EXAMINING THE U.S. DEPARTMENT OF HOMELAND SECURITY COUNTERING WEAPONS OF MASS DESTRUCTION OFFICE

HEARING

BEFORE THE

SUBCOMMITTEE ON EMERGENCY PREPAREDNESS, RESPONSE, AND RECOVERY

OF THE

COMMITTEE ON HOMELAND SECURITY HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTEENTH CONGRESS

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EXAMINING THE U.S. DEPARTMENT OF HOMELAND SECURITY COUNTERING WEAPONS OF MASS DESTRUCTION OFFICE

Friday, July 16, 2021

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOMELAND SECURITY,
SUBCOMMITTEE ON EMERGENCY PREPAREDNESS,
RESPONSE, AND RECOVERY,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:03 a.m. via Webex, Hon. Val Butler Demings [Chairwoman of the subcommittee] presiding.

Present: Representatives Demings, Payne, Cammack, and Miller-Meeks.

Mrs. DEMINGS. The Subcommittee on Emergency Preparedness, Response, and Recovery will come to order.

The subcommittee is meeting today to receive testimony on examining the U.S. Department of Homeland Security Countering Weapons of Mass Destruction Office.

Without objection, the Chair is authorized to declare the subcommittee in recess at any point.

We are here today to discuss the state of the United States Department of Homeland Security Countering Weapons of Mass Destruction Office.

This September marks the 20th anniversary of the worst terrorist attack on U.S. soil. Since that time, there has been general agreement that we as a Nation must be prepared to address terrorism and attacks on our country regardless of the mode of attack. This means being prepared for low-probability, high-consequence attacks involving chemical, biological, radiological, and nuclear materials.

As we emerge from an extremely tragic year, where COVID–19 took the lives of over 600,000 Americans, it does not take a lot of imagination to envision the damage that a chemical, biological, radiological, nuclear attack could do to our country. In addition to the immediate health and safety consequences, such an attack could imperil our Nation's critical infrastructure and destabilize large swaths of the country.

For its part within DHS, it falls to the CWMD Office to not only prevent such attacks, but also partner with domestic and international partners to safeguard the United States against health security attacks. Unfortunately, since CWMD was authorized in 2018, it has faced significant challenges and persistent problems,

some of which predate the office's actual establishment that have undermined the office's ability to successfully fulfill its very vital mission.

CWMD's challenges were not unforeseen. In August 2016, the Comptroller General cautioned, 2 years prior to the Trump administration's unilateral action to consolidate both programs within a new CWMD office, that DHS quote was—and I quote—"did not fully access and document potential problems that could result from consolidation".

Although the CWMD work force has performed laudable activities during the pandemic, taking such actions as issuing guidance, performing biosurveillance, and leading efforts to vaccinate the DHS work force, numerous Governmental and non-Governmental reports indicate that there are significant structural and work force morale issues within CWMD. CWMD is at a crossroads.

At this time, there are a number of proposals to spin off major portions of the office, and there is a fair bit of skepticism that the organization will have adequate resources to deliver the promise of its most prominent and consequential detection program.

For instance, DHW—DHS continues to struggle to deliver biodetection capability that can effectively deploy in urban and other high-risk areas. In 2003, DHS began installing BioWatch, air samplers, and conspicuously at street level and atop buildings in cities across the country to detect deadly biological attack. But that program never quite delivered the situational awareness that local responders needed.

So DHS shifted gears to the BioDetection for the 21st Century, or BD21, Program. Unfortunately, that program is struggling, too. In fact, a May 2021 report issued by the Comptroller General found that the program faces technical challenges due to inherent limitations and the technologies and uncertainties with combining technology for use and biodetection.

Then there is the Securing the Cities Program, which is supposed to detect nuclear and radiological threats in urban areas. In recent years, the Trump administration sowed confusion and uncertainty among city officials participating in the program, according to the Comptroller General, when the then leader of CWMD communicated to stakeholders that DHS wanted to reduce its participation and let other Federal agencies play a larger role.

Around the same time, in 2019, there was reporting that the Trump administration had quietly dismantled or cut back programs such as CWMD's Red Team Program that carried out dozens of drills and assessments around the country each year to help Federal, State, and local officials detect potential threats, such as improvised nuclear device concealed in a suitcase or a cargo ship carrying a radiation-spewing dirty bomb, as well as the operation support directorate, which had helped lead up to 20 WMD-related training exercises each year with State and local authorities.

Some of the challenges CWMD faces today are a by-product of the way in which CWMD was formed by the Trump administration. Other challenges are intrinsic in its mission.

Given all of these challenges, DHS leadership will have to prioritize improvements to CWMD in order to enhance the Department's counter-CBRN programs.

This subcommittee stands ready to assist CWMD and the Department in their efforts to improve our Nation's ability to protect the homeland against weapons of mass destruction.

I along with Members of this subcommittee are grateful for the participation of our witnesses here today, the Acting Secretary of CWMD, Gary Rasicot; and Christopher Currie, director of the Homeland and Justice Division within GAO. We look forward to your testimony.

[The statement of Chairwoman Demings follows:]

STATEMENT OF CHAIRWOMAN VAL BUTLER DEMINGS

JULY 16, 2021

Good morning.

We are here today to discuss the state of the U.S. Department of Homeland Security Countering Weapons of Mass Destruction Office (CWMD).

This September marks the 20th anniversary of the worst terrorist attack on U.S. soil.

Since that time there has been general agreement that we, as a Nation, must be prepared to address terrorism and attacks on our country—regardless of the mode of attack.

That means being prepared for low-probability, high-consequence attacks involving chemical, biological, radiological, or nuclear materials. As we emerge from an extremely tragic year, where COVID–19 took the lives of over 600,000 Americans, it does not take a lot of imagination to envision the damage that a Chemical, Biological, Radiological, Nuclear (CBRN) attack could do to our country. In addition to the immediate health and safety consequences, such an attack could imperil our Nation's critical infrastructure and destabilize large swaths of the country.

For its part, within DHS, it falls to the CWMD Office to not only prevent such attacks but also partner with domestic and international partners to safeguard the United States against health security threats. Unfortunately, since CWMD was authorized in 2018, it has faced significant challenges and persistent problems, some of which predate the Office's establishment, that have undermined the Office's ability to successfully fulfill its vital mission.

CWMD's challenges were not unforeseen. In August 2016, the Comptroller General 2 years prior to the Trump administration's unilateral action to consolidate existing programs into a new CWMD office—that DHS "did not fully assess and document potential problems that could result from consolidation."

Although the CWMD workforce has performed laudable activities during the pandemic—taking such actions as issuing guidance, performing biosurveillance, and leading efforts to vaccinate the DHS workforce—numerous Governmental and non-Governmental reports indicate that there are significant structural and workforce morale issues within CWMD.

CWMD is at a crossroads. At this time, there are a number of proposals to spin off major portions of the office and there is a fair bit of skepticism that the organization will have adequate resources to deliver on the promise of its most prominent and consequential detection programs.

For instance, DHS continues to struggle to deliver a biodetection capability that can be effectively deployed in urban and other high-risk areas. In 2003, DHS began installing BioWatch air samplers inconspicuously at street level and atop buildings in cities across the country to detect deadly biological attacks. But that program never quite delivered the situational awareness that local responders needed so, DHS, shifted gears to the "Biodetection for the 21st Century" or "BD21" program. Unfortunately, that program is struggling too. In fact, a May 2021 report issued by the Comptroller General found that the program faces "technical challenges due to inherent limitations in the technologies and uncertainties with combining technologies for use in biodetection."

Then there is the Securing the Cities program, which is supposed to detect nuclear and radiological threats in urban areas. In recent years, the Trump administration sowed "confusion and uncertainty" among city officials participating in the program, according to the Comptroller General, when the then-leader of CWMD communicated to stakeholders that DHS wanted to reduce its participation and let other Federal agencies play a larger role.

Around the same time, in 2019, there was reporting that the Trump administration had quietly dismantled or cut back programs such as—CWMD's "Red Team"

program that carried out dozens of drills and assessments around the country each year to help Federal, State, and local officials detect potential threats such as an improvised nuclear device concealed in a suitcase, or a cargo ship carrying a radiation-spewing "dirty bomb" as well as the Operations Support Directorate, which had helped lead up to 20 WMD-related training exercises each year with State and local authorities.

Some of the challenges CWMD faces today are a byproduct of the way in which CWMD was formed by the Trump administration; other challenges are intrinsic to its mission.

Given all of its challenges, DHS leadership will have to prioritize improvements to CWMD in order to enhance the Department's counter-CBRN programs.

This subcommittee stands ready to assist CWMD and the Department in their efforts to improve our Nation's ability to protect the homeland against weapons of mass destruction.

I, along with the Members of this subcommittee are grateful for the participation of our witnesses here today, the acting assistant secretary of CWMD, Gary Rasicot, and Christopher Currie, director of the Homeland and Justice Division within GAO. We look forward to your testimony.

