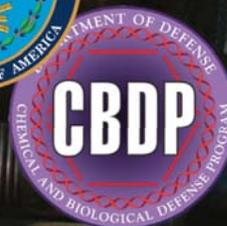
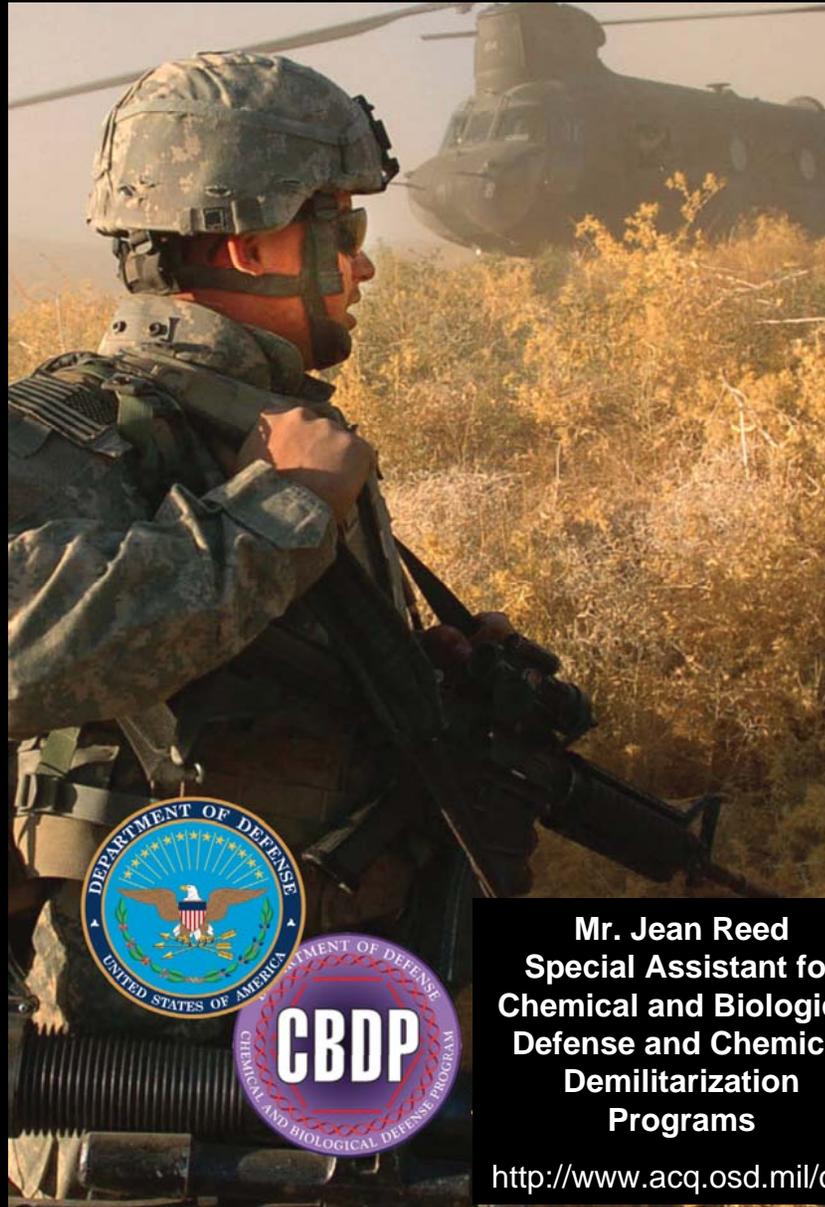


Department of Defense Chemical and Biological Defense Program



Mr. Jean Reed
Special Assistant for
Chemical and Biological
Defense and Chemical
Demilitarization
Programs

<http://www.acq.osd.mil/cp/>



Introduction



“It’s clear the United States and our allies will continue to be threatened by violent extremists, almost always operating in countries with whom we are not at war. The ambition of these networks to acquire chemical, biological, and nuclear weapons is real, as is their desire to launch more attacks on our country and on our interests around the world.”

*Robert M. Gates,
United States Secretary of Defense
18 July 2007*



Chemical and Biological Defense Program (CBDP) Overview



- **Vision and Mission**
- **Background**
- **Key Strategic Guidance**
 - **Quadrennial Defense Review (QDR)**
- **Organization**
- **Budget**
- **High Visibility Programs and Initiatives**
 - **Transformational Medical Technologies Initiative (TMTI)**
- **Priorities**
- **Way Ahead**



CBDP Vision and Mission



CBDP Strategic Context:
A Nation at War
Four Challenges: Traditional, Irregular, Catastrophic, Disruptive
Expanding Risks from a World in Conflict

Vision: Ensure DoD Operations are unconstrained by Chemical and Biological effects

Mission: Provide Chemical-Biological Defense capabilities in support of the national military strategies

Four Overarching, Interrelated Goals

The Chemical-Biological Defense Program



Current CBD Capabilities & Business Processes

External Risk: An adaptive enemy pursuing Chem-Bio WMD as Asymmetric weapons to deter or directly attack the U.S. and our allies

Future CBD Capabilities & Business Processes

Internal Risk: Limited resources, only the CBD program can provide our warfighters with the best CBRN Defense capability and support in the world

