



**Testimony**

**GARY C. RASICOT**

**Acting Assistant Secretary for Countering Weapons of Mass Destruction**

**U.S. Department of Homeland Security**

**FOR A HEARING ON**

***“Examining the U.S. Department of Homeland Security Countering Weapons of Mass Destruction Office”***

**BEFORE THE  
UNITED STATES HOUSE OF REPRESENTATIVES  
COMMITTEE ON HOMELAND SECURITY  
SUBCOMMITTEE ON EMERGENCY PREPAREDNESS, RESPONSE AND RECOVERY**

**July 16, 2021**

**Washington, DC**

## **INTRODUCTION**

Chairwoman Demings, Ranking Member Cammack, and distinguished Members of the Subcommittee, thank you for inviting me to speak with you today. I appreciate the opportunity to discuss the Department of Homeland Security (DHS) Countering Weapons of Mass Destruction Office (CWMD)'s efforts to safeguard the Nation from chemical, biological, radiological, nuclear (CBRN), and other health security threats, including highlights from our Fiscal Year (FY) 2022 budget request.

In accordance with the CWMD Act of 2018, CWMD is the hub for the Department's CBRN and other health security activities: providing coordination, strategy and policy guidance, intelligence analysis, operations support, and developing and deploying technologies through our research, development, test, evaluation (RDT&E), and acquisition initiatives. With your support, the creation of an Office solely focused on CBRN and other health security threats has elevated and streamlined the ability of DHS to successfully resource and execute this critical mission. Our programs and responsibilities are much more expansive than the sum of the legacy organizations from which we were formed. While each CBRN and health security portfolio poses unique threats and mitigation opportunities, overall, the Department and the mission have benefited considerably by bringing together the elements of the counter weapons of mass destruction (WMD) portfolio.

I have been the Acting Assistant Secretary for CWMD collectively for more than one year, most recently since January 2021, and previously serving in this same role from October 2019 through July 2020. Prior to my time at CWMD, I served in various leadership roles with the U.S. Coast Guard and the Transportation Security Administration. Throughout my tenure at CWMD, my priorities for the Office have been to: 1) establish a collaborative, safe, and productive work environment; 2) ensure risk-based mission capability across the broad spectrum of CBRN and health security threats, including ensuring that CBRN detection acquisition programs are informed by both intelligence and stakeholder requirements; 3) strengthen CWMD's support and partnerships with DHS operating Components, the Science and Technology Directorate (S&T), and other support entities; 4) broaden partnerships across the Federal Government; and 5) strengthen assistance to and the relationships with state, local, tribal, and territorial (SLTT) partners.

The President's Budget requests \$427M in FY 2022 funds to support 309 federal staff and the programs critical to the CWMD mission. This represents an increase of \$25M over the FY 2021 enacted amount for CWMD. CWMD allocates the \$427M across four appropriations: Research and Development, Procurement, Federal Assistance, and Operations and Support.

The programs and activities I will specifically discuss today represent a fraction of CWMD's work to mitigate the risk to the Nation from these threats, which is performed in close collaboration with our federal, state, local, tribal, and territorial (FSLTT) partners.

## **RISK-BASED APPROACH TO PROTECT AGAINST CBRN THREATS**

CBRN and other health security threats present dynamic challenges to U.S. national and homeland security, whether from nation states, terrorists, lone actors, or groups of domestic violent extremists. In our increasingly complex world, risks are evolving with the convergence of

technologies, spillover of animal pathogens to human populations, access to dual use material and information, and the degradation of WMD norms.

Defending the Homeland against CBRN threats requires a risk-based approach, and we must prioritize activities that “buy down” the most risk. Building on the previous work of legacy offices, CWMD is revitalizing a rigorous, repeatable, and transparent process to prioritize where the Office should focus its resources to have the greatest impact. CWMD is requesting \$15M, which includes an \$8M increase, for capabilities and risk assessment activities to counter enduring and emerging CBRN threats.