Mrs. DEMINGS. The Chair now recognizes the Ranking Member of the subcommittee, the gentlewoman from Florida, Ms. Cammack, for an opening statement.

Mrs. CAMMACK. Well, thank you. Thank you, Madam Chairwoman. Pleasure to see everyone here today.

Thank you to our witnesses.

In less than 2 months, our Nation will collectively mourn the 20th anniversary of the September 11 attacks. Following those attacks, the Department of Homeland Security was created to combat threats posed by al-Qaeda and other extremist and terrorist groups. However, in the last 20 years, the terrorist threat landscape has changed dramatically.

Terrorist groups and extremists have long strived to employ chemical, biological, radiological, and nuclear materials as part of their attacks. In 2001, anthrax attacks highlighted the grim reality of a bioweapon. The powder was delivered through the mail, ultimately killing 5 people, making ill 17, and shutting down much of the Capitol complex.

In 2017, the Australian Government disrupted a plot allegedly hatched by ISIS supporters that involved setting off a device to release toxic gas in an enclosed public space. Even now, when we are finally looking down at the downslope of COVID–19, questions have been raised as to the origins of a virus that has crippled not just the United States, but the entire world, and has cost more than 600,000 American lives. It is imperative that we stand ready to counter these types of threats.

The Countering Weapons of Mass Destruction Office was authorized in December 2018 to elevate and streamline efforts to prevent terrorism using weapons of mass destruction. Unfortunately, CWMD has had its fair share of growing pains. Media reporting in 2019 indicated that the CWMD Office significantly scaled back or eliminated programs specifically put in place to help protect the United States.

According to reports, subject-matter experts were removed from their areas of expertise, vital risk assessments were halted, and training exercises aimed at helping State and local officials were minimized.

Similarly, the GAO has issued several reports highlighting the many shortfalls that the office has encountered through its various programs. I am happy that we will hear from them today.

For example, GAO recently found that CWMD had taken little action on assessing and working with cities participating in the Securing the Cities Program on sustaining their detection capabilities. Securing the Cities aims at reducing the risk of a successful deployment of a radiological or nuclear weapon against major metropolitan areas within the United States. Without analyzing risks related to sustainment and working with cities to address these risks, radiological detection capabilities around the country could and will deteriorate.

GAO and DHS's Office of Inspector General have both reported on the long-standing challenges that CWMD has faced with regard to its biodetection technologies and BioWatch Program, a system intended to detect biological agents and provide early warning in the event of a biological attack.

Most recently, in March, the OIG reported that the system monitors and detects less than 50 percent of the biological agents known to be threats because BioWatch had not updated its biological agent-detection capabilities with their 2017 threat assessment results.

Additionally, in July of just last year, DHS's OIG report cited that CWMD, although required under the Securing Our Agriculture and Food Act had, quote, limited awareness of DHS and their on-going efforts and cannot ensure it is adequately prepared to respond to a terrorist attack against the Nation's food, agriculture, or veterinary systems.

Considering the supply shortages that we have faced both last year and this year due to the COVID–19 pandemic, I cannot simply imagine the consequences if our food and agricultural systems were attacked.

I would be remiss if I did not mention the low morale CWMD has faced since the office's formation. In 2019, the CWMD Office was ranked dead last amongst the like-sized agencies in the Partnership for Public Service's Best Places to Work rankings.

In 2020, while the office made slight progress, it ranked 403 out of 411 agencies, moving up only a handful of slots. A dedicated and motivated work force is so important for the success of this office and these programs that maintain our Nation's readiness to detect, deter, and thwart a terrorist attack.

As I have highlighted in my opening statement, the Countering Weapons of Mass Destruction Office has unfortunately hit many roadblocks since its creation. I am hopeful, as is, I am sure, the rest of our members of this committee, that this hearing will bring to light the underlying issues that have plagued the CWMD's success, and that we may have a fruitful and candid discussion that puts us on a positive path forward.

I thank Chairwoman Demings for holding this very important hearing, and I look forward to hearing from our witnesses here today.

With that, I yield back.

[The statement of Ranking Member Cammack follows:]

STATEMENT OF RANKING MEMBER KAT CAMMACK

In less than 2 months, our Nation will collectively mourn the 20th anniversary of the September 11 attacks. Following those attacks, the Department of Homeland Security was created to combat threats posed by al-Qaeda and other extremist and terrorist groups. However, in the last 20 years, the terrorist threat landscape has changed dramatically.

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And even now, when we are finally looking at the down slope of the COVID–19 pandemic, questions have been raised as to the origins of a virus that crippled, not just the United States, but the entire world and cost more than 600,000 American lives.

It is imperative that we stand ready to counter these types of threats.

The Countering Weapons of Mass Destruction Office (CWMD) was authorized in December 2018 to elevate and streamline efforts to prevent terrorism using weapons of mass destruction. Unfortunately, CWMD has had its fair share of growing pains.

Media reporting in 2019 indicated that the CWMD office significantly scaled back or eliminated the programs specifically put in place to help protect the United States. According to reports, subject-matter experts were removed from their areas of expertise, vital risk assessments were halted, and training exercises aimed at helping State and local officials were minimized.

Similarly, the Government Accountability Office (GAO) has issued several reports highlighting the many shortfalls the Office has encountered through its various programs. I am happy that we will hear from them today.

For example, GAO recently found that CWMD has taken little action on assessing and working with cities participating in the Securing the Cities program on sustaining their detection capabilities. Securing the Cities aims at reducing the risk of a successful deployment of a radiological or nuclear weapon against major metropolitan areas in the United States. Without analyzing risks related to sustainment and working with cities to address these risks, radiological detection capabilities around the country could and will deteriorate.

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And I would be remiss if I didn't mention the low morale CWMD has faced since the office's formation. In 2019, the CWMD Office was ranked dead last among like-sized agencies in the Partnership for Public Service's Best Places to Work rankings. In 2020, while the Office made slight progress, it ranked 403 out of 411 agencies, only moving up a few slots.

A dedicated and motivated workforce is so important for the success of this office and these programs that maintain our Nation's readiness to detect, deter, and thwart a terrorist attack.

As I've highlighted in my opening statement, the Countering Weapons of Mass Destruction Office has unfortunately hit many roadblocks since its creation. I am hopeful that this hearing will bring to light the underlying issues that have plagued CWMD's success and that we may have a fruitful discussion that puts us on a positive path forward.

I thank Chairwoman Demings for holding this important hearing and I look forward to hearing from our witnesses.

Mrs. DEMINGS. I thank the Ranking Member for her statement.

Members are also reminded that the committee will operate according to the guidelines laid out by the Chairman and Ranking Member in their February 3 colloquy regarding remote procedures.

Without objection, Members not on the subcommittee shall be permitted to sit and question the witnesses.

The Chair now recognizes the Chairman of the full committee, the gentleman from Mississippi, Mr. Thompson, for an opening statement.

Is Chairman Thompson on?

Is the Ranking Member on?

OK. We will move forward, and, if Mr. Thompson joins us, we will go back to him.

[The statement of Chairman Thompson follows:]

STATEMENT OF CHAIRMAN BENNIE G. THOMPSON

JULY 16, 2021

Good morning.

Thank you to Chairwoman Demings and Ranking Member Cammack for holding this hearing.

I am glad to have Acting Assistant Secretary Rasicot and Director Currie at today's hearing to discuss the status of the Countering Weapons of Mass Destruction Office (CWMD) at this critical time.

In 2018, the Office was created with the dual mission of preventing a Weapons of Mass Destruction attack against the United States and leading DHS's efforts to safeguard the United States against chemical, biological, radiological, nuclear, and health security threats.

By 2019, it was apparent that CWMD was in trouble. That is when we learned of the Trump administration dismantling several of the Office's programs.

In August 2019, I, along with then-Ranking Member Mike Rogers and our Senate counterparts, wrote to DHS to express our concerns about the changes under way at CWMD. The then-Assistant Secretary, James McDonnell, responded by assuring us that the CWMD programs were "realigned or restructured to better address threats, remove bureaucratic redundancy, and fully align with the President's National Security Strategy and our appropriation."

Shortly thereafter, there were a series of abrupt changes in leadership during the last year of the Trump administration. Mr. Rasicot, I look forward to hearing why you came back to lead CWMD and what you plan to do to get CWMD on a positive trajectory.

One area of major concern is CWMD's low workforce morale. In 2019, morale within this Office was ranked the lowest among all subagencies in the Federal Government, according to the Office of Personnel Management.

It has been reported that CWMD's biological threat detection system, BioWatch, which is deployed in 30 major metropolitan areas, is unable to fulfill its primary task of detecting aerosolized biological attacks. Confidence in the direction CWMD took the program hit a new low when, in 2021, the Bipartisan Commission on Biodefense recommended to eliminate the program from all future Presidential budget requests until replacement technology is identified and confirmed to meet the needs of the program.