Conclusion: Resource Vision and Mission for Warfighter



DoD CBDP Background



- **Established by Congress - 1994 National Defense Authorization Act, Public Law 103-160**
- **Consolidates all DoD CB defense efforts into defense-wide funding accounts overseen by a single office within the Office of the Secretary of Defense**
- **Closely coordinates with DARPA CB Defense Efforts**
- **Program re-organized in April 22, 2003**

ATSD(NCB) Provides Oversight of the Program

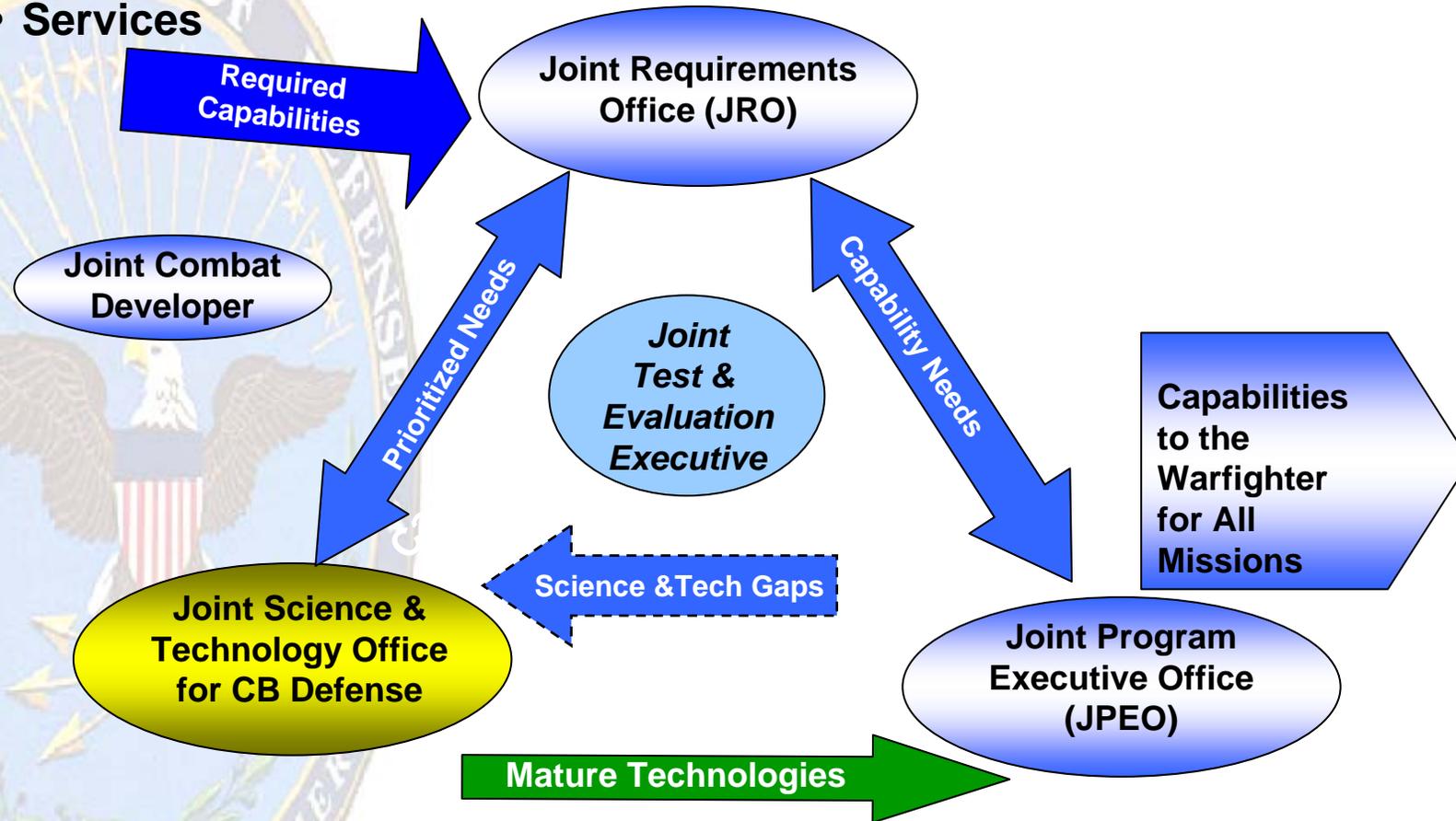


CBDP Process



- Combatant Commanders
- Services

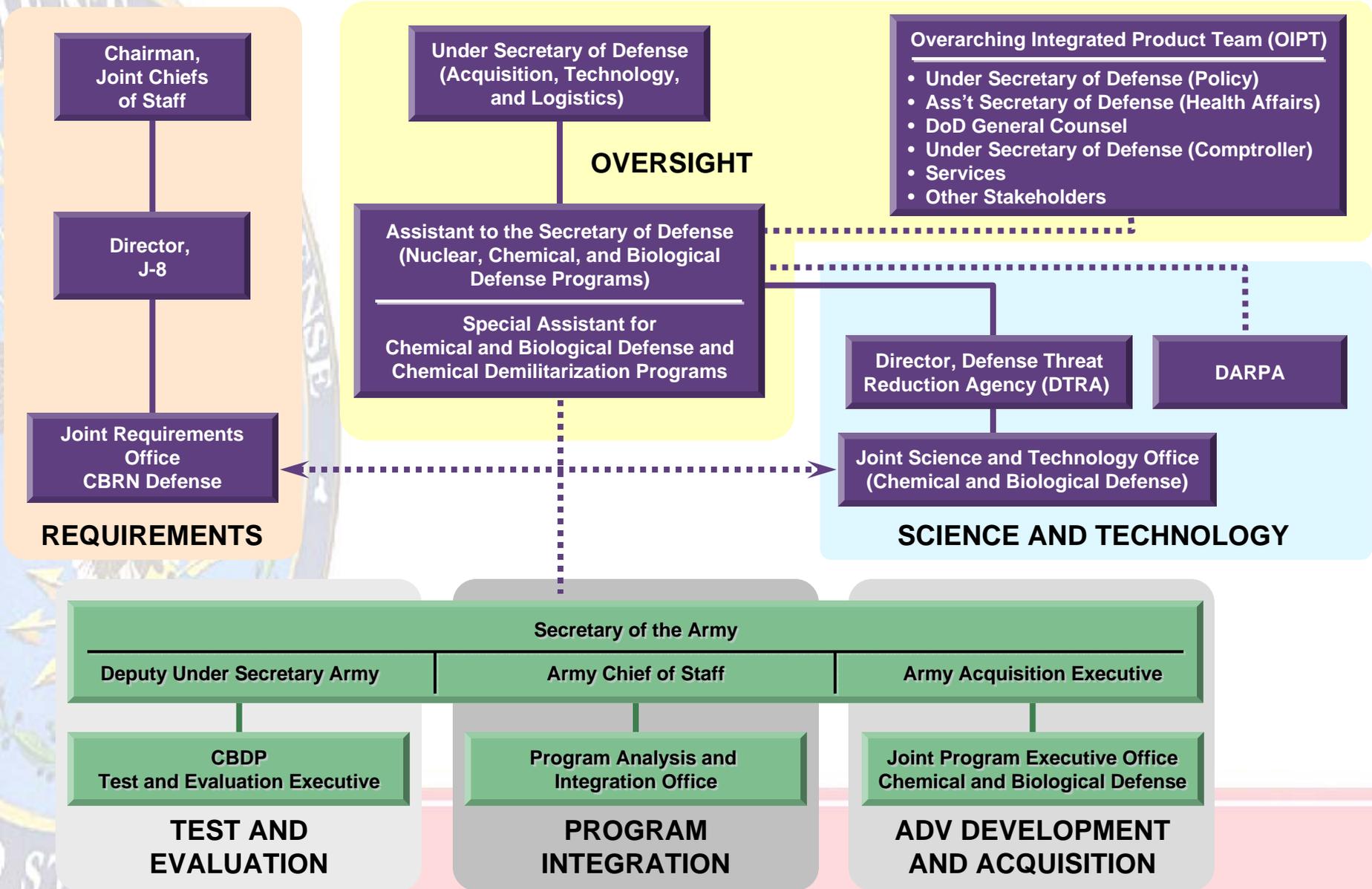
ATSD(NCB) Oversight



Process based on managing total program risk



CBDP Organization

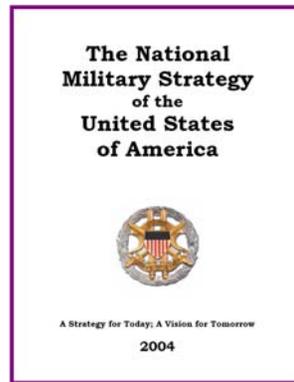
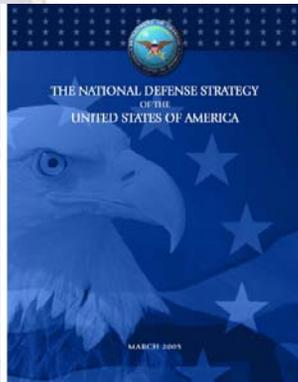




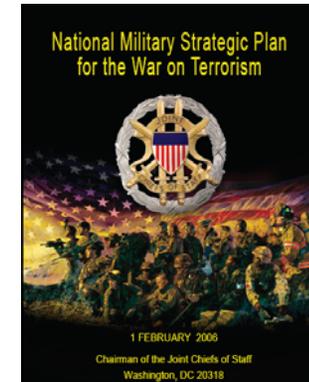
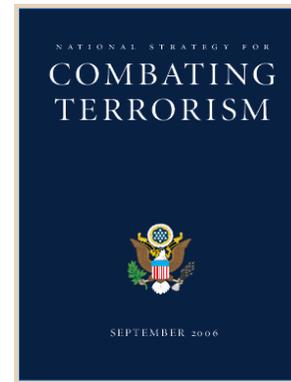
The CBDP Provides Key Capabilities Supporting Multiple National Strategies