Related to this effort, CWMD is partnering with DHS S&T to reinvigorate a strategic CBRN risk assessment that integrates the findings of the intelligence and law enforcement communities with input from the scientific, medical, and public health communities.

## **WARNING OF BIOLOGICAL THREATS AND INCIDENTS IN TIME TO SAVE LIVES**

CWMD’s flagship biodefense programs provide warning of biological attacks or incidents with the goal of enabling a rapid response to save lives.

### National Biosurveillance Integration Center

The National Biosurveillance Integration Center (NBIC) integrates, analyzes, and distributes information about ongoing and emerging biological incidents to help ensure the Nation’s responses at all levels of government are well-informed, save lives, and minimize economic impact. NBIC is unique in the biosurveillance community in that it looks across all biological threats – pandemic, accidents, and bioterrorism – across multiple sectors – wildlife, human, agriculture, and environmental. The Center also provides deep analysis on the impact of these biological threats to homeland security.

In FY 2020 through Quarter 2 of FY 2021, NBIC produced more than 950 biosurveillance products, and increased the audience for the Center’s biosurveillance products by more than 30 percent. Recipients represent 14 federal departments and agencies, including HHS who leads federal public health and medical response, 589 SLTT agencies, and 11 government information sharing systems.

In FY 2022, CWMD requests \$15.8M for NBIC, an increase of \$3.5M over the FY 2021 amount. This funding will accelerate NBIC’s efforts to integrate new biosurveillance systems to advance the capabilities of our partners and the national biosurveillance enterprise.

### BioWatch

As the Nation’s primary biodetection capability, CWMD’s BioWatch Program gives warning of an airborne bioterrorist attack in over 30 major metropolitan areas across the United States. Outward signs and symptoms of a biological attack may emerge slowly. BioWatch can detect the presence of certain biological agents in the air after release by a terrorist or other bad actor to marshal an earlier response.

Managed by the CWMD Office, the BioWatch program is locally operated and supports coordination among scientists, laboratory technicians, emergency managers, law enforcement officers, and public health officials. Although labor intensive, the BioWatch technology is proven and reliable and uses the same technology, Polymerase Chain Reaction, that is used in the most sensitive COVID-19 diagnostic testing. DHS modeling has shown that BioWatch warning can reduce casualties by 75 percent by enabling faster administration of medical countermeasures. The President's Budget requests \$83.7M for BioWatch in FY 2022.

In response to a recent Office of the Inspector General (OIG) audit, CWMD required all jurisdictions to enhance the physical security of portable sampling units (PSU) and developed a multi-year exercise plan for routine full-scale exercises; these actions closed two OIG recommendations. CWMD is addressing open recommendations by assessing whether BioWatch can expand the number of biological threat agents detected and assessing PSU location to maximize the protection of American lives. To implement these improvements, the President's Budget request includes an additional \$3.3M within the BioWatch Program for FY 2022.

### Biological Detection for the 21<sup>st</sup> Century (BD21)

CWMD is committed to protecting the American people from biological threats through technology and collaborative partnerships. In 2019, DHS began a major acquisition program entitled Biological Detection for the Twenty-First Century (BD21), to move toward the next generation of a national biodetection system.

BD21 is a Level 1 (i.e. major) acquisition program to address some of BioWatch's limitations. For example, the BioWatch system produces accurate and reliable results, but the detect-to-warn timeline could be shortened to more swiftly deploy lifesaving countermeasures. BD21 seeks to design, develop, and deploy networked detection systems that continuously monitor the air, collect real-time data, and employ data analytics to detect anomalies that may indicate the presence of biological agents. The faster anomalies are detected, the faster first responders can address potential threats. The program is currently in the development phase.

CWMD has conducted extensive stakeholder engagement with state and local partners to maximize the impact of BD21 and ensure this technology development is informed by local requirements and operational constraints. Through BD21, CWMD will train and equip first responders with the tools and information they need to take the fast, initial actions to save lives. CWMD will also remain engaged with laboratories, which are key partners in the effort to counter biological threats, and coordinate with the public health community. The President's Budget requests a \$6.2M increase over FY 2021 enacted, totaling \$9.7M for BD21 R&D in FY 2022.

