



Chemical and Biological Defense Program

D. Christian Hassell, PhD

Deputy Assistant Secretary of Defense for
Chemical and Biological Defense

August 2017



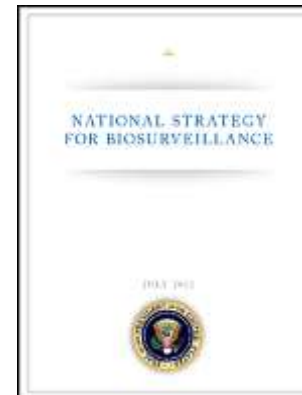
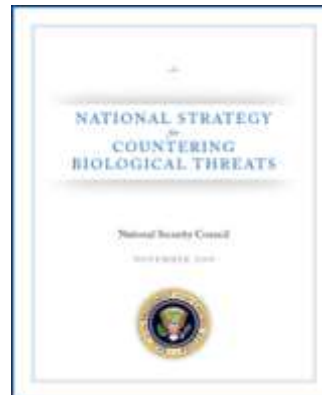
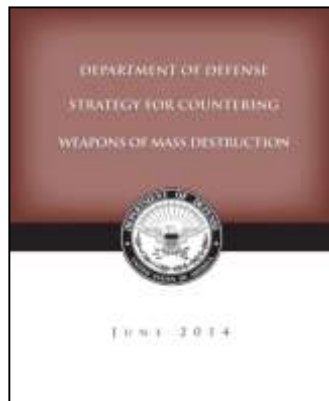
CBDP Overview

