Cooperative Biological Engagement Program

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Cooperative Bio Engagement Program

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The Defense Threat Reduction Agency enables DoD and the U.S. Government to prepare for and combat weapons of mass destruction and improvised threats and to ensure nuclear deterrence.
DTRA addresses high consequence, highly uncertain risks to the achievement of U.S. national objectives.

WMD and improvised threats are unique due to their potentially non-linear, asymmetric effect.

These threats develop as the result of the convergence at critical nodes across a complex network.

Countering Weapons of Mass Destruction and Improvised Threats
The result is increased risk to our national objectives and need for agile and adaptive solutions.
Strategic Imperatives

- Revamp Agency processes to more effectively bridge the gap from operational requirements to solution development

- Share Information across the CWMD enterprise at multiple levels of classification

- Innovate Capabilities in support of Combatant Commanders' requirements

- Attacking the Networks of existing or aspirant nation and non-state actors

- Building Partner Capacity in counter-proliferation and threat reduction based on top-tier threats
Agency Approach

- **DTRA Mission**
  - Develop Capability
  - Attack the Network
  - Build Partner Capacity

- **Secretary CWMD Priorities**
  - Counter-WMD
  - Counter-Improvised Threats
  - Nuclear Deterrence

- **Global Campaign Plans**
  - Counter-WMD
  - Counter-Improvised Threats
  - Nuclear Deterrence

- **Combatant Commander Campaigns**
  - Engage with partners
  - Innovate capability
  - Respond to warfighters
  - Empower the workforce

- **Presidential Policy**
  - Information Sharing
  - Develop Capability
  - Attack the Network
  - Build Partner Capacity

- **National Security Strategy**
  - Anticipate & understand future threat networks
  - Provide understanding of current & emerging threats & defeat options
  - Enable a safe, secure, & effective nuclear deterrent
  - Counter proliferation & facilitation
  - Innovate capability solutions
  - Prepare for & respond to crisis
Cooperative Threat Reduction (CTR) Mission and Objectives

The Department of Defense (DoD) CTR Program cooperates with partner governments to reduce the threat to the United States as well as its partners and allies from weapons of mass destruction (WMD) and related materials, technologies, and expertise including associated delivery systems and infrastructure.

- **Reverse WMD programs** by dismantling and destroying stockpiles of nuclear, chemical, or biological weapons, equipment, or means of delivery that partner countries own, possess, or that is in their control

- **Account for, secure, and safeguard** nuclear, chemical, and biological materials, equipment, or expertise which, if vulnerable to theft or diversion, could result in WMD threats

- **Prevent and detect acquisition, proliferation, and use of** nuclear, chemical, or biological weapons, equipment, or means of delivery and knowledge
CTR Mission Space

- WMD Threats
- Threat Actors
- Partner Buy-In
- Capability Potential

Cooperation

Sustainability

Threat

DoD Uniqueness

CTR
CTR Program Areas

• Proliferation Prevention Program (PPP)
• Global Nuclear Security (GNS)
• Chemical Weapons Destruction (CWD)
• Strategic Offensive Arms Elimination (SOAE)
• Cooperative Biological Engagement Program (CBEP)
CBEP Focus Areas

**BIOSAFETY AND BIOSECURITY (BS&S)**
Enhance BS&S procedures and practices and secure collections of especially dangerous pathogens (EDP) into a minimal number of safe and secure facilities. Provide technical consultations, risk assessments, and training courses to build human capacity and internal expertise, creating a sustainable culture of safe biorisk management practices.

**BIOSURVEILLANCE (BSV)**
Strengthen the capacity for public and veterinary health systems to detect, diagnose, and report infectious disease outbreaks in accordance with the World Health Organization’s (WHO) International Health Regulations (IHR), the World Organization for Animal Health’s (OIE), and the United Nation’s Food and Agricultural Organization’s (FAO) reporting guidelines.