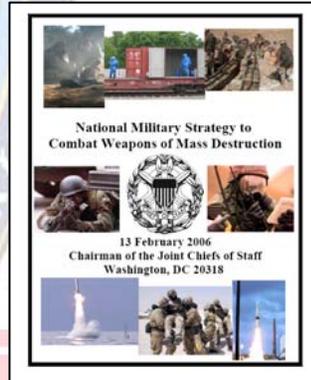
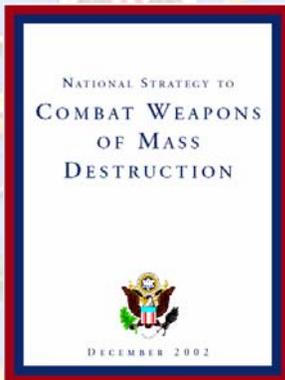
National Security



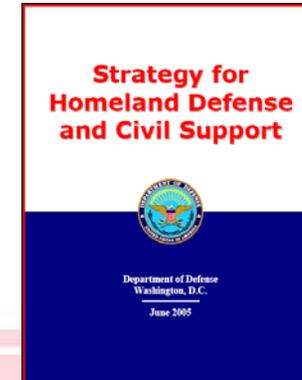
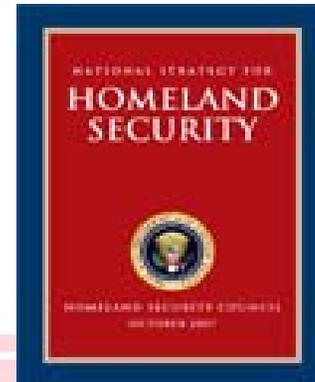
Combating Terrorism



Combating WMD



Homeland Security/Defense





Eight Mission Areas for Combating Weapons of Mass Destruction



Strategic Goal

Military Strategic Objectives



Interdiction

Threat Reduction Cooperation

Security Cooperation and Partnership Activities

Active Defense

Elimination

Passive Defense

Offensive Operations

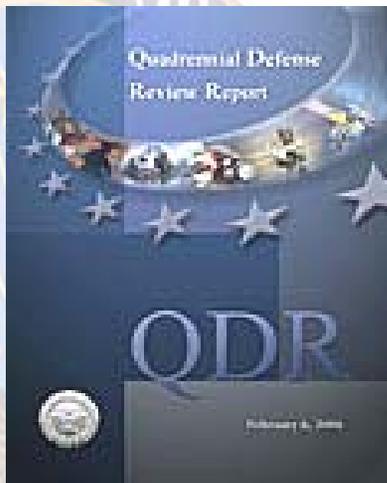
WMD Consequence Management

Strategic Enablers

Guiding Principles



Quadrennial Defense Review



Future force organized, trained, equipped, and resourced to deal with all aspects of WMD