### Strategic Review of Biodefense Posture

CWMD has initiated a strategic review of its biodefense posture in line with the President's January tasking under Executive Order 13987 to recommend actions to the President concerning emerging biological risks and national biopreparedness policies. CWMD will review its policy and programs, including environmental detection programs, to determine how best to prepare the Nation to mitigate enduring and emerging biological threats, incorporating the lessons from COVID-19.

## **DETECTING RADIOLOGICAL AND NUCLEAR THREATS TO PREVENT ATTACKS**

An act of radiological or nuclear (R/N) terrorism would have a devastating impact on the United States. DHS began the Securing the Cities (STC) Program to enhance the Nation's ability to detect and prevent terrorist attacks and other high-consequence events using nuclear or other radiological materials in high-risk urban areas. In support of this mission, CWMD provides detection equipment, training, exercise support, operational and technical subject matter expertise, and programmatic support through a cooperative agreement grant process with eligible U.S. regions.

STC is currently operational in 13 high-risk urban areas across the Nation, adding eight additional high-risk urban areas since FY 2020. The STC Program uses a regional approach to R/N detection that allows for a layered defense posture to increase the probability of detection. In addition, coordination with the Federal Bureau of Investigation and their specialized teams ensures a timely hand off and rapid response to a possible terrorism event. In order to continue to support this effort, the President's Budget requests \$30M in FY 2022, which represents an increase of \$5.4M over the FY 2021 enacted funding.

Beyond STC, CWMD's Mobile Detection Deployment Program (MDDP) enhances CBRN detection and R/N interdiction capabilities by deploying equipment and technical support for state and local surge operations and events of national significance. To date, in FY 2021, MDDP has conducted 124 deployments in 22 states supporting 57 federal, 18 state, and 28 local agencies. These deployments were scaled back in FY 2021 due to federal, state, and local partners' internal policies related to COVID-19. In FY 2022 MDDP is expected to conduct 144 deployments across the United States. This program continues at \$6.8M for FY 2022.

## **DEVELOPING AND DEPLOYING TECHNOLOGIES TO SUPPORT OPERATIONS**

CWMD continues to ensure implementation of robust domestic CBRN detection architectures through development and deployment of technologies to our FSLTT operational partners.

CWMD's R&D program manages efforts to identify, explore, develop, and demonstrate science and technologies that address gaps in the detection architecture, improve performance of CBRN detection and analysis, and reduce the operational burden of detection systems in the field. In addition to developing new CBRN sensors, the R&D program also improves detection through data analytics (advanced algorithms employing machine learning/artificial intelligence).

CWMD works with first responders and other operators to ensure transition of technologies to the field. For example, the Mobile Urban Radiological Search system provides operators in U.S. Customs and Border Protection (CBP) with the ability to detect, locate, and identify anomalous radioactive materials through the data fusion of directional radiation detectors with video cameras. Smaller fixed Optical Warning & Localization systems with similar capabilities have been used by the MDDP in support of local law enforcement to protect venues at National Security Special Events, such as the Indianapolis 500, or at CBP checkpoints.

During FY 2021, CWMD conducted two technology demonstrations of advanced spectroscopic R/N detection technology at two U.S. Border Patrol checkpoints to evaluate improvements in detection effectiveness and efficiency over the current technology. Additionally, CWMD procured

R/N detection systems for DHS Operational Components, including more than 16,000 Personal Radiation Detectors. CWMD is also acquiring new enhanced Radiation Portal Monitors (RPMs) to replace the first 216 of approximately 1,400 aging RPMs protecting our borders.

CWMD continues to expand beyond its legacy R/N RDT&E and acquisition programs to address chemical and biological threats in close coordination with our colleagues in DHS S&T and consistent with the CWMD Act of 2018. For example, in FY 2021, CWMD delivered chemical detectors to 20 DHS Operational Field Units and unmanned ground vehicles equipped with chemical detection capabilities to DHS special mission units.

