Chemical and Biological Defense Program (CBDP) Overview

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Advanced Planning Briefing for Industry (APBI)

Aberdeen Proving Ground, MD

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This briefing is:

UNCLASSIFIED
CBDP Overview - Agenda

- NCB Organization
- CBDP Background and Program Overview
- Implementing Strategic Guidance
- CBDP Enterprise
- Objectives, Priorities, and Methodologies
- CBDP Investments
DoD CBDP Background

- Established by Congress - 1994 National Defense Authorization Act, Public Law 103-160; Title 50, Chapter 32, Section 1522
- Consolidates all DoD Chemical and Biological (CB) Defense efforts into defense-wide funding accounts overseen by a single office within the Office of the Secretary of Defense
- Closely coordinates with Defense Advanced Research Projects Agency (DARPA) CB Defense efforts

**Vision:** A DoD that addresses CBRN threats and minimizes their effects. (CBDP Strategic Plan, 15 June 2012)

**Mission:** Enable the Warfighter to deter, prevent, mitigate, respond, and recover from CBRN threats and their effects as part of a layered, integrated defense (CBDP Strategic Plan, 15 June 2012)
Mission: Enable the Warfighter to deter, prevent, protect against, mitigate, respond to, and recover from chemical, biological, radiological, and nuclear (CBRN) threats and effects as part of an integrated, layered defense.

**Situational Awareness**
- Data Analysis, Management, and Decision Support
- Diagnostics

**Protection**
- Vaccines
- Pre-treatments
- Collective Protection
- Individual Protection

**Hazard Mitigation**
- Decontamination
- Therapeutics
- Tactical Disablement

**CBDP Develops and Procures Enabling Capabilities for All Services**
Implementing Strategic Guidance

Accomplish these goals while balancing risk in four categories: Operational, Force Management, Institutional, and Future Challenge

- **DoD CWMD Priority Objectives**
  - Reduce Incentives to Pursue, Possess, and Employ WMD Early Warning
  - Increase Barriers to the Acquisition, Proliferation, and Use of WMD
  - Manage WMD Risks Emanating from Hostile, Fragile, or Failed States and Safe Havens
  - Deny the effects of Current and Emerging WMD Threats through Layered, Integrated Defenses

- **NCB Strategic Planning Guidance Objectives**
  - Ensure the safety, security, reliability, and survivability of the U.S. nuclear deterrent
  - Prevent the spread, protect against, and respond to weapons of mass destruction threats
  - Implement nuclear, chemical, and biological treaties and agreements
  - Enhance enterprise effectiveness, efficiency, and accountability

- **CBDP Goals**
  - Equip the Force
  - Prevent Surprise
  - Maintain Infrastructure
  - Lead the Enterprise

- **DASD Priorities**
  - Early Warning
  - Avoid/Prevent/Prepare for surprise
  - Integrated Layered Defense
CBDP Enterprise

Oversight and Guidance - OASD(NCB/CB)

Oversight – ARMY (Executive Agent)

Requirements

Basic & Applied Research

Systems Acquisition

Procurement

Sustainment

Services

Joint Science and Technology Office

Joint Program Executive Office (JPEO) for CBD

Services

Joint Staff

USA Medical Research Institute of Infectious Disease

USA Medical Research Institute of Chemical Defense

Edgewood Chemical and Biological Center

DARPA

West Desert Test Center (Dugway)

Interagency

International Partners

Industry

Academia
Chemical and Biological Defense Priorities

We have three key objectives:

• **Prepare for Surprise**: Develop a detailed understanding of current CB threats and track advancements in science and technology to anticipate future threats and to seize technical opportunities for CB defensive programs.
  • Collaborate with the Intelligence Community to identify current threats early
  • Characterize and forecast emerging, advanced, and non-traditional threats
  • Maintain a robust, proactive technology watch

• **Advance Early Warning**: Ensure early detection of any use of CB agents, immediate and appropriate sharing of such information, and accurate forecasts of impacts.
  • Develop detection and diagnostic systems for CB agents that can be used in the field and in garrison
  • Build networked systems that integrate information from CWMD and health sources
  • Ensure processes are in place for the effective sharing of critical information