SENSE

SHAPE

SHIELD

SUSTAIN

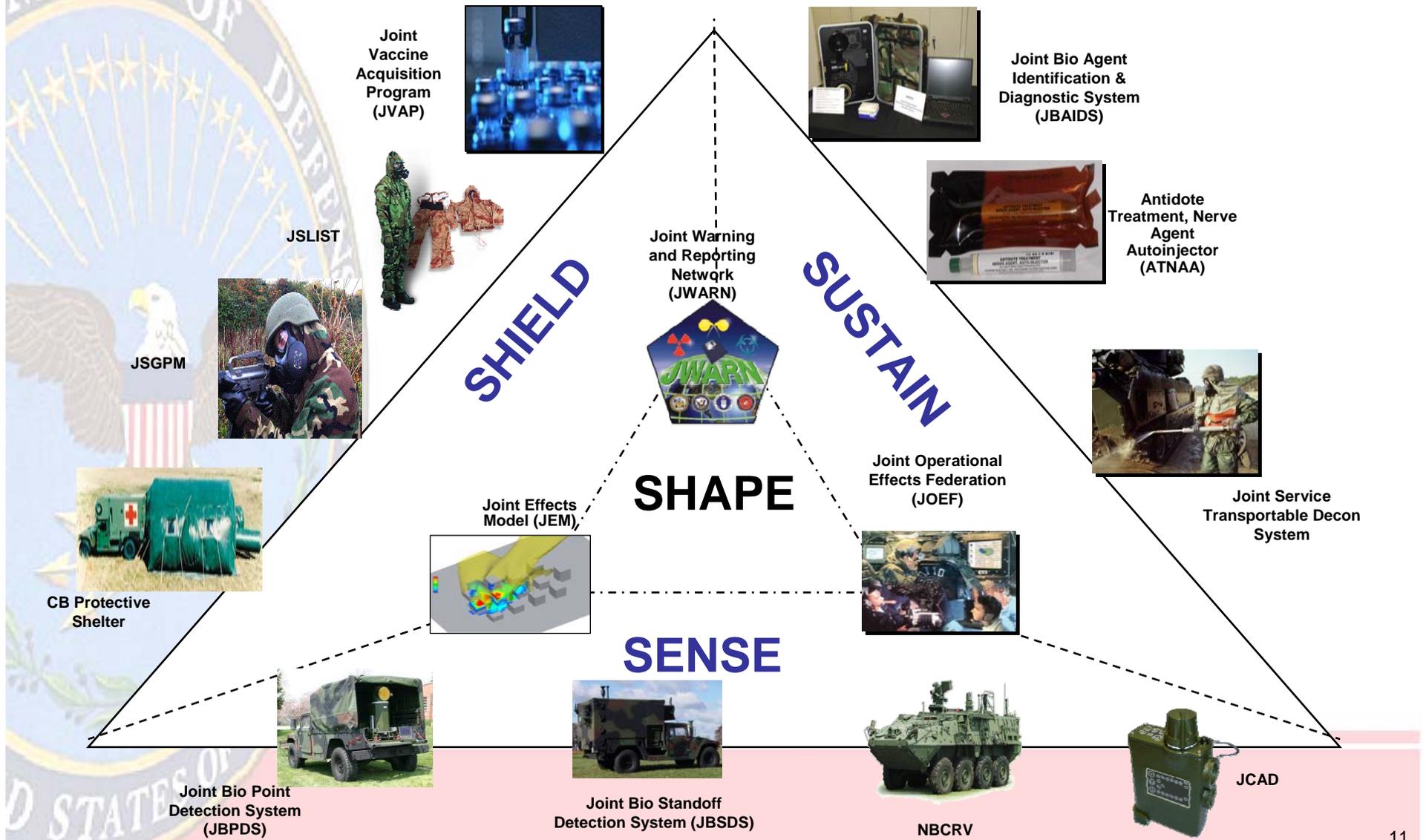
anticipate new WMD threats

genetically engineered biological pathogens

next generation chemical agents



Joint Chemical, Biological, Radiological and Nuclear (CBRN) Defense Functional Concept – Operational Attributes





CB Defense Program Senior Leadership



Chairman, Joint Chiefs of Staff



Admiral Mike Mullen

Under Secretary of Defense (Acquisition, Technology and Logistics)



Mr. John Y. Young Jr.

Director for Force Structure, Resources, and Assessment, J8 The Joint Staff



Vice Admiral P. Stephen Stanley

Assistant to the Secretary of Defense (Nuclear, Chemical and Biological Defense Programs)



Mr. Fred S. Celec

Director, Defense Threat Reduction Agency



Dr. James A. Tegnella

Director, Joint Requirements Office CBRN Defense



Major General Larry New

Special Assistant for Chemical and Biological Defense and Chemical Demilitarization Programs



Mr. Jean Reed

Director, Joint Science and Technology Office for Chemical and Biological Defense



Dr. Darrell Galloway

Joint Combat Developer

Colonel (Promotable) Les Smith

Acting Assistant Secretary of the Army for Acquisition, Logistics and Technology



Mr. Dean Popp

Joint Test and Evaluation Executive



Ms. Janet Garber

Joint Program Executive Office for Chemical and Biological Defense



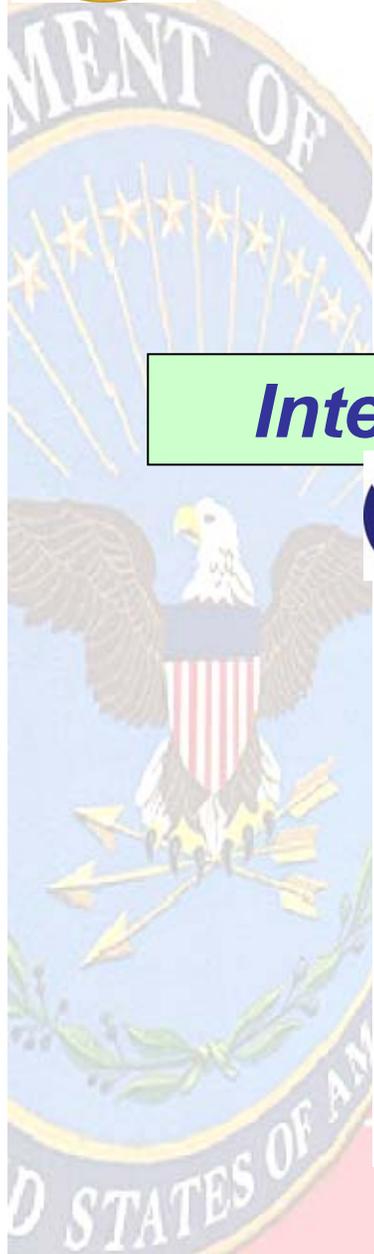
MG Stephen Reeves



oversight



Leveraging Interagency Activities is Key to Achieving National and International Strategies



