

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

DR. RHYS WILLIAMS

ACTING DIRECTOR

DEFENSE THREAT REDUCTION AGENCY

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

SUBCOMMITTEE ON INTELLIGENCE AND SPECIAL OPERATIONS

MAY 4, 2021

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

Chairman Gallego, Ranking Member Kelly, and distinguished members of the subcommittee, thank you for your continued support of the Defense Threat Reduction Agency (DTRA). On behalf of the nearly 2200 men and women – military and civilians – of DTRA, I am proud to appear today alongside Ms. Jennifer Walsh, Performing the Duties of the Deputy Under Secretary of Defense for Policy; Dr. Brandi Vann, Acting Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs; and Vice Admiral Tim Szymanski, Deputy Commander, United States Special Operations Command, to speak about DTRA’s unique role in countering Weapons of Mass Destruction (WMD) and emerging threats.

The Department of Defense (DoD) established DTRA to integrate and focus expertise and capabilities against the real and ever-evolving threat of the proliferation and use of WMD and emerging threats. Under National and Departmental policy and guidance, through close collaboration with our partners across the DoD, U.S. Government (USG) interagency, academia, industry and international partners, we reduce the dangers posed by WMD and emerging threats by delivering innovative capabilities that ensure a strong, protected, and prepared Joint Force.

DTRA is a unique organization within the DoD. We are both a Defense Agency and a Combat Support Agency, employing a highly skilled workforce that blends world-class technical expertise with the on the ground operational knowledge of uniformed service members. At home and abroad, we deliver mission success by **detecting**, **deterring**, and **defeating** WMD and emerging threats.

In our Defense Agency role, we respond to requirements from the Services, and a variety of DoD offices, including but not limited to: the Under Secretaries of Defense (USD) for Acquisition & Sustainment, Policy, and Research & Engineering. These requirements support key priorities to include building partner capacity, cooperative threat reduction, and treaty support. In our Combat Support Agency role, DTRA responds to Combatant Command (CCMD) and Joint Staff requirements. As such, we leverage our capabilities and expertise directly in support of Countering Weapons of Mass Destruction (CWMD) planning and operations. Our unique position as both a Defense Agency and a Combat Support Agency therefore enables us to integrate efforts across the CWMD mission space.

Given our mission, I cannot overstate that people are our most precious resource. Our staff includes world-class scientists developing therapeutics for emerging pathogens and chemical threat agents; technical linguists providing DoD with unique capabilities to interact with adversaries and partners;

tactical specialists securing dangerous weapons and materials; subject matter experts on call 24/7 to provide real-time expertise to all levels of government; and logisticians, contracting officers, security experts, and IT personnel who are the backbone of the Agency. DTRA's military personnel are fundamental to ensure DTRA remains closely aligned with warfighter requirements and provide the Joint Force with specialized expertise. Our capabilities are amplified by our forward deployed presence – we have personnel embedded with the CCMDs, task forces, and interagency to provide direct and tailored support to counter WMD and emerging threats.

A crucial mission for DTRA is to support implementation of U.S. policies for international CWMD cooperative programs to improve the capability and capacity of partner nations to detect, deter, and defeat WMD and emerging threats. Through these partnerships, we build biosurveillance networks; work collaboratively on nonproliferation; strengthen interdiction activities; secure vulnerable chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) materials; develop CWMD tools and capabilities, and prepare partner nations to respond to future WMD crises. Our partnerships are not only focused outside our borders. DTRA personnel collaborate closely with the interagency and enable federal, state, and local governments to identify, prevent, prepare for, and respond to WMD incidents.

Responding to COVID-19

In March of 2020 DTRA transitioned to a maximum telework status due to the COVID-19 pandemic. I am proud to say that the Agency maintained our core functions and 24/7 support to ongoing operations and programs. Since the transition our research and development (R&D) programs continued critical test and evaluation activities (with COVID safety protocols in place); subject matter experts continued to provide on-call modeling and reachback support, including weekly epidemiological modeling supporting CCMD operations in over 90 nations. DTRA personnel continued to escort international inspectors conducting on-site verification of U.S. chemical weapons destruction, and DTRA Technical Support Groups continue to train Special Operations Forces (SOF) for CWMD Missions. Our workforce has proven its tenacity over the past 14 months, continuing to provide tangible value despite challenges of travel and videoconferencing (at all classification levels) while managing the complexity of home life with spouses, children, and extended family at home.

