Department of Defense Chemical and Biological Defense Program Overview

Fiscal Year (FY) 2013 Budget Estimate

The Chemical and Biological Defense Program's (CBDP) Fiscal Year (FY) 2013 President's Budget provides a framework for the allocation of fiscal resources against valid capability requirements to achieve a strategy-driven balance of risk in accordance with National Defense Strategies, Department-level objectives, and Service force development priorities.

The overarching goal of the CBDP's FY 2013 President's Budget is to develop and field improved chemical, biological, and radiological (CBR) defense capabilities to the Joint Force in support of the 2010 Quadrennial Defense Review (QDR), Defense Planning Guidance (DPG), the CBDP FY 2012-2017 Program Strategy Guidance (PSG), and warfighter priorities. This budget will strengthen and expand programs that prevent, protect, mitigate, respond to, and recover from CBR threats as part of a layered, integrated defense and improve the warfighter's ability to find, track, interdict, and eliminate CBRN weapons or emerging threats

Focused efforts within this budget are captured in a number of emphasis areas that are a collection of mutually-supporting S&T efforts, systems acquisition programs, and T&E capabilities aimed at delivering comprehensive CBR defense capabilities (prevent, protect, mitigate, respond, and recover) to the warfighter. Emphasis areas are derived from National Strategies, senior leader guidance, and CBDP community priorities. Four key emphasis areas are: medical countermeasuress (MCMs), diagnostics and analytics, global biosurveillance, and non-traditional agent (NTA) defenses.

MCM Emphasis Area

The National Strategy for Countering Biological Threats emphasized the importance of developing MCMs to reduce impacts of outbreaks of infectious disease whether of natural, accidental, or deliberate origin. Homeland Security Presidential Directive (HSPD)-10, "Biodefense for the 21st Century," and HSPD-18, "MCMs Against Weapons of Mass Destruction," directed U.S. government agencies to "conduct joint development and procurement of medical countermeasures" throughout the Interagency and with international partner nations.

MCMs include capabilities to protect the warfighter against CBR threats and mitigate illness, suffering, and death. . MCMs will provide end-to-end countermeasures against emerging infectious diseases, genetically engineered threats, naturally occurring biological phenomena, novel chemical agents, and radiological threats.

Contributing programs or efforts include core medical efforts aimed at developing and delivering pretreatments/prophylaxes and therapeutics to the warfighter. MCMs in development by the CBDP traditionally fall into one of two categories: 1) pretreatments/prophylaxes such as a plague vaccine and 2) post-exposure, pre/post-symptomatic therapeutics such as the Hemorrhagic Fever Virus therapeutic.

This area also includes the DoD response to an Administration request to complete the following: (1) establish agile and flexible Advanced Development and Manufacturing (ADM) capabilities to support the rapid and efficient development, licensure, and production of MCMs; (2) fund S&T efforts to develop the next generation of manufacturing systems and regulatory science technologies; and (3) establish an MCM T&E facility to address national demand for animal T&E studies and related requirements. These efforts build on existing MCM initiative and programs at the Department of Health and Human Services (Centers for Innovation in ADM) and DoD.

The CBDP is currently charged with addressing all of the components listed above in order to achieve the DoD objectives, streamline inter-related ADM activities, and advance and integrate new manufacturing methods that may increase yield and reduce production time of priority MCMs. Initially, these needs were first addressed by the CBDP during FY 12 and resulted in a core level of funding needed to establish the S&T and advanced development components as part of the general ADM capability (formerly titled MCMI).

Diagnostics and Analytics Emphasis Area

Diagnostic and analytic-related efforts are a centerpiece of the CBDP's comprehensive capability to counter CBR threats and characterize CBR attacks or events by diagnosing causative agents of disease and providing situational awareness of threat agents in the environment. The CBDP has resourced a robust portfolio that includes S&T of CBR diagnostics, systems development and procurement of point-of-need/point-of-care diagnostic equipment, and continuous assay development and procurement to support fielded and developmental diagnostic or analytic platforms (i.e., JBAIDS (Joint Biological Agent Identification and Diagnostic System), NGDS (Next Generation Diagnostic System), and CALS (Common Analytical Laboratory System)).

Global Biosurveillance Emphasis Area

The CBDP contributes to the DoD's efforts to provide a layered and integrated response to the biological defense challenges facing the warfighter and homeland; the ability to strengthen and integrate capabilities that provide awareness of endemic pathogens in the environment along with warning and characterization of biological attacks or events (analysis and diagnostics) for decision-making; the ability to find, track, interdict, and eliminate biological weapons and threats directed against our warfighters and citizens; and the means to strengthen our ability to conduct forensics and attribution and to prevent re-attack.

The CBDP capabilities represent both pre-event (early warning and indications) and post-event (effective consequence management and persistent surveillance for re-emergence) activities necessary to improve early warning and characterization of man-made (i.e., genetically engineered/synthetic biological agents) and naturally occurring (i.e., emerging infectious diseases and the re-emergence of pathogens from zoonotic reservoirs) disease outbreaks in near real-time. Included in these efforts are the Critical Reagents Program, Joint Biological Point Detection System, Biosurveillance, the Next Generation Diagnostics System, and the Joint Biological Agent Identification and Diagnostic System.

Non Traditional Agent (NTA) Defense Emphasis Area

The 2010 QDR directed the DoD to increase resources for R&D of countermeasures and defenses to NTAs in concert with interagency partners. The CBDP works to:

- **Develop technologies that address existing and emerging NTAs in the near-, mid-, and far-term, including the ability to address multiple capability gaps and provide multi-layered and integrated defenses to NTAs**
- **Strengthen and integrate capabilities that provide warning of attack, barrier protection, and both pretreatments/prophylaxes and post-exposure treatments**
- **Field faster, more flexible consequence management capabilities on the battlefield and in the homeland**
- **Develop capabilities, policies, and plans that enable us to act swiftly to save lives and restore the effectiveness of contaminated areas.**

In order to adequately align efforts with the four emphasis areas, CBDP S&T efforts reported in the FY 2013 budget estimate have been restructured from previous budget estimates. Specific realignments are noted throughout Budget Activities (BAs) 1 through 3.

This FY 2013 budget estimate achieves a structured, executable, and integrated medical and non-medical joint CB Defense Program balanced to address national priorities. The CBDP remains committed to establishing the optimal balance between the near-term requirement to field modernized equipment to the field, and the need to protect and replenish our far-term investment in technologies.