- Mission
- Organization
- Strategy
- Partnerships
- Budget



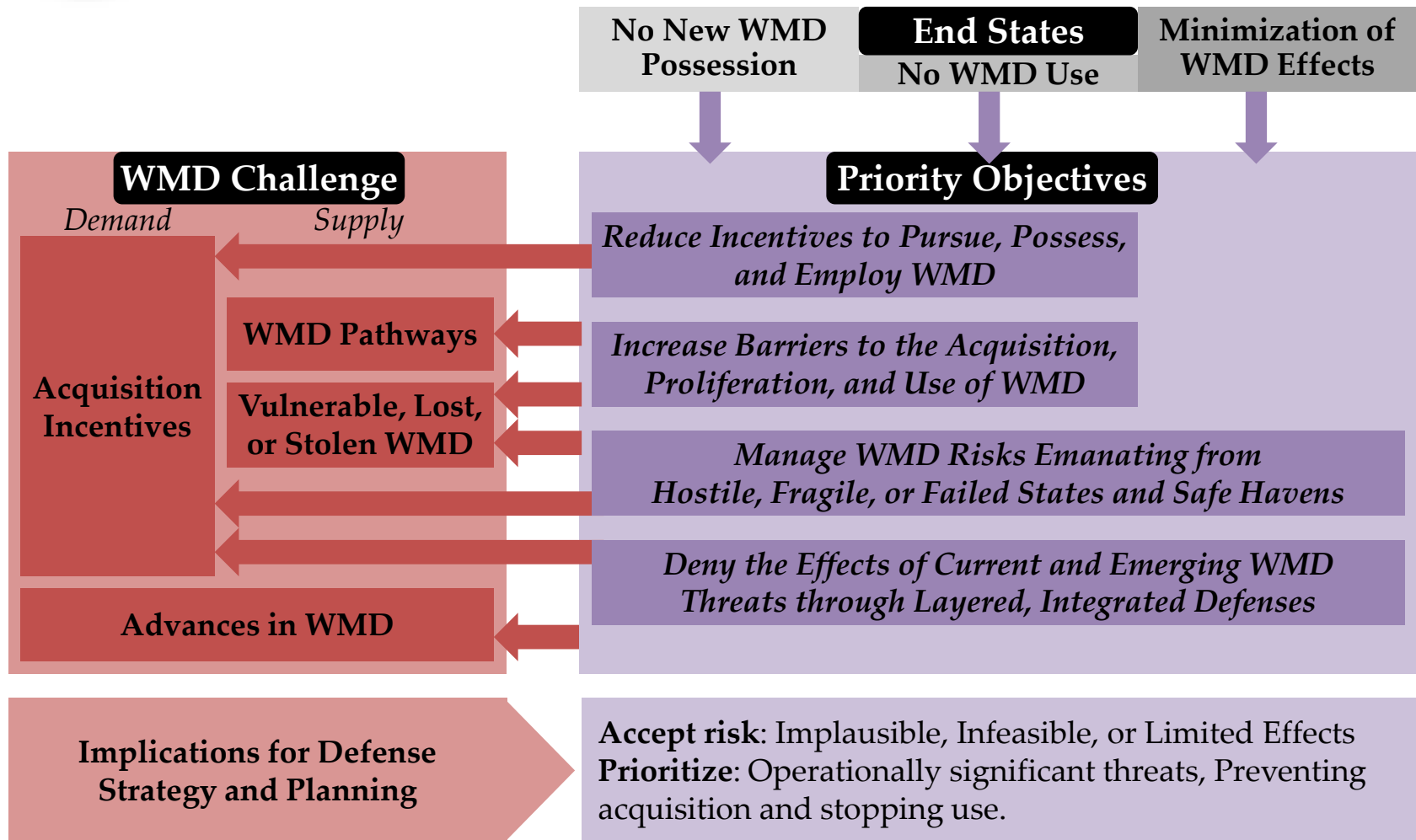
Chemical and Biological Defense Program

- Established by 50 USC 1522 (PL 103-160) to integrate research, development, and acquisition of capabilities to provide all Services with effective and integrated chemical and biological (CB) defense detection, protection, and response capabilities.
- Remains relevant today as fiscal environment causes Services to cut perceived lower priority efforts. One of the main factors for establishing this program in 1993 was that Services were not adequately funding this area.
- Must consider National, Departmental, and Service priorities
 - Responds to strategic National priorities outlined in the *2014 Quadrennial Defense Review*, the *National Strategy for Countering Biological Threats* (November 2009), and the *National Strategy for Biosurveillance* (July 2012), among others





CWMD Strategy: The Challenge, End States, and Priority Objectives





CBDP: A Systems Approach





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

Services

Joint Staff

Joint Program Executive Office (JPEO) for CBD

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 Strategy: Three Key Objectives

- **Prepare for Surprise:** Understanding of current CB threats and seize technical opportunities.
 - Collaborate with the Intelligence Community to identify threats
 - Characterize and forecast emerging, advanced, and non-traditional threats
 - Maintain a robust, proactive technology watch
- **Advance Early Warning:** Ensure early detection, information sharing and forecasts of impacts.
 - Develop detection and diagnostic systems for forward/field use
 - Build networked information systems that integrate CWMD and health sources
 - Ensure processes are in place for 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.
 - Invests in capabilities that are 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



CBD Strategy: Methodology

- Promote innovation *for sustainable solutions*
- Engage with end-users
- Streamline Business Processes