Additionally, CWMD's nuclear and radiological defense efforts have significant challenges. According to the Comptroller General, CWMD's "Securing the Cities" program, which is operated by local authorities in metropolitan areas to prevent terrorist attacks and other high-consequence events, does not collect information to fully track program spending or performance and and has "not addressed challenges to sustaining the programs."

At this time, it is critical that we hear from current CWMD leadership about its plan to address the challenges identified by GAO and others.

Given all the challenges inherited from the Trump administration, the challenge before the Biden administration, at this time, is where to focus its energies to position CWMD for success. I welcome the testimony from our witnesses today and hope to learn about the solutions to these many challenges.

Mrs. DEMINGS. I now welcome our panel of witnesses. The first witness is Gary Rasicot. Mr. Rasicot serves as the acting assistant secretary for the U.S. Department of Homeland Security Countering Weapons of Mass Destruction Office. Mr. Rasicot previously served as the acting assistant secretary of CWMD from October 2019 to July 2020.

Prior to his role within CWMD, he assumed the duties of the U.S. Coast Guard deputy commandant for support—for mission support deputy for personnel readiness in 2018 and has experience working within the Transportation Security Administration.

Mr. Rasicot has also served as an active-duty Coast Guard officer for more than 20 years, and this subcommittee appreciates him for his service.

Mr. Rasicot, thank you so much for joining us today.

Our second witness is Christopher Currie.

Mr. Currie served as the director of homeland and justice division within the U.S. Government Accountability Office. In his role, Mr. Currie leads GAO's investigative work on emergency management, disaster response and recovery, and management of the Department of Homeland Security. Mr. Currie began his time with GAO in 2002.

Mr. Currie, thank you so much for joining us as well.

Without objection, the witnesses' full statements will be inserted in the record.

I now give each witness the opportunity to summarize their statement for 5 minutes, beginning with Acting Assistant Secretary Rasicot.

STATEMENT OF GARY C. RASICOT, ACTING ASSISTANT SECRETARY, COUNTERING WEAPONS OF MASS DESTRUCTION OFFICE, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. RASICOT. Chairwoman Demings, Ranking Member Cammack, and distinguished Members of the subcommittee, thank you for inviting me to speak with you today. I appreciate this opportunity to discuss the Department of Homeland Security Countering Weapons of Mass Destruction Office, known as CWMD, and our efforts to safeguard the Nation from chemical, biological, radiological, nuclear, and other health security threats.

Additionally, I would like to thank the committee and its Members for their on-going support of the CWMD Office; specifically, Representative Payne, who was so helpful in getting our authorization bill passed.

In accordance with the CWMD Act of 2018, CWMD is the hub of the Department's CBRN and other health security activities, providing coordination, strategy and policy guidance, intelligence analysis, operation support, and developing and deploying technologies that support operational partners.

The President's budget requests $427 million in fiscal year 2022 to support 309 Federal staff and the programs critical to the CWMD mission.

I have had the privilege of leading the C—this office twice, most recently since January 2021. My priorities for this office have been, No. 1, to establish a safe, collaborative, and productive work environment; No. 2, to ensure risk-based mission capability across the

broad spectrum of threats; and, No. 3, to strengthen both our critical partnerships and support to DHS operating components and our full range of Federal, State, local, Tribal, and territorial partners.

Over the past 2 years, we have made notable progress in strengthening our programs with invaluable input from our colleagues in Congress, the Government Accountability Office, and the Office of the Inspector General, as well as many first-responder and other operational organizations we support.

Recent mission accomplishments include strengthening CWMD flagship biodefense programs, including near-term actions with BioWatch and the formal recapitalization acquisition program, known as BD21; expanding the Securing the Cities Program; reinvigorating the DHS Food, Agriculture, and Veterinarian Defense Program; responding to the COVID–19 pandemic through biosurveillance and supporting CDC in implementing public health actions; strengthening the CWMD coordination role through a three-part series of exercises that included over 300 DHS Federal, State, and local participants over the past several months.

The DHS chief medical officer led the Operation Vaccinate our Workforce, which has vaccinated more than 75,000 front-line mission-critical and DHS employees.

Finally, we have focused extensively on improving employee morale. CWMD established an employee engagement team to empower staff at all levels to provide input and share ownership in the organization's strategic decision-making process. Throughout the pandemic, we have conducted over 70 weekly virtual town halls, with an average of more than 250 of our staff participating.

Additionally, I have personally held numerous small town halls to engage the work force at multiple ladders. These and other actions have played a significant role in CWMD being reflected as one of DHS's most improved components in the overall rankings in the recently released Partnership for Public Service's Best Places to Work in the Federal Government.

The creation of CWMD through the CWMD Act of 2018 elevated and streamlined the ability of DHS to successful resource and execute this critical mission. But, as with any new organization, there is certainly room for refinement and improvement. We plan to work closely with the Members of this subcommittee as we strive to improve the CWMD Office.

On the behalf of the CWMD staff, who work tirelessly to keep the American people safe, I look forward to working with each of you on the continued authorization of our office.

Finally, I am humbled to be here representing this office and the Department of Homeland Security. To me, this hearing is the Federal Government at work, just like we all learned about in school as kids. Growing up, I did not think I could have ever imagined that I would be afforded such a privilege, so thank you. I look forward to your questions.

[The prepared statement of Mr. Rasicot follows:]

PREPARED STATEMENT OF GARY C. RASICOT

JULY 16, 2021

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 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 1 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 $427 million in fiscal year 2022 funds to support 309 Federal staff and the programs critical to the CWMD mission. This represents an increase of $25 million over the fiscal year 2021 enacted amount for CWMD. CWMD allocates the $427 million 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 $15 million, which includes an $8 million 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 on-going 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 fiscal year 2020 through Quarter 2 of fiscal year 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 fiscal year 2022, CWMD requests $15.8 million for NBIC, an increase of $3.5 million over the fiscal year 2021 amount.

This funding will accelerate NBICs 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 $83.7 million for BioWatch in fiscal year 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 $3.3 million within the BioWatch Program for fiscal year 2022.

Biological Detection for the 21st 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 time line 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 $6.2 million increase over fiscal year 2021 enacted, totaling $9.7 million for BD21 R&D in fiscal year 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 8 additional high-risk urban areas since fiscal year 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 $30 million in fiscal year 2022, which represents an increase of $5.4 million over the fiscal year 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 fiscal year 2021, MDDP has conducted 124 deployments in 22 States supporting 57 Federal, 18 State, and 28 local agencies. These deployments were scaled back in fiscal year 2021 due to Federal, State, and local partners' internal policies related to COVID–19. In fiscal year 2022 MDDP is expected to conduct 144 deployments across the United States. This program continues at $6.8 million for fiscal year 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 fiscal year 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 fiscal year 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 9 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 fiscal year 2022, the President's budget requests $65.7 million for Research and Development Activities, which is consistent with the enacted amount for fiscal year 2021 of $65.3 million. The fiscal year 2022 request also includes $53.7 million to procure and deploy large scale detection systems and $15 million 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 $1 million in the fiscal year 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 $2.0 million 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 fiscal year 2020, CWMD reestablished a formal Food, Agriculture, and Veterinary Defense (FAV–D) program under the DHS chief medical officer (CMO). In fiscal year 2022, the President's budget requests an additional $2.8 million above enacted funding ($5.8 million 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 fiscal year 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 ap-

proximately 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 front-line 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 fiscal year 2022, the President's budget requests $7.5 million to support the CMO, which reflects a $4.0 million increase over the fiscal year 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.

Mrs. DEMINGS. Thank you so much for your testimony.

I now recognize Director Currie to summarize his statement for 5 minutes.

STATEMENT OF CHRISTOPHER P. CURRIE, DIRECTOR, HOMELAND SECURITY AND JUSTICE, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. CURRIE. Thank you very much, Chairwoman Demings, Ranking Member Cammack, Chairman Thompson, if you are here, and other Members of the subcommittee. I really appreciate the chance to be here to discuss our past work and on-going work on the Countering Weapons of Mass Destruction Office at DHS. I don't think I could have set up the importance of this topic any better than you—the Chairman did and Chairwoman did and the Ranking Member in their opening statements.

CWMD faces an incredibly difficult mission. Chemical, biological, nuclear, and radiological threats are extremely unique challenges. Unlike cyber threats, mass shootings, disasters, border apprehensions, drug smuggling, and other more daily occurrences DHS faces, WMD threats are not as routine, and they are not always perceived as more likely, as you said in your opening, Ms. Chairwoman.

CWMD has to compete within DHS for resources and attention with other DHS components dealing with these kind of daily events. However, the COVID–19 pandemic showed us that biological and other threats like this, while not routine, can create catastrophic and society-changing impacts. It also showed that pandemics are not just a public health issue but a National security issue requiring a huge role for DHS, and that is what happened.

Our work has identified a number of challenges across CWMD's mission. One major challenge they face right now is both addressing many of the programmatic challenges that were mentioned in the opening while at the same time working to better define its role and transform itself.