• **Protect the Force**: Develop and deploy effective materials, products, technologies, and medicines to minimize the effects of any CB agent.
  • Ensure CBDP invests in capabilities that can be integrated into Warfighter CONOPs and training
  • Develop flexible and broad-spectrum technologies – e.g., protective equipment, medical countermeasures, and decontamination – for diverse user communities
  • Explore how capabilities can be combined to optimize outcomes
DASD Priorities

• Early Warning
  • Information Management to support timely Decision Making
  • Advanced Diagnostics

• Avoid/Prevent/Prepare for Surprise
  • Prepare for Emerging Threats
  • Non-traditional Agents and Synthetic Biology

• Integrated Layer Defense
  • Medical Countermeasures
  • Individual and Collective Protection
  • Detectors and Sensors
  • Decontamination
DASD Methodologies

- **Engage with End-Users**
  - We work for the warfighter, the first responder, the humanitarian assistance provider. Their views and requirements are paramount.
  - Engage end-users at the beginning of the design process. “User-centric Design”
  - Foster “Scientist in the Foxhole” and “Soldier at the Lab Bench” processes.

- **Streamline Business Processes**
  - Improve transition process from 6.1 through Acquisition and Sustainment.
  - Facilitate innovation.
  - Implement all phases of BBP at all possible opportunities.
  - Eliminate excess Program Management processes.

- **Balance Internal and External Engagements**
  - International: Focus on collaborative R&D, Testing and Acquisition to realize a Return on Investment of time, travel and funding.
  - Interagency: Eliminate duplication and clearly define position/distinction in cases of perceived duplication.
  - Align with GAO best practices for interagency collaboration:
    - *leverage available resources*
    - *establish mutually reinforcing joint strategies*
    - *develop compatible policies, procedures, and other tools to operate across agency boundaries*
  - Intelligence: Improve feedback loop between Analysts and Subject Matter Experts.
  - Infrastructure: Maintain physical and intellectual capital while fostering innovation and new performers.
### FY17-21 Presidential Budget

#### Funding ($k)

<table>
<thead>
<tr>
<th>Year</th>
<th>RDTE Management Support</th>
<th>Advanced Development</th>
<th>Science &amp; Technology</th>
<th>Procurement</th>
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**Note:** The budget table and graph illustrate the allocation of funds across different categories from FY17 to FY21.
The FY 2017 Research, Development, Test and Evaluation (RDT&E) budget request supports key efforts including:

- Medical countermeasures addressing high priority biological threats as well as traditional and non-traditional chemical agents.

- Advancing environmental (detectors and sensors) and medical surveillance (diagnostic and analytical devices) capabilities providing enhanced situational awareness.

- Chemical and biological defense research, development, and test infrastructure and operations.

- Biosurveillance, warning & reporting, and modeling and simulation capabilities.

- Advancing protection, threat agent sciences, medical countermeasures, detection, and hazard mitigation capabilities to defend against non-traditional agents.

- Personnel/collective protection and hazard mitigation capabilities.

- Advancing fundamental knowledge and experimental research in the life and physical sciences.
FY17 Procurement Key Efforts

- **The FY 2017 Procurement budget request supports key efforts including:**
  - Modernized respiratory and ocular protection for ground and air forces.
  - Procure CBRN Dismounted Reconnaissance Sets, Kits, and Outfits (DR SKO) which allows Warfighters to perform CBRN dismounted reconnaissance, surveillance, and site assessment of WMD suspect areas not accessible by traditional CBRN reconnaissance mounted platforms.
  - Procure Common Analytical Laboratory Systems providing a modular, scalable and adaptable analytical capability for a variety of operating and environmental conditions.
  - Procure modernized Collective Protection capabilities (Joint Expeditionary Collective Protection and CB Protective Shelters).
  - Procure the CBRN Uniform Integrated Protection Ensemble supporting enhanced protection for special purpose units.