Finally, CWMD chairs the Countering Weapons of Mass Destruction Requirements Oversight Council, composed of Senior Executives from nine DHS components, to facilitate the executive review, prioritization, and approval of capability needs and gaps of CWMD operational requirements across DHS components and work with the DHS Joint Requirements Council to validate counter-WMD requirements.

In FY 2022, the President's Budget requests \$65.7M for Research and Development Activities, which is consistent with the enacted amount for FY 2021 of \$65.3M. The FY 2022 request also includes \$53.7M to procure and deploy large scale detection systems and \$15M to acquire portable detection systems.

## **ENSURING A COORDINATED APPROACH TO COUNTER CHEMICAL THREATS**

In response to a 2018 Government Accountability Office audit, CWMD established the DHS Chemical Coordination Group (CCG) in 2019 to meet the evolving threat from chemical attacks and incidents. This body is composed of representatives from DHS Components with significant chemical defense equities and serves as the primary coordination mechanism for DHS chemical defense. The CCG has addressed issues such as current and emerging chemical threats, including coordinating DHS actions on pharmaceutical-based agents (e.g. fentanyl). The President's Budget includes \$1M in the FY 2022 Operations & Support appropriation to ensure that the CCG and related activities will integrate, align, and advance DHS chemical defense capabilities.

The CCG developed the first ever DHS Chemical Defense Strategy, published in December 2019. CWMD and the CCG also directed an in-depth analysis of Department-wide chemical capabilities, defense and preparedness equities, programs, activities, and lines of effort. The CCG has begun to use this analysis to improve program coordination, share information about current activities throughout the Department, and address operational gaps. To support these efforts, the President's Budget requests an additional \$2.0M in the Federal Assistance appropriation for Chemical Defense activities in support of the Integrated Chemical Defense Assessment Toolkit to assist communities in building layered defenses against chemical threats.

## **DEFENDING THE NATION'S FOOD, AGRICULTURE, AND VETERINARY SYSTEMS**

CWMD's mission encompasses more than traditional counter-WMD programs. The Securing Our Agriculture and Food Act (Public Law 115-43) requires that CWMD implement a program to coordinate the Department's efforts to defend the Nation's food, agriculture, and veterinary systems against terrorism and other high-consequence events. To meet this mandate, in FY 2020,

CWMD reestablished a formal Food, Agriculture, and Veterinary Defense (FAV-D) program under the DHS Chief Medical Officer (CMO). In FY 2022, the President's Budget requests an additional \$2.8M above enacted funding (\$5.8M total) to protect against the intentional introduction or natural occurrence of catastrophic animal, plant, and zoonotic diseases.

CWMD works closely with DHS Components to enhance the resilience of the nation across the food and agriculture sector. In FY 2021, CWMD and DHS S&T jointly published a strategic plan to guide the future of FAV-D RDT&E activities. Last month, in collaboration with the Critical Infrastructure Partnership Advisory Council, CWMD led a roundtable with Federal Government, state, local, and private sector partners to identify areas of improvement toward building a resilient food and agriculture sector.

## **RESPONDING TO COVID-19**

Since the earliest days of the pandemic, CWMD has provided expert biological and medical guidance and reports and enhanced support to DHS Components, the Department of Health and Human Services, and other partners. CWMD's role in the COVID-19 response has been three-fold, focused on traditional biodefense actions, like biosurveillance; supporting the Centers for Disease Control and Prevention (CDC) in implementing public health actions at our borders; and helping to ensure the health and safety of DHS's workforce. CWMD has also led policy coordination for DHS in the transportation sectors (land, air, and sea) to ensure CDC guidance is implemented and decisions are informed by operational constraints.

NBIC began tracking COVID-19 in early January 2020 and continues to generate and distribute reports and analytic and modelling products to federal, state, and local partners. Over the course of the COVID-19 pandemic, NBIC has generated approximately 600 biosurveillance reports on COVID-19 and developed a COVID-19 daily briefing that reaches over 200 DHS senior leaders.