However, this shows what we have seen for decades in looking at Government programs. Mission results cannot be separated from organizational health and employee morale, and you can't have one without the other.

In the biodefense area, since 2012, we have reported on challenges in implementing BioWatch, a system that is designed to detect an airborne bio attack. Just 2 months ago, we reported on challenges in the effort to upgrade and replace BioWatch, the third effort to do so, which is called BD21.

We found that BD21 faces challenges, such as just inherent limitations in the available technology and uncertainties with combining technologies for use in the domestic environment, places like train stations, sporting arenas, things like that.

For example, avoiding and reducing false alarms is still a difficult technical challenge that has to be overcome if DHS is to more quickly detect bio threats in these environments. I also think this shows how hard it is to employ technologies in DHS in our homeland versus, you know, overseas in the warfighter or military environments.

We have also found that CWMD has struggled to develop an effective surveillance system to detect and share information on bio threats. For example, we have reported that the DHS National Biosurveillance Integration Center has struggled to really fulfill its mandate in law and provide value to Federal, State, and local partners.

In chemical—the chemical security area, in 2018, we reported that DHS had not fully integrated and coordinated its chemical defense programs and activities across all the DHS components. We recommended that DHS develop a strategy and implementation plan, and the good news is that one has been completed, and an implementation plan is to be completed in the next couple of months, according to DHS.

We have also identified challenges related to CWMD's nuclear and radiological efforts. We found challenges in their Securing the Cities Program, which were spelled out in the opening. This seeks to help cities basically detect and deter nuclear terrorism.

We reported that they didn't fully track program spending and performance and haven't addressed challenges to sustaining the program at the local level, and we recommended they better do so. I know that they have made a lot of progress in this area, but there is still more to be made. It is also important to note this because DHS seeks to expand the program in the 2022 budget.

Now, I realize the key question—I think it is the right question for today—is what do we do moving forward to help this organization be successful?

In addition to addressing the recommendations we have made, there are also actions that could be taken to help the organization mature and address morale and the other challenges. Four years ago, we testified for this same committee as DHS was first considering this reorganization. We stand by the same recommendations we made at that time.

CWMD has to continue to implement best practices from past successful transformations in Government. For example, focusing on efforts to continue better defining its mission and focusing on what it does best, communicate with internal and external stakeholders, and involve employees in all of these efforts.

This completes my statement. I look forward to the discussion and questions.

[The prepared statement of Mr. Currie follows:]

PREPARED STATEMENT OF CHRISTOPHER P. CURRIE

FRIDAY, JULY 16, 2021

HIGHLIGHTS

Highlights of GAO–21–105332, a testimony before the Subcommittee on Emergency Preparedness, Response, and Recovery, Committee on Homeland Security, House of Representatives.

Why GAO Did This Study

In December 2018, statute established the CWMD office, reorganizing several legacy offices, including the Domestic Nuclear Detection Office and Office of Health Affairs into one. The office manages programs intended to enhance the United States' ability to detect, deter, and defend against chemical, biological, radiological, and nuclear threats. However, programs operated and managed by the CWMD office have faced long-standing challenges, some which predate the reorganization.

This statement describes our 2016 work related to the CWMD office formation and findings from our past reports on CWMD programs from 2009 through May 2021, including challenges and opportunities for the effective operations and implementation of key programs related to biodefense, nuclear security, and chemical security.

To conduct our prior work, GAO reviewed relevant Presidential directives, laws, regulations, policies, strategic plans, and other reports and interviewed Federal, State, and industry officials, among others.

What GAO Recommends

GAO made 16 recommendations designed to address the challenges discussed in this statement. As of July 2021, DHS has taken steps to address some, but not all of them. Of the 16 recommendations GAO made, 10 remain open, and GAO continues to monitor DHS's progress to implement them.

COUNTERING WEAPONS OF MASS DESTRUCTION.—OPPORTUNITIES FOR DHS TO BETTER ADDRESS LONG-STANDING PROGRAM CHALLENGES

What GAO Found

In April 2016, GAO evaluated Department of Homeland Security (DHS) plans to consolidate chemical, biological, radiological, and nuclear security programs into the Countering Weapons of Mass Destruction (CWMD) office. GAO recommended DHS use, where appropriate, the key mergers and organizational transformation practices identified in prior work, such as conducting adequate stakeholder outreach. DHS agreed with and addressed the recommendation by soliciting employee feedback on the transformation and formed a leadership team for the consolidation, among other practices. However, GAO observed that significant challenges remained at the CWMD office—such as low employee morale and questions about program efficacy. GAO has on-going work evaluating these issues and plans to issue a report in early 2022.

Over the past decade, GAO has also conducted extensive work evaluating legacy and on-going programs managed by the CWMD office and has identified program management challenges and opportunities for improvement in the following program areas:

- *Biosurveillance programs*.—Since 2009, GAO has reported on progress and challenges with two of DHS's biosurveillance efforts—the National Biosurveillance Integration Center and the pursuit of replacements for the BioWatch program (aimed at detecting aerosolized biological attacks). For example, DHS faced challenges defining these programs' missions and acquiring suitable technologies. In December 2009 and September 2012, GAO highlighted the importance of following Departmental policies and employing leading management practices to help ensure that the mission of each program is clearly and purposefully defined and that investments effectively respond to those missions. DHS agreed with and addressed these recommendations. Most recently, DHS agreed to a May 2021 GAO recommendation that it should follow best practices for conducting technology readiness assessments for a biodetection effort and described planned efforts to conduct one before the next key decision event.
- *Nuclear/radiological detection*.—In May 2019, GAO found that the CWMD office lacked a clear basis for proposed changes to the strategies of the Securing the Cities program, which is designed to enhance the nuclear detection capabilities of Federal and non-Federal agencies in select cities. GAO found the strategies were not based on threats or needs of the participating cities. DHS agreed with our recommendations aimed at improving communication and coordination with participating cities, but has not fully implemented them.
- *Chemical defense*.—In August 2018, GAO found that DHS had not fully integrated and coordinated its chemical defense programs and activities, which could lead to a risk that DHS may miss an opportunity to leverage resources and share information. Improved program integration and coordination could lead to greater effectiveness addressing chemical threats. DHS agreed to develop a strategy and implementation plan to aid integration of programs, which it expects to finalize in September 2021.

Chairwoman Demings, Ranking Member Cammack, and Members of the subcommittee: I am pleased to be here today to discuss our work on the Department of Homeland Security's (DHS) Countering Weapons of Mass Destruction (CWMD) office. Our Nation faces a variety of homeland security threats that continue to evolve and present an array of challenges. Multitudes of Governmental and non-Governmental stakeholders are responsible for preventing and responding to these threats. In particular, chemical, biological, radiological, and nuclear weapons, also known as weapons of mass destruction (WMD), have the potential to kill thousands of people in a single incident.

Chemical attacks abroad and the threat of using chemical weapons against the West by the Islamic State of Iraq and Syria have raised concerns about the potential for chemical attacks occurring in the United States. Additionally, clandestine attacks using aerosolized biological agents could be carried out in urban areas, at sporting events, at transportation hubs, or at indoor facilities like office buildings.[1] The United States also faces a continuing threat that terrorists could smuggle in nuclear or radiological materials to use in a terrorist attack. According to DHS, terrorist attacks using chemical, biological, or radiological material may lack overt warning signs, which limits opportunities for intervention.[2] However, the consequences of such attacks are potentially high even though the likelihood of their occurrence is relatively low.[3]

In a June 2015 report to Congress, DHS proposed consolidating the agency's core chemical, biological, radiological, nuclear, and explosives functions.[4] The CWMD office, formed by DHS in December 2017 and established by statute in December 2018, is a reorganization of several DHS offices, including the Domestic Nuclear Detection Office and Office of Health Affairs.[5] The office works to protect against the dangers posed by hostile state and non-state actors who seek to acquire and use nuclear, chemical, radiological, or biological materials in the form of weapons of mass destruction to harm Americans or U.S. interests.

The office manages programs intended to enhance the United States' ability to detect, deter, and defend against chemical, biological, radiological, and nuclear threats. These programs include partnerships with non-Federal Governments designed to address the risk of nuclear and biological attacks in metropolitan areas and efforts to integrate and share information about those risks. The primary statutory missions of the CWMD office are coordinating with other Federal efforts and developing a strategy and policy for the Department to: (1) Plan for, detect, and protect against the importation, possession, storage, transportation, development, or use of unauthorized chemical, biological, radiological, or nuclear materials, devices, or agents in the United States; and (2) protect against an attack using such materials, devices, or agents against U.S. people, territory, or interests.[6]

Since August 2016, we have evaluated DHS efforts to consolidate chemical, biological, radiological, and nuclear security programs into the CWMD office.[7] Moreover, over the past decade, we have conducted extensive work evaluating legacy and on-going programs managed by the CWMD office that address biological, nuclear, and chemical security issues.[8] For example, we have conducted reviews of DHS's

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[1] GAO, *Biodefense: DHS Exploring New Methods to Replace BioWatch and Could Benefit From Additional Guidance,* GAO–21–292, (Washington, DC: May 20, 2021).

