. Chapter-length discussions provided include such topics as: "Threat and Risk Assessment;" "Philosophy, Doctrine, And Training for Chemical and Biological Warefare;" "Physical Protection;" "Decontamination;" "Testing and Evaluation;" and "Assessment of Military Capabilities to Provide Emergency Response."

Includes numerous tables, figures and seven appendices.

Full text can be reviewed online at the National Academy Press website.

CB-169696 ISBN 0-309-06793-6 National Academy Press Box 285 2101 Constitution Ave., N.W. Washington, D.C. 20055 Phone: 1-800-624-6242 or 202-334-3313 http://www.nap.edu

Documents from the Web

Inglesby, Thomas V. et al. **Plague as a Biological Weapon.** JAMA. Vol. 283, No. 17 (May 3, 2000). http://jama.ama-assn.org/issues/v283n17/full/jst90013.html

"An aerosolized plague weapon could cause fever, cough, chest pain, and hemoptysis with sign consistent with severe pneumonia 1 to 6 days after exposure. Rapid evolution of disease would occur in the 2 to 4 days after symptom onset and would lead to septic shock with high mortality without early treatment. Early treatment and prophylaxis with streptomycin or gentamicin or the tetracycline or fluoroquinolone classes of antimicrobials would be advised." (authors' conclusions).

CB-173411 American Medical Association 515 S. State St. Chicago, Ill 60610 (312) 464-2402

Department of Defense. Chemical and Biological Defense Program—Annual Report to Congress, March 2000. http://www.nbcprotect.com/new/pdf.htm

"An (annual) assessment and a description of plans to improve readiness to survive, fight and win in a nuclear, biological and chemical (NBC) contaminated environment. This report contains modernization plan summaries that highlight the (Defense) Department's approach to improve current NBC defense equipment and resolve current shortcomings in the program." Chapters include "DOD Chemical and Biological Defense Program Management and Oversight;" "Non-Medical NBC Warfare and Defense Requirements and R & D Program Status;" "Medical NBC Warfare Defense Requirements and R & D Program Status;" "NBC Defense Logistics Status;" "NBC Defense Readiness and Training;"and "Status of DOD Efforts to Implement the Chemical Weapons Convention."

There are nine annexes. Annexes A through D provide detailed information on NBC defense equipment. Annex E summarizes the funding of the DOD's CBDP. Annex F provides a list of NBC-related websites. Annex G addresses the issue of the use of human subjects in the chemical and biological defense program. Annex H provides the text of congressional language mandating this report.

Includes numerous tables, diagrams, photos and an index. Report is approximately 260 pages long.

"New CBD Information Resources" Continued from page 10

Journals

Frazier, Thomas and Drew Richardson, eds. Food and Agricultural Security: Guarding Against Natural Threats and Terrorist Attacks Affecting Health, National Food Supplies, and Agricultural Economics. Annals of the New York Academy of Sciences. Vol. 894 (1999), pp. 233.

"Addresses issues concerning the possibility of bioterrorism against agricultural crops and domestic animals. A unique feature of the book is an industry-government dialogue concerning defense of these vulnerable resources. Presents papers at a conference entitled International Conference on Food and Agricultural Security held by the US Department of Agriculture, FBI Scientific Laboratory, the DoD Veterinary Service Activity, the American Veterinary Medical Association, the Louisiana State University, and the National Consortium for Genomic Resources Management."

CB-172270 ISBN 1-57331-230-4 New York Academy of Sciences 2 East 63rd Street New York, N.Y. 10021 Phone: 1-800-843-6927

Phone: (212) 838-6727 ext. 603

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Journal of Applied Toxicology. Vol. 19, Supplement 1 (December 1999), pp. 95.

This is a special issue on, "the development of medical countermeasures to botulinum toxins and topical skin protectants against nerve and vesicating agents." The medical countermeasures discussed include "Promising New Approaches for Treatment of Botulinum Intoxication," "Rapid Microplate Assay for Monitoring Botulinum Toxin B Catalytic Activity," "Historical Overview of Topical Skin Protectant Development," "Development of Reactive Topical Skin Protectants Against Sulfur Mustard and Nerve Agents," and "Analysis and Stability of the Candidate Sulfur Mustard Decontaminant S-330."

CB-172215 John Wiley & Sons 605 Third Avenue New York, N.Y. 10158-0012 Phone: (212) 850-6645

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THE U.S. ARMY MEDICAL RESEARCH INSTITUTE OF CHEMICAL DEFENSE

Bioscience Review 2000

By Cindy Kronman

The U.S. Army Medical Research

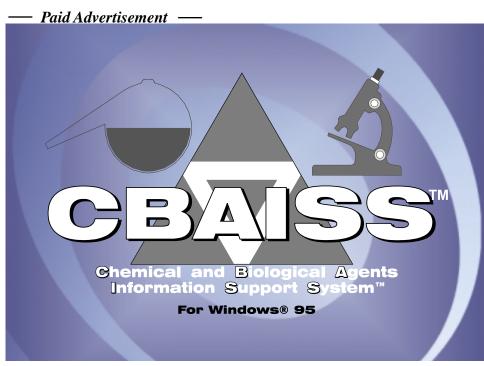
Institute of Chemical Defense
(USAMRICD) hosted its twelfth Medica
Defense Bioscience Review at the Hunt
Valley Marriott from 4-9 June. The confe
theme, "Advancing Medical Countermeasures for the
Millennium," drew nearly 400 subject matter experts from the
Department of Defense, academia, industry and many allied countries. Keynote addresses, platform talks, panel discussions, and
poster presentations detailed the latest research on chemical and
biological warfare agents and their medical countermeasures.

Col. James S. Little, commander, USAMRICD opened the meeting on 5 June. Next, Maj. Gen. John S. Parker, commander, U.S. Army Medical Materiel Command (USAMRMC), spoke about USAMRMC and its role in shaping the world and the future of the world through its successes. Maj. Gen. Parker offered the following perspective at the conclusion of his address:

"If just what I talked to you about today could be projected over the globe in the next 10-20 years, think what could be. Diseases like malaria and HIV could be suppressed. We could encourage civilian organizations to use our already developed deployable hospitals with worldwide connectivity via teletechnologies to bring more sophisticated medical care to some tough spots on the globe. We will reduce the chemical/biological threat with our detectors, diagnostic equipment, vaccines, pretreatments, treatments, and preventive measures. The mortality of trauma may be reduced. Surely you must feel as I do everyday: the people of MRMC are shaping the globe."

Conference sessions the first day discussed the latest efforts to develop enzyme scavengers to protect against the effects of nerve chemical warfare agents. The second day focused on current research on nerve agent-induced seizures and the development of an advanced anticonvulsant; and the effects of low dose, chronic exposure to chemical warfare agents. Day three began with discussions on vesicating agents (specifically sulfur mustard) and the development of reactive topical skin protectants. The fourth day, was devoted to presentations on medical product development. Chemical casualty care doctrine and current research toward the development of therapies for toxins wrapped up the fifth and last day of the conference. At the traditional conference banquet, Dr. Kelley Ann Brix, assistant chief, Research and Development Officer, Department of Veterans Affairs, gave the keynote address, "Gulf War Illness 10 Years Later, What We Know."

The USAMRICD's bioscience reviews challenge attendees to explore and develop better countermeasures, ensuring that U.S. and allied service members will have the best possible medical protection against the threat of chemical and biological warfare agents.



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