Our deep technical expertise in emerging biological threats enabled DTRA to provide specialized capabilities, training, and logistical support to COVID-19 response operations. CCMDs and partner nations leveraged relationships with DTRA to address critical shortages of locally-sourced personal protective equipment (PPE), test kits, laboratory equipment, training, and expertise, helping to ensure readiness and continuity of operations.

The Joint Science and Technology Office (JSTO) – a DTRA function, supporting the DoD Chemical and Biological Defense Program (CBDP) – executed \$55 million in CARES Act R&D funds for work on vaccines, therapeutics, diagnostic tools, detection devices, computer modeling (disease spread projections), and other efforts. Early in the pandemic, working with partners, we provided expertise to adapt existing technologies to assist in the fight; for example, USTRANSCOM leveraged the Transportation Isolation System – originally developed in response to the 2014 Ebola outbreak – to transport COVID-positive patients. Remdesivir, a therapeutic developed for Ebola, became the first FDA-approved treatment for COVID-19.

The expert analysis DTRA provided to DoD, the Department of Health and Human Services, Centers for Disease Control, and the White House helped identify and forecast emerging COVID hotspots. This critical analysis enabled the government to surge limited PPE, therapeutics, critical care beds, ventilators, and other vital medical equipment nation-wide. Our epidemiological forecasts were also linked to key defense performers within the Defense Industrial Base, keeping the nation one step ahead of COVID impacts to defense manufacturing and logistics. While the global pandemic was the unanticipated challenge of 2020, I am proud of DTRA's contributions to the domestic and international response.

Our Strategic Mission: Reduce Global WMD & Emerging Threats

The functions DTRA undertakes as a Defense Agency – those that meet DoD goals, priorities, and mandates – are often our more strategic functions: deterrence and arms control; and building partner capacity, or BPC.

Deterrence and Arms Control

As China, Russia, and North Korea modernize and expand their nuclear forces, DTRA supports the Services and United States Strategic Command to ensure the U.S. strategic deterrent continues to be safe, secure, and credible while protecting the American people, our homeland, and our allies and partners. Focusing on critical infrastructure, site vulnerability, and control measures in place for U.S. nuclear weapons, components, and materials, DTRA provides monitoring, oversight, assessments, and support for inspections and exercises. Our Inspection Teams ensure positive control and enhance resilience within the nation's nuclear force. Additionally, DTRA models nuclear employment effects, and examines emerging trends that could complicate U.S. deterrence operations or defense planning through workshops, roundtables, tabletop exercises, and symposia. This work informs consequence management analysis, improves Joint Force survivability, and signals U.S. resolve to those that challenge U.S. actions.

Effective and verifiable arms control is in the U.S. national security interest and makes the United States and its allies and partners more safe and secure. On behalf of DoD and the Nation, DTRA executes highly sensitive, intrusive on-site activities abroad, across an array of treaties – including the New Strategic Arms Reduction Treaty (New START), the Treaty on Conventional Armed Forces in Europe (CFE), and the Vienna Document 2011 (VD11). DTRA personnel likewise protect U.S. equities and facilitate treaty compliance by escorting foreign inspections of U.S. facilities, units, and activities under these agreements and arrangements as well as the Chemical Weapons Convention (CWC).

Building Partner Capacity: Nonproliferation

As the Interim National Security Strategic Guidance states, American nonproliferation leadership is essential to reducing the dangers posed by nuclear weapons. As part of our efforts to *detect* and *deter* WMD and emerging threats, we work with CCMDs, interagency, allies, and partners to prevent the proliferation of WMD and related materials. We apply deep subject matter expertise and data analytics to support nonproliferation policy and goals across the USG. Our custom analytical tools enable CCMDs to illuminate WMD procurement networks and provide the interagency and law enforcement with information they need to disrupt proliferation – a global effort to stop trafficking of WMD, its delivery systems, and related materials.

Building Partner Capacity: Cooperative Threat Reduction & Biological Threat Reduction

While DTRA builds partner capacity through many lines of effort, a standout is the Nunn-Lugar Cooperative Threat Reduction Program (CTR). Under Policy guidance from USD(P) and in close collaboration with interagency partners such as the Departments of State and Energy, the Agency works with partner countries to prevent the proliferation of WMD and eliminate chemical, biological, radiological, and nuclear (CBRN) threats to the U.S., allies, and partners. CTR eliminates WMD stockpiles, provides support to consolidate, secure, and account for the materials or items, and enables partners to detect and prevent WMD trafficking around the world.