[2] *DHS Strategic Plan for Fiscal Years (FY) 2020–2024.*

[3] DHS, Quadrennial Homeland Security Review Report, (Washington, DC: June 2014).

[4] During an initial review of chemical, biological, radiological, nuclear, and explosives functions at DHS, agency officials determined that the Office of Bombing Prevention should be included within the WMD consolidation option. Subsequent DHS consolidation planning did not include the Office of Bombing Prevention. The Countering Weapons of Mass Destruction (CWMD) Act of 2018 does not affect the organizational placement of the Office of Bombing Prevention. Pub. L. No. 115–387, 132 Stat. 5162.

[5] Pub. L. No. 115–387, § 2(a)(2), 132 Stat. at 5162–63 (classified at 6 U.S.C. § 591).

[6] 6 U.S.C. §§ 591g, 592. The Assistant Secretary for the CWMD reports to the Secretary of Homeland Security. Id. at § 591.

[7] GAO, *Homeland Security: DHS's Chemical, Biological, Radiological, Nuclear and Explosives Program Consolidation Proposal Could Better Consider Benefits and Limitations.* GAO–16–603. Washington, DC: August 11, 2016.

[8] GAO. *Biosurveillance: Developing a Collaboration Strategy Is Essential to Fostering Interagency Data and Resource Sharing,* GAO–10–171 (Washington, DC: Dec. 18, 2009); *Biosurveillance: DHS Should Reevaluate Mission Need and Alternatives before Proceeding with BioWatch Generation–3 Acquisition,* GAO–12–810 (Washington, DC: Sept. 10, 2012); *Combating Nuclear Terrorism: DHS Should Address Limitations to Its Program to Secure Key Cities.* GAO–19–327 (Washington, DC: May 13, 2019); and *Chemical Terrorism: A Strategy and Implementation Plan Would Help DHS Better Manage Fragmented Chemical Defense Programs and Activities,* GAO–18–562 (Washington, DC: August 22, 2018), among others.

National Biosurveillance Integration Center (NBIC), the BioWatch and Securing the Cities Programs, as well as chemical defense programs.

As such, this statement describes our prior work related to the CWMD office formation and findings from our past reporting on CWMD programs, including challenges and opportunities for the effective operations and implementation of key programs related to biodefense, nuclear security, and chemical security. This statement is based on our prior work issued from December 2009 through May 2021 on various CWMD efforts.[9] It also includes updates on the status of recommendations. To conduct our prior work, we reviewed relevant Presidential directives, laws, regulations, policies, strategic plans, and other reports and interviewed Federal, State, and industry officials, among others. More information on our scope and methodology can be found in each of the reports cited throughout this statement. The work upon which this statement is based was conducted in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

BACKGROUND

CWMD Biodefense Efforts

National Biosurveillance Integration Center

The Implementing Recommendations of the 9/11 Commission Act of 2007 (9/11 Commission Act) established the National Biosurveillance Integration Center (NBIC) within DHS.[10] The Act specifically tasked NBIC with integrating and analyzing information from human health, animal, plant, food, and environmental monitoring systems across the Federal Government and supporting the interagency biosurveillance community. As defined in the July 2012 NBIC Strategic Plan, integration involves combining biosurveillance information from different sources and domains to provide partners and stakeholders with a synthesized view of the information, and what it could mean. The primary goal of integration includes creating a common understanding of potential and on-going biological events and providing insights across data sources that cannot be gleaned in isolation.

BioWatch and Biological Detection for the 21st Century

In 2003, in response to the 2001 anthrax attack, DHS started the BioWatch program—designed to provide early indication of an aerosolized biological weapon. The BioWatch program uses routine laboratory testing designed to detect an aerosolized biological attack for 5 specific biological agents considered high-risk for use as biological weapons. The BioWatch program is a Federally-managed, locally-operated system. The CWMD office collaborates with more than 30 BioWatch jurisdictions throughout the Nation to operate approximately 600 aerosol collectors, primarily in outdoor locations. The determination of whether a public health threat exists based on information from the BioWatch program can take 12 to 36 hours after the aerosol collection unit initially captures an agent. This 36-hour time line consists of up to 24 hours for air sampling, up to 4 hours for retrieving the sample from an aerosol collection unit and transporting it to the laboratory, and up to 8 hours for laboratory testing.

Since the program's inception, DHS has pursued enhancements and replacements to the existing BioWatch system without success. DHS designed these efforts to further reduce the time to detection, limiting morbidity and mortality from aerosolized biological attacks. Biological Detection for the 21st Century (BD21) is DHS's current effort to replace BioWatch. DHS describes this multi-year acquisition effort as a system-of-systems that will incorporate multiple technology components and use machine learning and data analytics to provide contextual information and indication that a biological attack may have occurred.[11]

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[9] Specific reports are cited throughout the statement.

[10] Pub. L. No. 110–53, title XI, § 1101, 121 Stat. 266, 375–79 (classified, as amended, at 6 U.S.C. § 195b).

[11] A system-of-systems is a collection of technology elements that operate or function together within a larger system to create a new, more complex system, which offers more functionality and performance than simply the sum of the constituent technology elements.

National Biodefense Strategy

DHS was 1 of 4 agencies required by law to jointly develop a National biodefense strategy and associated implementation plan.[12] In September 2018, the White House issued the National Biodefense Strategy to promote a more efficient, coordinated, and accountable biodefense enterprise and established a governance structure to guide the strategy's implementation. In June 2019, we testified that the National Biodefense Strategy and its interagency governing leadership offer the potential for the Nation to better define the role of detection technologies in a layered, National biodefense capability to help those that pursue these technologies better articulate their mission needs and align requirements and concepts of operation accordingly.[13] As part of the implementation of the National Biodefense Strategy, DHS and its interagency partners will have the opportunity to assess the role of and investment in biodetection of aerosolized attacks in a layered approach to mitigating risks of a variety of biological threats. CWMD officials represent DHS on the Biodefense Coordination Team—a working group of experts from agencies with biodefense responsibilities. CWMD officials are also responsible for leading the Strategy's implementation at DHS.

Nuclear and Radiological Detection

In fiscal year 2007, DHS's Domestic Nuclear Detection Office initiated the Securing the Cities program and implemented it for the program's first decade. Securing the Cities operates as a cooperative agreement between CWMD and eligible cities designed to enhance the nuclear detection capabilities of Federal, State, local, Tribal, and territorial agencies.[14] Cities use the funds to purchase commercial radiation detection devices and other detection equipment. The program also provides detection training for up to 5 years. Securing the Cities has 3 primary goals: (1) Enhance regional capabilities to detect and interdict unregulated nuclear and other radiological materials, (2) guide the coordination of participating cities in their roles defined by the Global Nuclear Detection Architecture, and (3) encourage participating cities to sustain their nuclear or radiological detection programs over time.[15]

Chemical Defense Efforts

DHS has a number of chemical defense responsibilities, programs, and activities spread across its various components. DHS's efforts to address a terrorist chemical attack also involve a wide range of components including the CWMD office.[16] Upon formation of the CWMD office by DHS in December 2017, the office subsumed the majority of the Office of Health Affairs. CWMD took on the office's responsibility for the public health impact of National threats and hazards, including the impact of chemical releases. CWMD also took over as the advisor to the Secretary and other DHS leaders on medical and health security issues including chemical attacks.

DHS'S INITIAL PLAN FOR CONSOLIDATION DID NOT FOLLOW KEY TRANSFORMATION PRACTICES

In 2016, as DHS prepared to create the CWMD office, we evaluated the proposed reorganization.[17] We compared available documentation related to DHS's consolidation planning efforts against key transformation practices identified based on our

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[12] Signed into law on December 23, 2016, the National Defense Authorization Act for Fiscal Year 2017 required the Secretaries of Defense, Health and Human Services, Homeland Security, and Agriculture to jointly develop a National biodefense strategy and associated implementation plan, which shall include a review and assessment of biodefense policies, practices, programs and initiatives. Such Secretaries shall review and, as appropriate, revise the strategy biennially. See Pub. L. No. 114–328, div. A, title X, subtitle G, § 1086, 130 Stat. 2000, 2423–24 (2016) (classified, as amended, at 6 U.S.C. § 104).

[13] GAO, *Biodefense: The Nation Faces Longstanding Challenges Related to Defending Against Biological Threats,* GAO–19–635T (Washington, DC: June 26, 2019).

[14] A cooperative agreement is a legal instrument of financial assistance between a Federal agency and a non-Federal entity that is used to enter into a relationship with the principal purpose to transfer anything of value, such as money, to a non-Federal entity to carry out a public purpose authorized by law. In 2019, 5 cities participated in the program.