Beginning in early February 2020, before much was known about the transmission of COVID-19, DHS partnered with CDC to establish medical entry screening at designated airports for travelers returning from restricted countries to reduce the risk of COVID-19 importation.

Finally, in coordination with DHS Components and the Veterans Health Administration, the DHS CMO led Operation Vaccinate Our Workforce (Operation VOW) to voluntarily vaccinate frontline and mission critical DHS employees against COVID-19. Through both fixed facility and field and expeditionary vaccine events, Operation VOW has vaccinated more than 75,000 employees as of June 2021.

## **PROVIDING EXPERT HEALTH ADVICE AND OPERATIONAL MEDICAL SUPPORT**

Per the CWMD Act of 2018, the DHS CMO resides within CWMD and serves as the principal advisor to the Secretary of Homeland Security, Assistant Secretary for CWMD, the Federal Emergency Management Agency Administrator, and DHS senior leadership on medical and public health issues related to natural disasters, border health, pandemic response, acts of terrorism, and other man-made disasters.

The CMO team provides operational medical support to DHS Components. This support includes immigration health issues, public health preparedness and response, and the DHS Emergency Medical Services enterprise, which comprises over 3,500 emergency medical technicians across the Department. The CMO team implements critical medical programs such as the Department's forthcoming electronic health records system and the First Responder Vaccine Initiative Pilot Program, which makes expiring anthrax vaccine doses available on a voluntary basis to state and local emergency response providers. In FY 2022, the President's Budget requests \$7.5M to support the CMO, which reflects a \$4.0M increase over the FY 2021 enacted funding.

During his May 26, 2021 testimony before the House Appropriations Subcommittee on Homeland Security, Secretary Mayorkas committed to providing a plan to reform the Department's health and medical functions. CWMD, including the CMO, is assisting Department leadership in assessing the role, structure, and functions of the CMO in light of the lessons learned from COVID-19 and other recent health and medical responses. We look forward to working with this Committee on that effort.

## **WORKFORCE MORALE**

The CWMD workforce is composed of the best and brightest in the Federal Government. From the scientists and doctors, to the individuals who work behind the scenes on the day-to-day tasks, the accomplishments of this team make the Nation safer.

From the onset of the COVID-19 response, CWMD has recognized the importance of keeping our staff safe, informed, and mission ready. With this premise in mind, CWMD senior leadership has conducted over 74 weekly virtual Town Halls with an average of 280 of our staff participating. Additionally, I have personally held numerous small group Town Halls to engage with the workforce at multiple levels.

CWMD established the Employee Engagement Team (EET) to focus on identifying barriers to and measures of success across the organization. The EET is an employee driven effort to develop an action plan for strengthening CWMD, implementing changes, and monitoring their effectiveness.

All of these actions played a significant role in CWMD being listed as the most improved DHS Component, and fifth most improved government-wide, in Overall Rankings in the recently released Partnership for Public Service's Best Places to Work in the Federal Government.

## **CONCLUSION**

CWMD remains focused on countering CBRN and health-related threats and incidents. While we are a relatively new Office, we have matured quickly. CWMD performed a key role for DHS throughout the COVID-19 pandemic. During that same time, we continued to coordinate DHS efforts in the WMD mission space, provide our FSLTT partners with CBRN detection equipment, and run programs to protect the Nation from CBRN and other health security threats. We have assessed the full mission space and expanded our counter chemical and biological capabilities to most efficiently and effectively execute our mission. We have also minimized certain functions that better align with other federal department missions, such as the technical nuclear forensics pre-detonation materials program.



On behalf of the CWMD staff who work tirelessly to keep the United States and the American people safe from CBRN and other health security threats, I look forward to working with you on the reauthorization of our Office.

Chairwoman Demings, Ranking Member Cammack, and distinguished Members of this Subcommittee, thank you again for your attention to this important mission and for the opportunity to discuss CWMD's work.