**RESEARCH (Technical Engagement)**
Enhance global health security and foster safe, secure, and sustainable bioscience capacity through joint scientific collaborations designed to help prevent, detect, and respond to biological threats. Research is focused on understanding and reducing the biorisk posed by EDPs.
Engage the Scientist (Cooperative Research)

- Inform and enhance disease surveillance
- Improve understanding and capacity to reduce biological threats
- Promote the One Health initiative (i.e., Human and Animal)
- Foster an international culture of responsible and ethical conduct in biological research
- Ensure research results are published in peer reviewed journals
CBEP Historical Projects

- Dismantled biological weapons production facilities in Kazakhstan, Georgia, Russia, and Uzbekistan
- Established 52 labs and research centers throughout the FSU
- Consolidated and secured dangerous pathogens at risk for theft, diversion, accidental release, or terrorist use
- Electronic Integrated Disease Surveillance System
  - 1700 sites in 7 countries
  - Built or upgraded 36 safe/secure laboratories
- Ebola Virus Detection in Guinea
  - Trained technicians to staff a transportable laboratory
- Organized and led 400 training events in key biological engagement and laboratory disciplines annually
CBEP Current Projects

• United States European Command (EUCOM)
  • Laboratory Transitions: Armenia, Azerbaijan, Georgia
  • African Swine Fever (ASF) Outbreak Support: Ukraine

• United States Central Command (CENTCOM)
  • Laboratory Transitions: Kazakhstan
  • Research, training, and certification projects: Jordan, Iraq, Turkey

• United States Pacific Command (PACOM)
  • Research Networks: Philippines, Thailand
  • Begin laboratory construction: Philippines
  • Laboratory transitions: Cambodia

• United States Africa Command (AFRICOM)
  • Laboratory transition and sustainment: Guinea, Sierra Leone
  • Laboratory construction/renovations: Kenya, Senegal
  • Laboratory design: Liberia, Ethiopia
Reducing biological threats in sub-Saharan Africa

Dismantling FSU WMD infrastructure, preventing WMD smuggling, and building WMD response capacity

Targeting and technical reach-back for OIR/RSM, and border security cooperation in Jordan

Counter Improvised Threat rapid acquisition and embedded “Counter Threat Networks” support

USFK/CFC WMD OPS Exercise Support

Building CBRN defense and response capacity in Southeast Asia

(U) Seeking additional Senior Leader engagements in Afghanistan to build on OIR/RSM lessons learned

Development in technology, tools and equipment advances DTRA in the IED fight

Over 2,500 Global Engagements

DEFENSE THREAT REDUCTION AGENCY

2943 Site Locations | 2637 Missions | 110 Countries | 48 US States

UNCLASSIFIED
CBRN Military Advisory Teams (CMAT)

• DTRA deployable element providing advice and assistance for WMD/CBRN incidents, specializing in mitigation, response, and recovery efforts

• Team capabilities:
  • CBRN technical expertise
  • Consequence Management doctrinal/policy expertise
  • Crisis Action planning
  • Hazard effects analysis
  • Basic detection, ID, and decontamination capability
  • Facilitate Reachback via DTRA Operations Center/IMAAC

Examples

**Operation TOMODACHI**: 23 pax, 24-hr CMAT support for USJSF-J for 45 days

**CENTCOM Support**: Deployed CMAT in support of CENTCOM Forward (Feb ‘13)

**CMAT Support to Operation United Assistance**: Deployed CMAT in support of AFRICOM’s Ebola Response (Oct 14 -Jan ‘15)

**Operational & Exercise Support**: Exercises and National Special Security Events (NSSEs)
CBRN Preparedness Program (CP2)

- Develop CBRN preparedness and response capabilities
- Training and equipping
- Military and Civilian Responders

1204 Countries of Engagement
The Experience To Do More

2011 Operation Tomodachi

2011-2014 Syria

2012-2014 Libya

2014-2015 Ebola

The next WMD challenge?
DTRA adapts to respond to a complex threat environment at the speed of relevancy