[15] The Global Nuclear Detection Architecture is a multi-layered framework encompassing many different Federal programs, projects, and activities to detect and deter nuclear smuggling in foreign countries, at the U.S. border, and inside the United States.

[16] Other components include the National Protection and Programs Directorate, the Science and Technology Directorate, the Federal Emergency Management Agency, U.S. Customs and Border Protection, the Transportation Security Administration, and the U.S. Coast Guard.

[17] GAO–16–603. In June 2015, DHS delivered a report to Congress which proposed consolidating the agency's core chemical, biological, radiological, nuclear, and explosives functions into a new office. According to DHS officials, this proposal was based on a 2013 consolidation study.

review of previous public and private-sector reorganizations.[18] For example, key practices include dedicating an implementation team to manage the transformation process, soliciting employee views and gain their ownership for the transformation, and establishing a communication strategy to create shared expectations and report on progress.

We recommended DHS use the set of practices, where appropriate as part of the reorganization for the CWMD office. DHS agreed with the recommendation, and in October 2017 notified Congress that it planned to determine where to apply the key transformation practices and provided us with documentation demonstrating how it considered the practices. For example, at least 17 employee working groups were created to gather employee perspectives on the reorganization. Additionally, CWMD created a leadership team in January 2018 to manage the consolidation process. CWMD also created an internal communication strategy for the reorganization.

The steps DHS took to consider key practices during the consolidation were consistent with our recommendation, and we have since closed the recommendation as implemented. However, at the time we closed the recommendation, we observed that significant challenges remained at the CWMD office, such as low employee morale and questions about the efficacy of some CWMD programs. As part of on-going work begun in September 2020, we are evaluating the extent to which the CWMD office continues to perform the missions of its predecessor offices, coordinates with its partners, and manages employee morale.

OPPORTUNITIES REMAIN TO ADDRESS LONG-STANDING CHALLENGES WITH CWMD PROGRAMS

Our prior work has highlighted challenges in programs operated and managed by the CWMD office, including those that predated its creation. We have identified opportunities for improvement to address the inherently fragmented nature of these kinds of security efforts, which require many Federal, non-Federal, and industry partners to execute. Specifically, we have identified challenges in the following program areas: Biodefense, nuclear/radiological detection, and chemical defense.

DHS's Biosurveillance and Detection Programs Have Struggled to Define and Carry Out Their Missions

Between 2009 and 2021, we have reported on progress and challenges with two of DHS's biodefense efforts—the National Biosurveillance Integration Center (NBIC) and the pursuit of replacements for the BioWatch program. These reports demonstrate the importance of following departmental policies and employing leading management practices to help ensure that the mission of each program is clearly and purposefully defined and that subsequent investments effectively respond to those missions.[19] We have previously reported that the release of the National Biodefense Strategy in 2018 and establishment of the governance structure offer opportunities for DHS and partner agencies to consider how to address some of the challenges from a broader interagency and layered National security approach.[20]

National Biosurveillance Integration Center Collaboration Challenges

In December 2009, we reported that NBIC faced a variety of collaboration challenges with its partners, including confusion on roles and responsibilities and incomplete policies and strategies for operating across agency boundaries. To help NBIC enhance and sustain collaboration, including the provision of data, personnel, and other resources, we recommended that NBIC develop a strategy for addressing collaboration challenges and develop accountability mechanisms to monitor these efforts. In August 2012, NBIC issued the NBIC Strategic Plan, which intended to provide NBIC's strategic vision, clarify the center's mission and purpose, articulate the value that NBIC seeks to provide to its partners, and lay the groundwork for setting interagency roles, responsibilities, and procedures. Because NBIC created the plan we recommended, we closed those recommendations as implemented.

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[18] GAO, *Streamlining Government: Questions to Consider When Evaluating Proposals to Consolidate Physical Infrastructure and Management Functions,* GAO–12–542 (Washington, DC: May 2012).

[19] GAO–10–171; GAO–12–810; GAO, *Biosurveillance: DHS Should Not Pursue BioWatch Upgrades or Enhancements Until System Capabilities Are Established,* GAO–16–99 (Washington, DC: Oct. 23, 2015); and GAO, *Biosurveillance: Challenges and Options for the National Biosurveillance Integration Center,* GAO–15–793 (Washington, DC: Sept. 24, 2015).

[20] GAO–21–292; GAO, *National Biodefense Strategy: Additional Efforts Would Enhance Likelihood of Effective Implementation,* GAO–20–273 (Washington, DC: Feb. 19, 2020); and GAO, *Biodefense: The Nation Faces Longstanding Challenges Related to Defending Against Biological Threats,* GAO–19–635T (Washington, DC: June 26, 2019).

However, in follow-up work in 2015, we reported that a variety of challenges remained.[21] Specifically, when we surveyed NBIC's 19 Federal interagency partners,[22] we found that:

- *Some partner agencies expressed uncertainty about NBIC's value*.—Some of NBIC's partner agencies—which include various parts of the Departments of Health and Human services, Defense, Agriculture, and others—expressed a lack of trust in providing data to NBIC and NBIC's ability to interpret that data. Partners were not sure how the information would be used and cited barriers to sharing information they collect from non-Federal entities. The participation of member agencies and their subject-matter expertise is needed to create sophisticated meaning and interpretation of data in the proper context from a variety of monitoring systems covering human, animal, and plant health, and the environment.
- *Some partner agencies reported difficulties providing personnel to NBIC*.—Despite the need for subject-matter expertise from partner agencies, NBIC also faced challenges getting partner agencies to participate in NBIC activities, such as daily or weekly calls. Some partners felt the calls were repetitive of information emailed from NBIC. Partner agencies had difficulty in detailing subject-matter experts to NBIC in a resource-constrained environment, although all partner agencies do have a point of contact for NBIC. At the time of our 2015 work, NBIC had started to partially fund other agencies' liaisons, but on a very limited basis.
- *NBIC was unable to secure streams of raw data needed to conduct near-real-time quantitative analysis to reveal unusual patterns and trends*.—Because NBIC was unable to secure raw data, it relied on publicly-available reports and global news sources. This led to partner agencies not seeing much value in NBIC's products, which generally repackage information with which they are already familiar. However, we did find in 2015 that NBIC's partners from supporting agencies, such as members of the intelligence community, who do not have the same level of expertise on health issues find the reports NBIC provides helpful context for emerging or on-going events.

In September 2015, NBIC's interagency partners and other major stakeholders in the biosurveillance community acknowledged—and we agreed—that no single problem limits NBIC's mission to integrate biosurveillance data. Rather, over the years, several long-standing problems—such as data sharing across disparate missions—have combined to inhibit the achievement of this mission as envisioned in the 9/11 Commission Act. We identified options in our 2015 report for policy or structural changes that could help better fulfill the biosurveillance integration mission.[23] However, no significant change has occurred in NBIC's charge since that time. The options we outlined included:

- *Reinforce NBIC's Analyzer Role*.—Under this option, NBIC would be provided with new authorities and resources designed to access additional public and private data sources and statistical and modeling tools to develop meaningful information.
- *Strengthen NBIC's Coordinator Role*.—Under this option, NBIC would be provided with greater authority for coordinating the Federal biosurveillance enterprise.
- *Expand NBIC's Innovator Role*.—Under this option, NBIC would be provided with new authorities and resources to lead research and development investments of new tools and technology to address gaps.
- *Status Quo: Continue to Execute the 2012 NBIC Strategic Plan*.—In this option, NBIC would continue to implement the mission, goals, and objectives detailed in the August 2012 NBIC Strategic Plan or subsequent approved updates.
- *Repeal the NBIC Statute*.—In this option, National biosurveillance integration would not be pursued through NBIC.

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[21] GAO–15–793.

[22] Although NBIC has interaction with other stakeholders, we selected these 19 Federal agencies based on their biosurveillance roles and responsibilities and because they were Federal departments or components within Federal departments that have signed the NBIC Advisory Board charter.

[23] We identified these options and their benefits and limitations, on the basis of the roles of a Federal-level biosurveillance integrator we identified in the 9/11 Commission Act, NBIC's strategic plan, and the perspectives of partners obtained during our structured interviews. These options are not exhaustive, and some options could be implemented together or in part. In developing these options, we did not evaluate the financial implications of implementing each option, to the extent they are knowable, but we acknowledge they are likely to result in an increase, decrease, or shifting of funding based on the changes described.

Challenges Acquiring Biodetection Technologies

Since 2012, we have assessed the BioWatch program and DHS efforts to upgrade or replace it.[24] Since 2003, DHS has focused on acquiring an autonomous detection system to replace the current BioWatch system, but has faced challenges in clearly justifying the BioWatch program's mission and need and ability to reliably acquire technology to address that need. In September 2012, we found that DHS approved the acquisition of an autonomous detection capability (known as BioWatch Generation 3, or Gen–3) in October 2009 without fully developing critical knowledge that would help ensure sound investment decision making, pursuit of optimal solutions, and reliable performance, cost, and schedule information.[25] Specifically, we found that DHS did not engage the early phases of its Acquisition Life-cycle Framework, which is designed to help ensure that the mission need driving the acquisition warrants investment of limited resources and that an analysis of alternatives systematically identifies possible alternative solutions that could satisfy the identified need.