Interagency

International

Department of Defense

**Coordination
Cooperation
Integration**

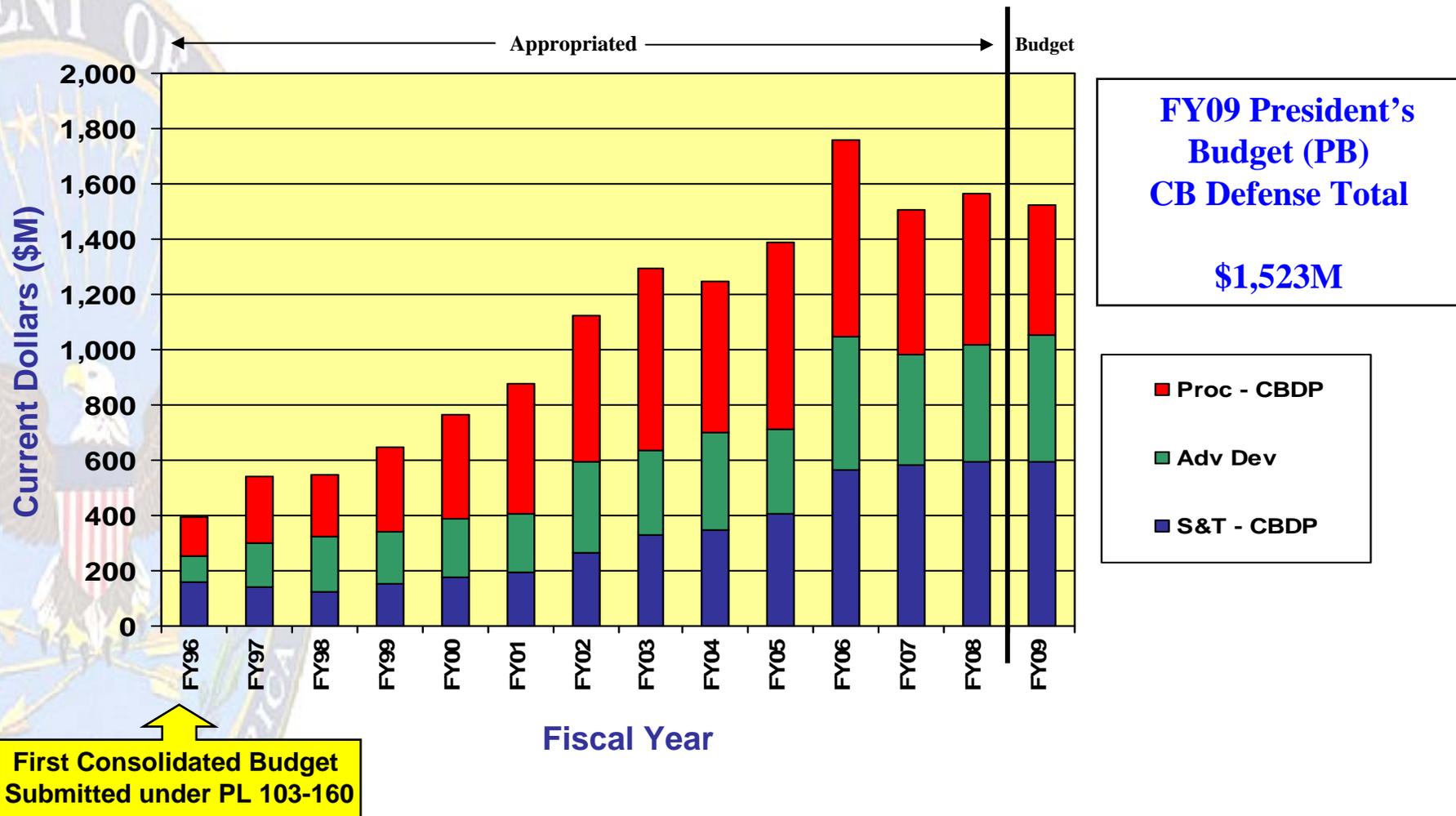


Department of Defense





CBDP Funding (FY1996-2009)



Trends:

- Total CDBP funding steadily increases from FY96, but begins to stabilize at approximately \$1.6M in FY08.
- In FY06, CDBP RDT&E funding increased significantly as a result of Program Budget Decision (PBD) 753/746.



Interagency Partnerships

Unity of Purpose and Effort with DHHS



- **HHS and DoD have discussed the level of investment supporting the national portfolio for biodefense medical countermeasures during the FY 2004- FY 2008 timeframe**
- **HHS and DoD have identified a course of action to harmonize technology readiness level frameworks into a language that promotes effective communication and interoperability**
- **HHS and DoD have initiated draft strategic decision criteria and measures of success as well as a plan for institutionalizing portfolio management**
- **This integrated, end-to-end national Biodefense portfolio for medical countermeasure products is needed to leverage investments and maximize preparedness**



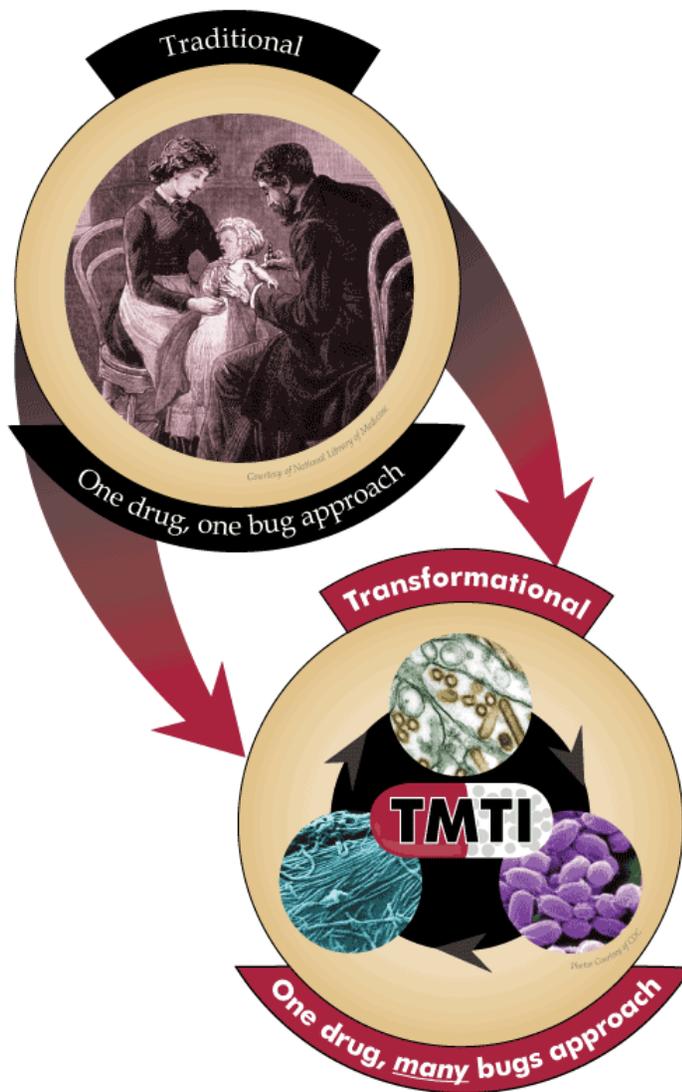
High Visibility Programs and Initiatives