Secretary of Defense Mattis' Guidance

Phase 1: Improve warfighting readiness

Phase 2: Achieve program balance

Phase 3: Build capacity and improve lethality

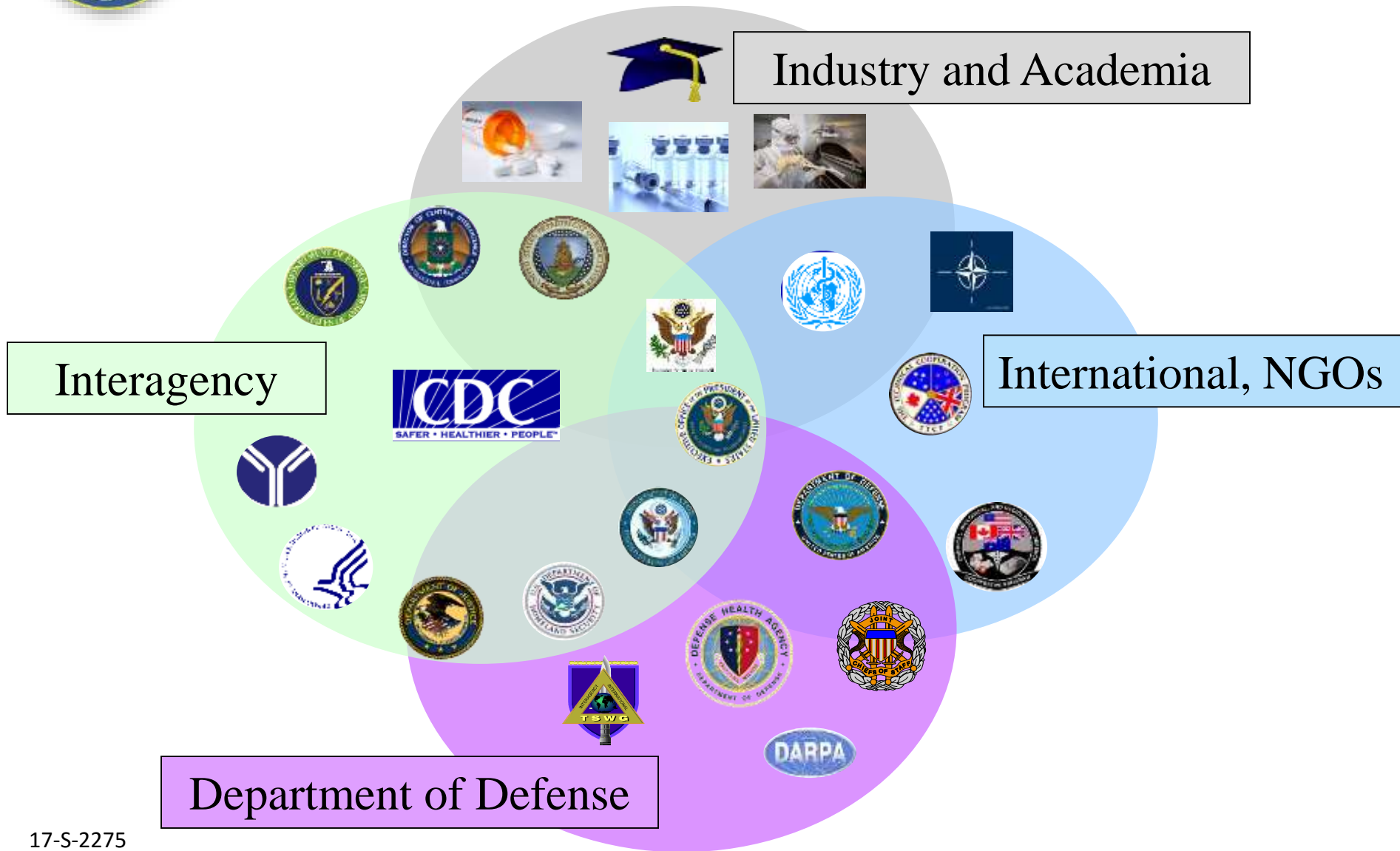
- Strengthen alliances and partnerships
- Reform Business Practices

“[The National Defense Strategy] will determine an approach to enhancing the lethality of the joint force against high-end competitors and the effectiveness of our military against a broad spectrum of potential threats.”

Source: <https://www.defense.gov/News/Article/Article/1067243/mattis-issues-budget-guidance-says-2017-submission-will-rise/>