In our September 2012 report, we recommended that before continuing the Gen–3 acquisition, DHS reevaluate the mission need and possible alternatives based on cost-benefit and risk information. DHS concurred with the recommendation and in 2012, directed the BioWatch program to complete an updated analysis of alternatives. In April 2014, DHS canceled the acquisition of Gen–3 because the analysis did not confirm an overwhelming benefit to justify the cost of a full technology switch.

When DHS canceled the Gen–3 acquisition, it continued to rely on the current system for early detection of an aerosolized biological attack. However, in 2015 we found DHS lacked reliable information about BioWatch's technical capabilities to detect a biological attack, in part, because in the years since BioWatch's initial deployment in 2003, DHS had not developed technical performance requirements for the system.[26] We reported in 2015 that BioWatch has been criticized because it was deployed quickly in 2003 to address a perceived urgent need, but without sufficient testing, validation, and evaluation of its technical capabilities.[27]

In our October 2015 report, we made recommendations to help ensure that biosurveillance-related funding is directed to programs that can demonstrate their intended capabilities, and to help ensure sufficient information is known about the current BioWatch system to make informed cost-benefit decisions about possible upgrades and enhancements to the system. We recommended that DHS not pursue upgrades or enhancements to the current BioWatch system until it: (1) Established technical performance requirements necessary for a biodetection system to meet a clearly-defined operational objective for the BioWatch program; (2) assessed the Gen–2 system against those performance requirements; and (3) produced a full accounting of statistical and other uncertainties and limitations in what is known about the system's capability to meet its operational objectives. DHS concurred and described steps to address these recommendations, but they remain open as DHS considers other options to replace BioWatch.

In May 2021, we reported on DHS's current effort to replace the BioWatch program, known as BD21.[28] BD21 intends to combine various technologies, such as biological sensors, data analytics, anomaly detection tools, collectors, and field screening devices to enable timelier and more efficient detection of an aerosolized attack involving a biological agent. We reported in May 2021 that the BD21 program office was following the agency's acquisition policy and guidance, but that the program was early in the acquisition life cycle. Therefore, DHS had not yet selected the technologies to use and continued to analyze potential technologies to demonstrate that certain components of the overall concept are feasible, such as an anomaly detection algorithm.[29]

However, we also reported that BD21 faces technical challenges due to inherent limitations in the technologies and uncertainties with combining technologies for use in biodetection. For example, common environmental material such as pollen,

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[24] See, GAO–12–810 and GAO–16–99.

[25] GAO–12–810.

[26] GAO–16–99. Technical performance requirements would help DHS better understand the types and sizes of attacks the system could detect.

[27] GAO–16–99 and Institute of Medicine and National Research Council, *BioWatch and Public Health Surveillance* (Washington, DC: National Academies Press, 2011).

[28] GAO–21–292.

[29] For BD21, an anomaly detection algorithm is intended to use data from biological sensors that continuously monitor the air, as well as other data sources, to determine if there is a departure or deviation from the baseline environmental data, known as an anomaly. Baseline environmental data is the characterization of background environments, which can vary by geography, climate, topography, and urban density, as well as by time of day, seasons, weather, animal population dynamics, farming patterns, construction, and manufacturing (emissions).

soil, and diesel exhaust can emit a signal in the same range as a biological threat agent, thereby increasing false alarm rates in biological aerosol sensors that monitor the air and provide data on biological material in the environment. Program officials reported that the risk of false alarms produced by biological sensor technologies could be reduced by using an anomaly detection algorithm in addition to the sensor. However, it is too early to determine whether integration of an anomaly detection algorithm will successfully mitigate the false alarm rate—specifically, because the algorithms have never been developed and used for the purpose of biodetection in an urban, civilian environment.

We also reported in May 2021 that the BD21 program office plans to conduct technology readiness assessments along the way as part of the acquisition life cycle. In 2020, DHS issued a technology readiness assessment guide. We found it lacked detailed information about how the Department will ensure objectivity and independence, among other important best practices identified in our technology readiness assessment best practices guide. To ensure decision makers and program managers have the information necessary to make informed decisions at key acquisition decision events, we recommended that, among other things, the BD21 program office conduct assessments that follow our best practices prior to the program's acquisition decision events. DHS concurred with our recommendations and provided additional information on the steps the agency has taken or plans to take to address them. We will continue to monitor its progress.

Securing the Cities Program Faces Management Weaknesses

In May 2019, we identified several limitations in the CWMD office's efforts to implement the Securing the Cities program.[30] We found that CWMD lacked a clear basis for proposed changes to the program's strategies—which were not based on threats or needs of the cities. CWMD officials told us that the agency is considering several potential changes to the Securing the Cities program that would broaden its geographic reach and scope, including establishing new goals for the program, expanding geographic coverage, centralizing acquisition of detection equipment, increasing the role of other agencies, and including chemical and biological weapon detection and deterrence within the program's scope.

However, it had not: (1) Fully developed potential changes or documented a plan for making changes to the Securing the Cities program; (2) identified the basis for such changes; and (3) clearly communicated with the cities, raising concerns about how the changes will affect them. We also reported in 2019 that most of the officials we interviewed from the 5 cities in the program at the time said that DHS provided a high-level overview of potential changes in an August 2018 meeting, but little detail on how such changes would be implemented or affect city operations. We determined that if DHS did not clearly communicate to cities how the program would operate under potential changes, these cities could face difficulties planning for the future and achieving the program's detection and deterrence objectives.

Additionally, we reported in May 2019 that CWMD had not identified a clear basis for making program changes, and the extent to which these changes could be attributed to new priorities under DHS's reorganization was unclear. CWMD officials told us at the time that they had not conducted any studies or analyses that would justify making changes to the program. In DHS's fiscal year 2019 budget justification, CWMD noted the importance of using the Securing the Cities program to build capabilities far outside the immediate target areas, (i.e., cities) and the need to detect threats along the air, land, or sea pathways into and within the country that terrorists could potentially use to reach their targets. However, according to CWMD officials at the time of our 2019 review, the office had not identified a change in the nature or level of nuclear or radiological threats to explain its intent to move from its original city-focused model for the program to a more National approach. CWMD officials said that the uncertainty surrounding making changes reflected a program under transition within an agency under transition—that is, the reorganization from the Domestic Nuclear Detection Office to CWMD.

Further, we reported that the CWMD Act of 2018 required development of an Implementation Plan for Securing the Cities (due December 2019).[31] In 2019 we reported that the Act required that before making changes to the Securing the Cities program, the assistant secretary of CWMD brief appropriate Congressional committees about the justification for proposed changes. This briefing was to include, among other things, an assessment of the effect of changes, taking into consideration previous resource allocations and stakeholder input. We reported that this new requirement would provide DHS an opportunity to identify the basis for poten-

[30] GAO–19–327.

[31] Pub. L. No. 115–387, § 2(a)(10), 132 Stat. at 5164–66 (Classified at 6 U.S.C. § 596b).

tial changes, and that assessing such changes could provide more reasonable assurance that they would strengthen the program and not result in unintended consequences, such as reducing capabilities in current cities. In June 2021, the CWMD office issued the Implementation Plan for the Securing the Cities Program, which we are currently reviewing. Additionally, as part of our 2019 report, and to address program management deficiencies for the Securing the Cities program, we made 4 recommendations to CWMD, including to work with cities to address risks to sustaining detection capabilities, which remain open at the time of this statement. We are monitoring CWMD's actions to address the report's recommendations.[32]

DHS Chemical Defense Programs Not Fully Integrated

In August 2018, we reported that DHS manages several programs and activities designed to prevent and protect against domestic attacks using chemical agents.[33] Some DHS components have programs that focus on chemical defense, such as the Science and Technology Directorate's chemical hazard characterization. Others have chemical defense responsibilities as part of their broader missions, such as U.S. Customs and Border Protection, which is responsible for interdicting chemical agents at the border. The establishment of the CWMD office aimed to consolidate some chemical defense programs and activities, but we found—and DHS officials acknowledged—that DHS had not fully integrated and coordinated its chemical defense programs and activities. As such, we reported in 2018 that several components—including Customs and Border Protection, U.S. Coast Guard, the Office of Health Affairs, and Science and Technology Directorate—conducted similar activities, such as acquiring chemical detectors or assisting local jurisdictions with preparedness, separately, without DHS-wide direction and coordination. We determined that as components carry out chemical defense activities to meet mission needs, there was a risk that DHS may miss an opportunity to leverage resources and share information that could lead to greater effectiveness addressing chemical threats.