- **Transformational Medical Technologies Initiative (TMTI)**
- **Doctrine, Training, Leadership and Education (DTL&E)**
- **Installation Protection (IP)**
- **International**



Transformational Medical Technologies Initiative (TMTI) Overview



TMTI's *Innovative* Approach:

- Developing broad-spectrum countermeasures and novel technology platforms (one drug, many bugs)
- Pursuing novel medical countermeasures that target common disease pathways or enhance the immune system
- Integrating the 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 TMTI’s mission



Transformational Medical Technologies Initiative (TMTI)



Purpose

Accelerate broad-spectrum defense against bacterial pathogens, viral hemorrhagic fevers, and counter emerging biological threats

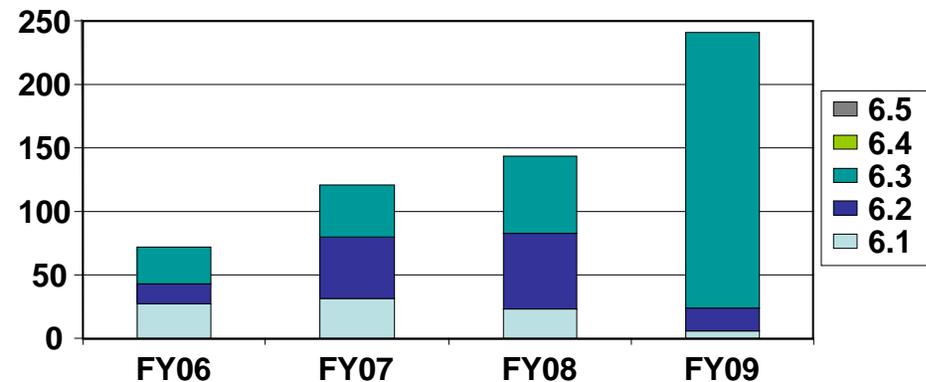
Stakeholders

ATSD(NCB), JPEO-CBD, JSTO

Background and Purpose

- Directed by Quadrennial Defense Review
- TMTI must deliver:
 - Two or more broad-spectrum therapeutic Investigational New Drugs (INDs)
 - Two new technology platforms for rapid response
 - Genetic sequences for pertinent threat

Funding (\$M)



Successes

- Submitted two pre-IND packages to U.S. Food and Drug Administration (FDA)
 - Marburg and Ebola Treatments
 - On schedule to deliver 2 INDs in 2010
- Capability to identify pathogenic bacteria and modified bacteria within 24 hours
- Toxin Knowledge Base established and growing

Way Ahead

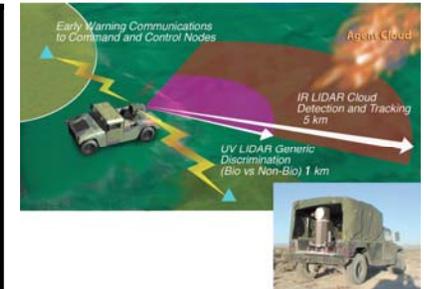
- Identification and use of animal models for approval (i.e., "2-animal rule")
- Funding cuts early in TMTI severely limit the ability to deliver platform technologies and INDs due to much greater costs associated with later stage drug development.



CBDP Joint Priority List



Capability	Capability
(1) Respiratory and Ocular Protection	(15) Transportable Collective Protect.
(2) Integrated Early Warning	(16) Medical Diagnosis
(3) NBC Reconnaissance	(17) Equipment Decontamination
(4) Biological Standoff Detection	(18) Radiological Point Detection
(5) Percutaneous Protection	(19) Battle Analysis
(6) Chemical Standoff Detection	(20) Medical Therapeutics Biological
(7) Biological Prophylaxis	(21) Medical Therapeutics Chemical
(8) Biological Point Detection	(22) Human Factors and Interfaces
(9) Individual Decontamination	(23) Mobile Collective Protection
(10) Chemical Point Detection	(24) Medical Therapeutics Radiological
(11) Chemical Prophylaxis	(25) Sensitive Equipment Decon
(12) Medical Surveillance (M&S)	(26) Radiological Prophylaxis
(13) Radiological Standoff Detection	(27) Fixed Site Collective Protection
(14) Battle Mgmt Systems	(28) Modeling and Simulation Support
	(29) Fixed Site Decontamination