CTR also includes the Biological Threat Reduction Program (BTRP), which builds capabilities to detect and track Especially Dangerous Pathogenic (EDP) diseases with the potential to affect national security. BTRP links the U.S. to over 30 foreign partners, enhancing national, regional, and global biosafety, biosecurity, and biosurveillance capabilities. While COVID-19 has made BTRP more prominent, the increasing incidence of EDP outbreaks – up to and including an ongoing local Ebola outbreak in Guinea and the Democratic Republic of Congo – has proven this program’s value to global health security time and again.

Emerging Threats

Fundamental to our ability to prepare for and avoid surprise is DTRA’s continual analysis of emerging technologies and their applications. To that end, using the highest classified information from the U.S. Intelligence Community and merging it with our deep scientific and technical knowledge, we are continually scanning the horizon for indications of emerging threats and their potential impact on the battlespace. As a key partner in the CBDP, we lead science and technology efforts to understand threat agent science: the analysis of novel and potential threats, in order to characterize operational risk and develop countermeasures (both material and non-material). And when new technologies gain salience – as Unmanned Aircraft Systems (UASs) have in recent years – it is often DTRA who leads initial exploration into the threat and potential countermeasures, characterizing the threat space to inform future requirements. As an example of this effort, DTRA successfully transferred its programs and knowledge-base on small UASs to the new DoD Joint Capability Office (JCO), while retaining the authority to analyze small UAS incursions into U.S. installations.

Our Operational Mission: Identify, Develop, and Field Solutions to Counter WMD and Emerging Threats

As a Combat Support Agency, DTRA responds to cross-cutting Joint Force and CCMD requirements, meeting capability gaps with innovative material and non-material solutions to improve readiness, enhance and speed leadership decision-making, and increase force survivability.

Research, Development, Test & Evaluation

Our Research, Development, Test & Evaluation (RDT&E) programs develop and field CWMD capabilities for the Joint Force, while at the same time exploring potential technologies to identify, characterize, and counter emerging threats. DTRA teamed with the Army to develop and field a vehicle-mounted long-range radiation imaging system, which can detect and report radiation levels from a safe distance, monitor crew exposure, and protect warfighters on the nuclear battlefield. In support to CBDP, we prototyped protective systems for warfighters operating in hazardous chemical or biological environments. For the U.S. Air Force, we develop advanced conventional warheads capable of neutralizing WMD targets while minimizing collateral effects.

Effects Modeling / Response Support

DTRA also maintains a 24/7, world-class CBRN effects modelling capability that supports all levels of the U.S. Government as well as international allies. This specialized capability enhances CBRN preparation and response activities, and informs both offensive and defensive decision-making during WMD incidents. From 2019 to 2020, DTRA answered over 2,000 requests for information: 1906 in support of DoD, 161 for interagency partners, and 13 on behalf of partner nations. In support of the Federal Emergency Management Agency (FEMA) and first responders, we provided hazard analysis of atmospheric and waterborne plumes 74 times – helping to safeguard the environment and the American public.

DTRA Support to Special Operations

DTRA directly supports the unique needs of U.S. Special Operations Command (USSOCOM), in its role as the DoD Coordinating Authority for CWMD, and as it rebalances deployed forces to meet the demands of both counter-violent extremist organization (VEO) and great power competition. DTRA's support for SOCOM's "no-fail" mission to *defeat* WMD in the field will

remain critical. Agency experts – from scientists to Explosive Ordnance Disposal (EOD) technicians – provide direct support to SOF missions in a “team of teams.” Linking agencies from the Department of Energy, the Department of Justice, National Labs, the Defense Advanced Research Projects Agency (DARPA), and the Intelligence Community, DTRA drives innovation for SOF CWMD. In these relationships, DTRA participates fully in a whole-of-government approach that not only enables SOF, but reaps benefits across the CWMD and emerging threats space. And ultimately, while we take this opportunity to highlight our relationship with SOCOM, the role of DTRA in supporting Special Operations reflects our robust and on-going relationships across the Joint Force – for each CCMD.

Conclusion

There are few greater challenges to U.S. National interests than those posed by WMD and emerging threats. As a Defense Agency, we work to *reduce global WMD threats* through counterproliferation, international cooperative programs, and building partner capacity; as a Combat Support Agency, we bring our deep technical expertise to bear, responding to CCMD and Joint Staff requirements to *identify, develop, and field solutions* through operational analysis, planning activities, RDT&E, agile acquisition and technical subject matter expertise. Our world-class, operationally-informed workforce and unparalleled professional network, access, and credibility give us unmatched advantage in enabling the DoD, USG, and International partners to detect, deter, and defeat WMD and emerging threats in every theater.