Department of Defense
Chemical Biological Defense Program

Mr. Jean D. Reed
Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense/Chemical Demilitarization DATSD (CBD/CD)

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Chemical Biological Defense Program (CBDP) Overview

- Background
- Organization
- Global Security Environment
- Strategic Priorities
- CBDP Funding
- Major Thrust Areas
- Way Ahead
- Measures of Success
Established by Congress in 1994, Re-organized in 2003

Consolidated all DoD CB defense efforts into defense-wide funding accounts overseen by a single office - ATSD(NCB) – within the Office of the Secretary of Defense

**Vision:** to ensure DoD operations are unconstrained by Chemical, Biological, Radiological, and Nuclear (CBRN) effects

**Mission:** to provide CBRN Defense capabilities in support of the National Military Strategies

Realizing the vision and mission of the CBDP will ensure we sustain our competitive advantage
DoD Lead for Interagency Chemical and Biological Defense Activities

CBDP Coordinates Continuously With:

- Counterproliferation Program Review Committee (CPRC)
- Technical Support Working Group (TSWG)
- U.S. Coast Guard
- Centers for Disease Control (CDC)
- National Institute of Allergies and Infectious Diseases (NIAID)
- Department of Homeland Security (DHS), S&T Directorate

CBDP Coordination/Cooperation Exists With:

- U.S. Department of Agriculture (USDA)
- Office of Science & Technology Policy
- Department of Health and Human Services (DHHS)
- National Security Council (NSC)
- Department of Justice
Global Security Environment

Threat
- Pervasive
- All types of conflict
- Every Possible Region
- Asymmetric (seeks WMD)
- Adaptive

Overseas Contingency Operations:
Priority to Maintaining Homeland Defense and Security

Major Challenges
- Traditional
- Irregular
- Catastrophic
- Disruptive

Multitude of Stakeholders
- Joint
- Interagency
- International

Failure to address this environment with the right mix of CBRN capabilities will increase risk to the Force and the Homeland
DoD Strategic Priorities in CWMD

• Increase barriers to WMD proliferation and use

• Develop layered integrated WMD defense

• Improve ability to identify and mitigate emergent WMD threats

• Neutralize WMD threats emanating from failing, fragile states
ATSD(NCB)’s Strategic Guidance for the CBDP

• Provide a balanced CBDP to support National Military Strategies and Departmental objectives to improve CBRN Defense readiness and reduce operational risk.

• Build a comprehensive fiscal plan wherein budgets flow from programs, programs from capability needs, capability needs from missions, and missions from national security objectives.

• Provide operational capabilities to the Joint Force for CBRN defense.

• Define and develop capabilities to increase significantly our ability to dissuade, deter, defend, and defeat.

• Sustain the capability of the Joint Force to respond in any CBRN crisis.

• Improve management practices to fulfill enterprise strategic roles and missions.
Trends:
• Total CBDP funding steadily increases from FY96, but begins to stabilize at approximately $1.6M in FY08.
• In FY06, CBDP RDT&E funding increased significantly as a result of Program Budget Decision (PBD) 753/746.

FY10 President’s Budget (PB) 
CB Defense Total 
$1,574M
Chemical Biological Defense Program
Based on FY10 PB Request
$1.573B
FY10 RDT&E Management Support ($106.4M)

Major Range and Test Facility Base (Dugway Proving Ground)
$54,789
51%

Management Support
$51,778
49%

Includes:
• Joint Requirements
• Joint Concept Development & Experimentation Program
• Joint Doctrine & Training Support
• Information Systems
• RDT&E Management Support
• Laboratory Support
CBDP Thrust Areas

• Emerging Chemical Threats
• Emerging Biological Threats
• TMTI
• Consequence Management
• Preparedness
• Training
Traditional Threats
- Traditional chemical warfare threats (nerve, blood, and blister)
- Agents designed for military operations/applications

Emerging Threats
- Nontraditional CBRN hazards
- Toxic industrial materials (TIM) hazards
- Toxic Industrial Chemicals (TIC)

Enhanced Threats
- Small levels of CBRN hazards, not necessarily weaponized, caused by a terrorist incident that may cause mass casualties.
- Next generation agents

Advanced Threats
- Unforeseen CB agent threats
- Asymmetric applications and/or engagements
Traditional Threats
- Intracellular bacterial pathogens
  - Anthrax
  - Plague
  - Tularemia
- Viral hemorrhagic fevers
  - Ebola
  - Marburg
  - Junin

Emerging Threats
- Natural and emerging diseases:
  - H1N1
  - Cholera
  - Pandemic flu
  - SARS
  - Drug-resistant TB
  - Malaria
- Multi-drug and vaccine resistant pathogens

Enhanced Threats
- “Bioprospecting” to find particularly virulent strains in nature
- Cultivating particularly virulent strains of pathogens in the laboratory

Advanced Threats
- Adding, deleting or mutating genes to engineer pathogens that are more resistant, transmissible and virulent
- Creating viruses de novo
Transformational Medical Technologies Initiative (TMTI)