NOTE: (#) equates to the Joint Priority List rankings

Physical S&T Area
 Medical S&T Area
 Adv Develop



CBDP: The Way Ahead



Need to build on current strengths...

while recognizing a changing environment...

and Planning for the Future





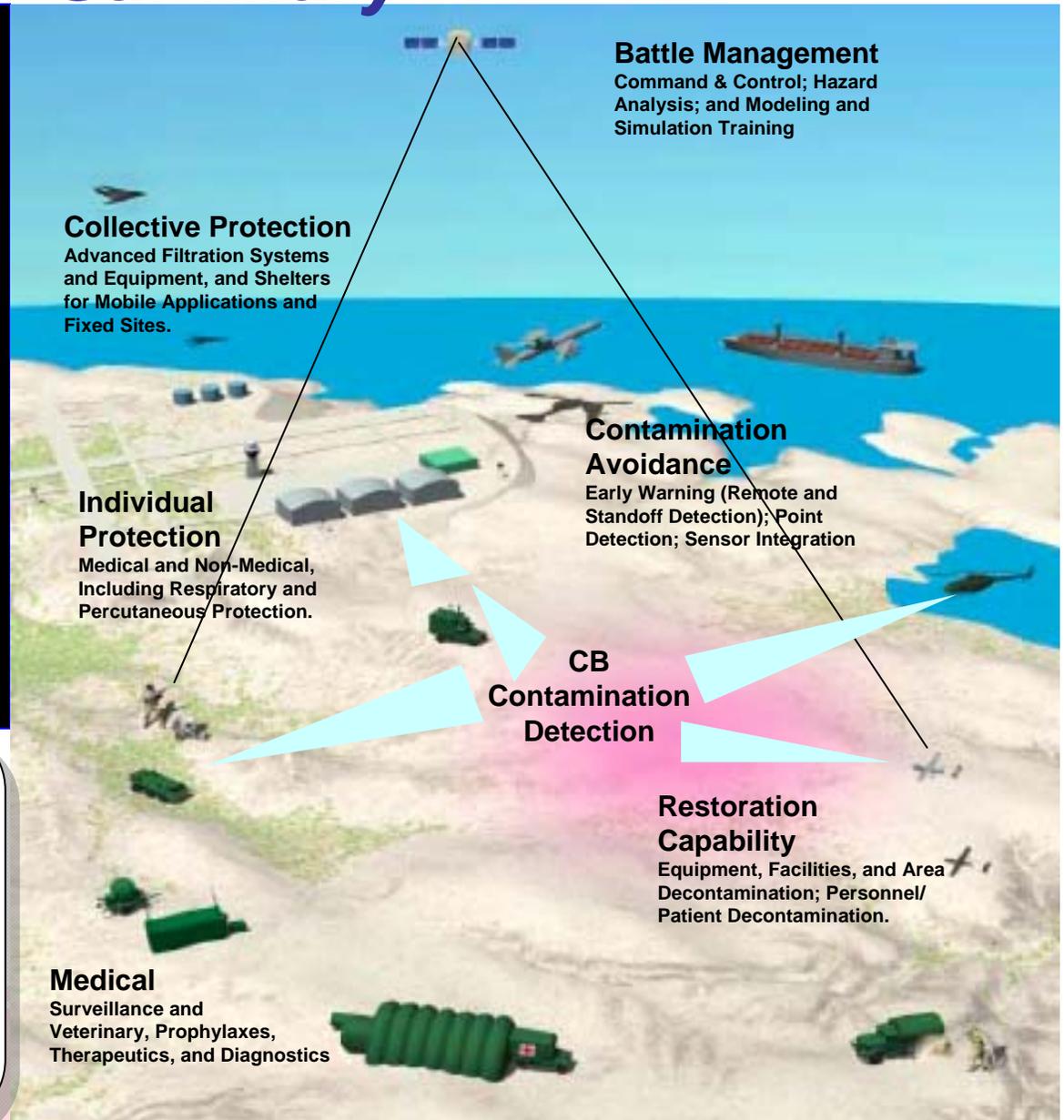
Chemical and Biological Defense Summary



An Integrated System of-Systems, across the DOTMLPF Spectrum

- **SENSE - CB Contamination Avoidance**
- **SHAPE – Battle Management**
- **SHIELD – Protection**
- **SUSTAIN - Restoration**

**An integrated response to the threat is required –
There will be no silver bullet!**





CBDP in the Next 5-10 years

To execute effectively for the next 5 to 10 years, the CBDP depends on continued Leadership and Congressional support in three priority areas:

Future Vision

- **Consistent resources** for the overall program to ensure that, year after year, we are able to field improved defensive capabilities essential to ensuring our military can operate in any environment, unconstrained by CBRN threats
- **Adequate funding** for the Transformational Medical Technologies Initiative (TMTI) to counter successfully future genetically engineered biological weapons and any newly emergent or bioengineered pathogen
- **Adequate far-term investment** in the Research, Development, Testing, and Evaluation (RDT&E) infrastructure to enhance our RDT&E capabilities, including the modernization and construction



Questions

<http://www.acq.osd.mil/cp/>