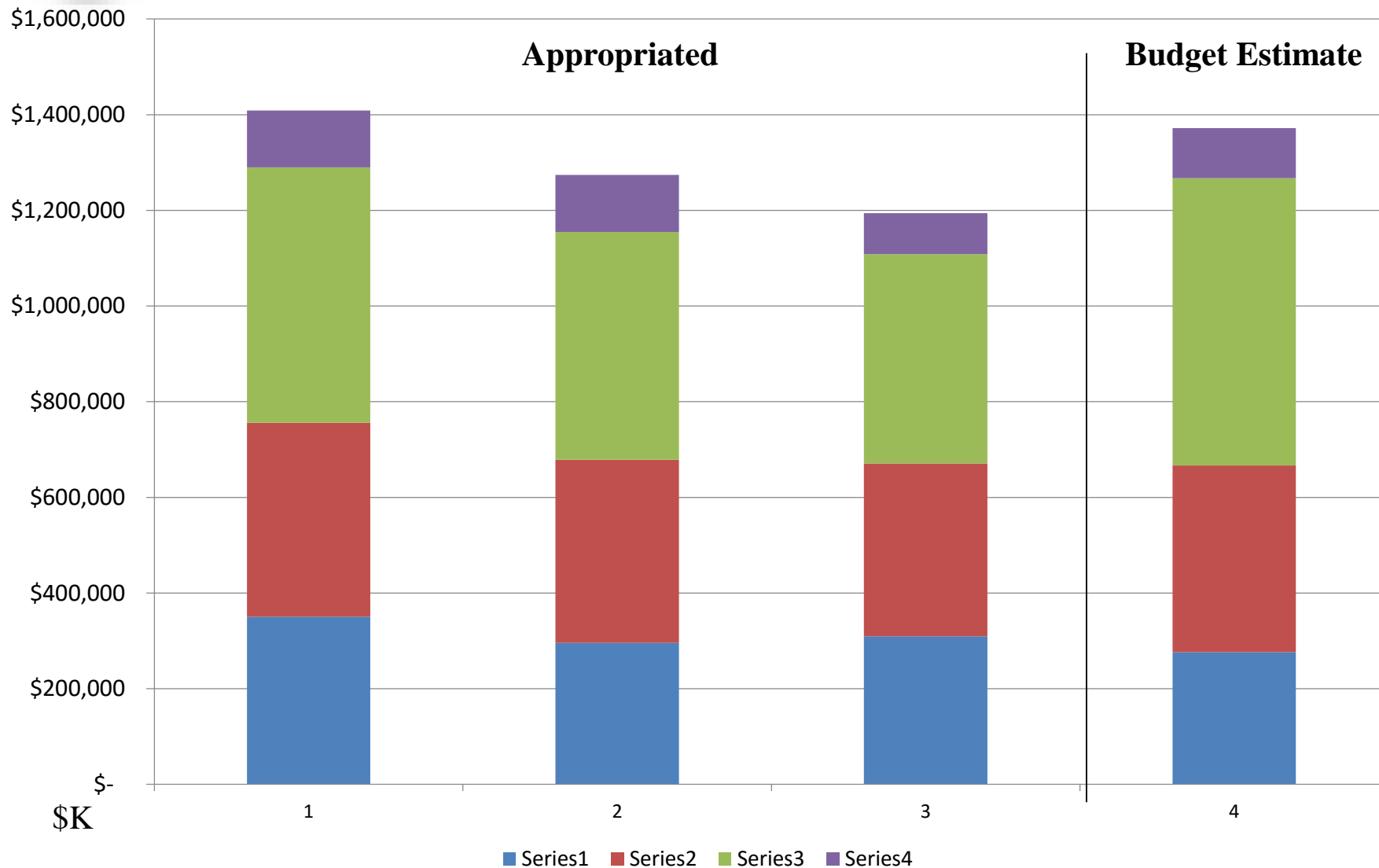
Coordination, Cooperation, Integration





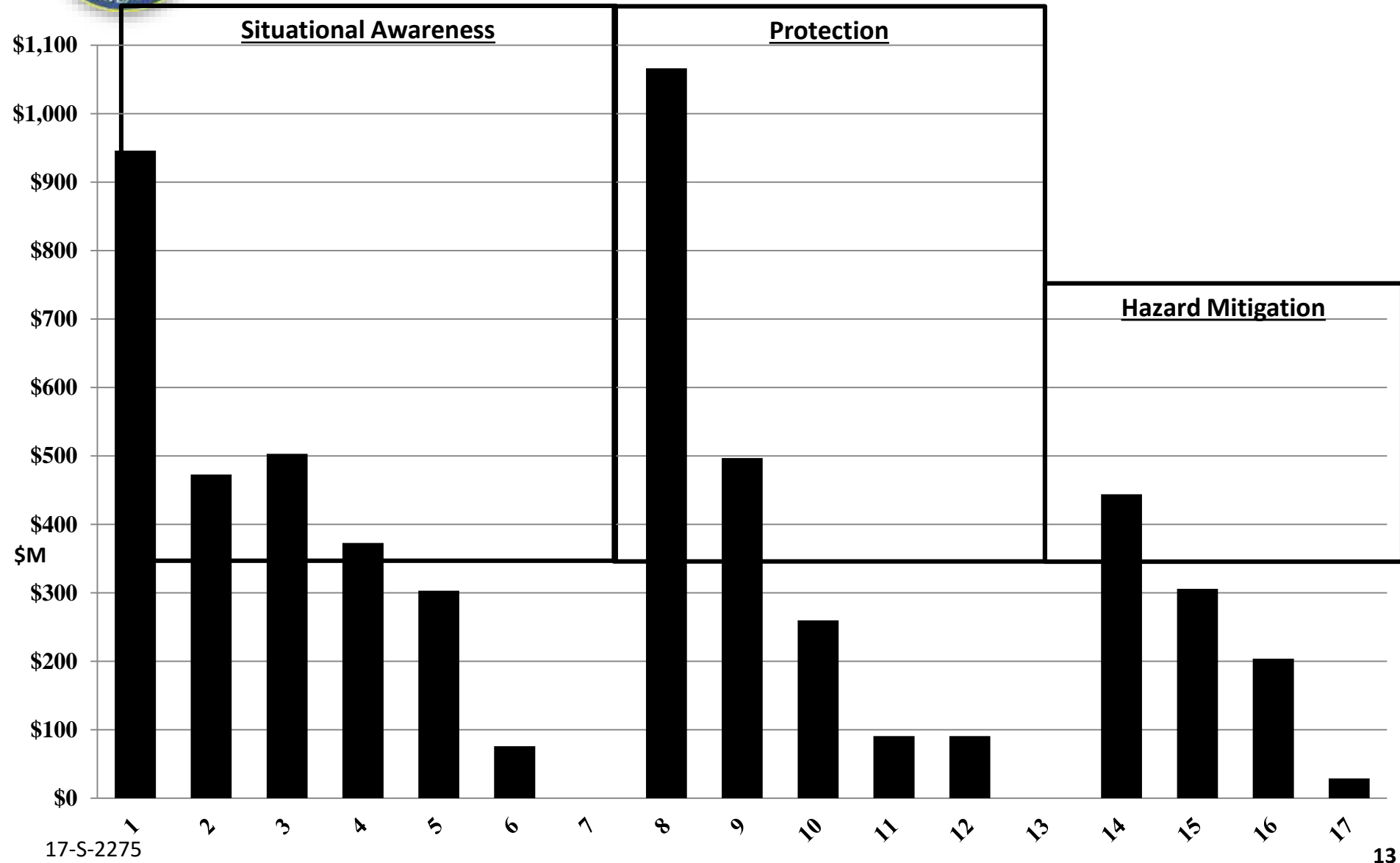
Chemical Biological Defense Program

Funding: FY15-18





FY 17-21 President's Budget (PB) Investments by Capability Area





CBDP FY17/18 Initiatives

- Understand risks and opportunities posed by synthetic biology
 - Funded National Academy of Sciences study to evaluate threat
 - Partners: HHS, IC, DHS
- Accelerate efforts against priority non-traditional agents (NTAs)
 - Partners: DEA/FBI, HHS, DHS, EPA
- Improve Infrastructure Management
 - Evaluate needs for Service Laboratories and Test and Evaluation (T&E) Facilities.
 - Partners: DoD T&E entities, CB Labs
- Revamp Medical Countermeasures (MCM) Programs
 - Exploit biotechnology advances to be more response to emerging threats
 - Partners: DoD Health, HHS
- Evaluate application of CBD programs to non- and counter-proliferation
 - Reconsider institutional, cultural and policy/legal issues
 - Partners: DTRA J9