Provides innovative solutions to the Warfighter by:

- Developing broad-spectrum countermeasures and novel technology platforms (*one drug, many bugs*)
- Pursuing countermeasures targeting common disease pathways or enhance the host’s immune system
- Integrating best efforts within government, academia, DoD, biotech industry, and small and large pharmaceutical corporations
- Providing seamless “end-to-end” product development
- Eliminating capability gaps by adding promising candidate technologies to the pipeline
- Using milestone-driven management to select the highest-quality performers with the best value products aligned with the program mission
Integration of Policy, Guidance and Capability Solutions

Fielding at 37 Installations in FY2010-FY2011
Domestic CM Response Forces

State Response (Title 32)
- National Guard Civil Support Team (CST)
  - 22 Personnel
  - Identification
  - Assessment
  - Advisement (55)

Federal Response (Title 10)
- National Guard CBRNE Enhanced Response Force Package
  - ~186 Personnel
  - Search/Rescue
  - Decontamination
  - Emergency Medical (17)

CBRNE Consequence Management Response Force
- CCMRF
  - HQ / C2 JTF-CS
  - TF Response (IRF)
  - TF Medical

CBIRF
  - Triage / Treatment
  - TF Logistics
  - Trans/Log Support
  - TF Aviation (3)

Employable first 24-48 hours after incident

48+ hours after incident
Fielding improved Analytical and Incident Management capabilities to NGB / CSTs

- Expanded TIC/TIM detection capability
- Broader range of sample matrixes
- Improved communication capabilities including secure video, satellite communications, and secure VTC

Equipping and Fielding 20th Support Command WMD CE, TEU, Nuclear Disablement Teams, and Mobile Laboratories

- Provided 20th with advanced mobile Chemical, Biological, Radiological and Explosive identification capability for short-term and extended missions, supporting DHS and contingency operations

Fielded 81 Chemical / Biological Incident Response trailers to the U.S. Army Reserve Reconnaissance / Decontamination Platoons

- Providing rapid deployability for Army Reserves to support civilian authorities in response to a CBRN event

Fielded 12 DRSKO interim systems to NORTHCOM and Army Units in response to a Joint Urgent Operation Needs Statement (JUONS)

- Providing Dismounted Reconnaissance Sets, Kits and Outfits
- Providing Monitor and Survey Sets, Kits and Outfits

Enhancing Domestic Response and Reserve Capability
Preparedness Assessment – Process Strategies & Linkages

CBRN Defense Preparedness Strategy

Integrated capabilities based assessment with metrics aligned to core capabilities
Training

• DoD CBRN Doctrine, Training, Leadership, and Education (DTL&E) Strategic Plan (Dec 2008)

• DoD CBRN Doctrine, Training, Leadership, and Education (DTL&E) Implementation Plan (May 2009)

• Establishes Four Objectives:
  – Improved, Integrated, and Unified CBRN Defense Operations
  – Sustained Adaptive and Innovative Environment
  – Aligned CBRN Defensive Training Infrastructure
  – Established Performance-Based Management Process

• Way Ahead:
  – Develop & Execute a mitigation strategy for validated CBRN defense gaps and shortfalls.
  – Initiate changes to policy, authority, and guidance documents, as appropriate.
  – Coordinate DoD-wide CBRN defense preparation and submission of the President’s Budget and POM resource decisions.
  – Continue assessments to identify required policy, authority, guidance, and direction to enhance Joint operations.
To execute effectively for the next 5 to 10 years, the CBDP depends on continued Congressional support in three priority areas:

- Consistent resources for the overall program to ensure that, year after year, the CBDP is able to field improved defensive capabilities essential to ensuring our military can operate in any environment, unconstrained by CBRN threats.

- Adequate funding for the TMTI to exploit fully the advanced S&T innovation necessary to counter successfully future genetically engineered biological weapons and any newly emergent or bioengineered pathogen. This will improve the nation’s military health infrastructure to deal with changing and emerging threats.

- Adequate far-term investment in the RDT&E infrastructure to enhance our RDT&E capabilities, including the modernization and construction of laboratories and test facilities needed to ensure the efficient and effective development of advanced countermeasures against current and emerging CBRN threats. These threats include both traditional military threat agents and emerging chemical threats.
Our Measure of Success

Our Soldiers, Marines, Sailors, and Airmen continue to lead the world in CBRN defense capabilities:

- Obtain the necessary DOTMLPF integrated solutions for components, systems, and systems-of-systems
- Continue to develop new defensive capabilities in anticipation of the continued evolution of WMD threats
- Provide CBRN Defense capabilities in support of the National Military Strategies
- Realize the vision to ensure that DoD operations are unconstrained by CBRN effects through that same integration

Inherent responsibility of the CBDP Enterprise is to create a Joint Force with Warfighters better organized, trained, equipped, and resourced than in the past to deal with the WMD threat
Questions