We also reported that it was too early to tell the extent to which the new CWMD office would enhance the integration of DHS's chemical defense programs and activities. In August 2018, to help guide the consolidation of these programs, we recommended that DHS develop a strategy and implementation plan to help the CWMD office: (1) Mitigate the risk of fragmentation among DHS programs and activities, and (2) establish goals and identify resources to achieve these goals, consistent with the GPRA Modernization Act of 2010.[34] We also reported that CWMD officials agreed that the establishment of the new office was intended to provide leadership to and help guide, support, integrate, and coordinate DHS's chemical defense efforts and that a strategy and implementation plan could help DHS better integrate and coordinate its fragmented chemical defense programs and activities. DHS concurred with our recommendation, and CWMD issued a strategy in December 2019, but the implementation plan is in development and not expected to be finalized until September 2021.

Thank you, Chairwoman Demings, Ranking Member Cammack, and Members of the subcommittee. This concludes my prepared statement. I would be happy to respond to any question you may have at this time.

Mrs. DEMINGS [continuing]. Your testimony. Thank you so much, and thank you to both of you for your testimony.

I will remind the subcommittee that we will each have 5 minutes to question the panel.

I will now recognize myself for questions.

As you all know, both of our witnesses today, the mission of CWMD is to lead DHS efforts and coordinate with Federal, State, local, Tribal, territorial, and international partners to safeguard the United States against chemical, biological, radiological, and nuclear threats. However, as we have already talked about, the relatively new office has struggled to manage its responsibilities, with

[32] GAO–19–327.

[33] GAO–18–562.

[34] Pub. L. No. 111–352, 124 Stat. 3866 (2011). The GPRA Modernization Act of 2010 updated the Government Performance and Results Act of 1993 (GPRA), Pub. L. No. 103–62, 107 Stat. 285. We reported this would also be consistent with a 2012 DHS effort, since abandoned, to develop a strategy and implementation plan for all chemical defense activities, from prevention to recovery. DHS officials stated the 2012 effort was not completed because of leadership changes and competing priorities.

biodetection being one of the most prominent examples of the office's struggles. Previous leadership issues within CWMD has led to, as we have already mentioned, to low employee morale and high attrition rates.

Assistant Secretary, CWMD has only been authorized for 2.5 years, and, in that short time, the office has already sought to spin off its responsibilities, including the National Technical Nuclear Forensics Program and the Office of the Chief Medical Officer.

What is your vision for CWMD, and how will you work to keep the office intact?

Mr. RASICOT. Thank you for the question, Chairwoman Demings.

My vision for CWMD is very much aligned with the CWMD Act. We are the hub of coordination, policy, intelligence, operational support, and deployment of technologies for this critical mission throughout DHS and, quite honestly, throughout major parts of the Federal Government. We are the link from National policy to State and locals through our programs, such as Securing the Cities and BioWatch and other programs, where we have exceptional reach all the way down to the local level.

So it is my vision that, as we mature these programs—and I just want to say, you know, we are taking into account all of the GAO recommendations, all of the IG recommendations, and we are trying as best as possible to incorporate them as we move forward.

I look forward to discussing several of the questions on the very specific programs. I am not sure that is where we are going on this question, but I look forward to some of those, Securing the Cities, BioWatch, BD21, as well as giving you a good debrief on where we are on employee morale.

Mrs. DEMINGS. We will have an opportunity to discuss those. Thank you so much.

Director Currie, there are currently a number of proposals to reorganize CWMD. They include proposals to move the chief medical officer to the Office of the Secretary and to spin out the nuclear forensics operation to the Energy Department and moving CWMD's policy officials to DHS's Policy Office.

Given that CWMD is a relatively young organization and has a diverse range of significant challenges, how should we be thinking about reorganization?

Mr. CURRIE. The first thing I would say is that reorganization or moving deck chairs around is often something that is looked to when a problem is perceived. The challenge is, is that it is understandable that it is a specific action to take, but that doesn't always solve the problem.

As we have seen with CWMD's reorganization, oftentimes it can create additional problems. When something reorganizes, then they have to go through a transformation effort that can often take multiple years. When that happens, the focus on the internal transformation can take away from some of the mission responsibilities they have outside, and some of the services they provide can decline.

So we are not for or against those changes, but I think it can't be looked at as the solution. The key with some of these offices, if there are challenges—let's take the CMO, for example. If you are going to move it, there has to be a clear understanding and a rea-

son why you are moving it to a different place, and it has to be crystal clear what the responsibilities and authorities of that office are going to do, or else, frankly, it is just going to be another move.

Mrs. DEMINGS. Assistant Secretary, what would your response be to Director Currie's answer there or thoughts on reorganization?

Mr. RASICOT. Yes, ma'am.

On the CMO side, the Secretary is looking across the Department at various structural changes that might be necessary, and he has asked myself and the chief medical officer to provide him some options regarding the correct placement of the chief medical officer.

You know, we have learned a lot in the last year, and it has really highlighted the public health and medical aspects of DHS. I think the review is warranted. I tell the staff all the time: We have to reserve the right to learn, and, as we learn more things, we may act differently. That is what we are—you know, we—we have—no decision has been taken on the CMO.

If I could, if I could address the nuclear forensics piece, we are still doing what we are required to do by law. I chair the Nuclear Forensics Executive Committee. We just had a meeting on May 13. What we are doing is that the Department of Energy does the primary operational work. We don't have boots on the ground doing nuclear forensics. That is Energy. Their labs provide most of the analysis.

Now, through a construct, we were funding most of the R&D for those labs. I think it is a good leadership practice to put the funding decisions and the funding leadership closest to what is being funded and what—and the operational piece. So the interagency suggested that we move the actual funding and the direction of the R&D for the DOE labs to DOE. DOE has been funded in the last year to do that.

So, while our funding is going down, our role in coordinating nuclear forensics for the Nation remains intact. Like I said, I just chaired the Nuclear Forensics Executive Committee. So I think—I agree with Director Currie. You don't change for change sake. That is not going to get us out of any problems.

You know, there is an old Government saying: When in doubt, reorganize. Well, that is not what we are doing. We are learning as we move along, and we have to take advantage of what we have learned.

Thank you.

Mrs. DEMINGS. Thank you so much, Assistant Secretary.

The Chair now recognizes the Ranking Member, the gentlewoman from Florida, Mrs. Cammack, for 5 minutes.

Mrs. CAMMACK. There we go. Now we are unmuted.

Thank you, Madam Chair. I appreciate it.

Again, thank you to our witnesses for appearing here today.

You know, I know we are going to cover a lot here today, specifically about the GAO report, so I am just going to—I am going to touch very briefly on it, and then move on.

So, July 2020, the Office of Inspector General published a report that found that CWMD had not yet carried out a program to meet the Securing Our Agriculture and Food Act requirements. As noted in your testimony, in fiscal year 2020, CWMD established and rees-

tablished a formal Food, Agriculture, and Veterinary Defense Program to meet the standards and the requirements.

Can you describe in detail exactly how CWMD is meeting the requirements of this law, and were additional staff requested for this program for the 2022 budget request? If not, why?

Mr. RASICOT. Yes. So we were—we—November—November 2019, we reestablished the Food, Ag, Vet Program within CWMD. We brought some staff over and began leveraging some internal resources to do that.

Our accomplishments thus far is we put together a cooperative agreement with S&T to direct the research—their research on the Food Ag Vet Program and have significantly enhanced that research and development work. We have increased the budget. In fiscal year 2019, it was $800,000. In 2021, it was $2.4 million. In 2022, we are requesting another $2.7 million to take it to $5.1 million.

We have pushed out to both Agriculture and FDA. We meet with them all the time. Those are our primary partners in defending the Nation against a high-consequence event in the food/ag/vet sector, and one of the things we really pushed the interagency on was I feel like we have been in a full-scale exercise over the past year on food/ag/vet as we have watched the impact of COVID through meatpacking industry. We have read all about that.

So what we did is we put together an industry listening session and roundtable just the first week of June where we brought in all the major industry leaders through—using our system format for industry engagement through the agricultural sector and really tried to capture the lessons learned that they had over the last 4—last year in the COVID response to see how we can do things better. As we adjust policy based on that, we want to make sure we have industry input on that because they are living on the front lines.

So that is—that is where we are heading, ma'am.

Mrs. CAMMACK. Well, I appreciate that.

As a follow-up, you know, we had a conversation a couple days ago, and I am really glad to hear about the industry listening sessions. I would love to get a work-up of some of the findings that you have had from those discussions, and our team can follow up with yours on that.

But, in the interest of time, I want to jump to the strategy. So it states that the mission of this office is to enable operational partners to prevent weapons of mass destruction use against the homeland; to promote readiness for chemical, biological, radiological, nuclear, and health security threats.

Now, this strategy notes that its ability to provide operational capabilities and technical assistance to the State, local, Tribal, and territorial front-line operators is a crucial aspect of homeland security.

My own sheriffs don't even know about this office. So, if they don't even know it exists, how are we executing on this strategy, and what is the plan to engage with local law enforcement?

Mr. RASICOT. So I will offer that we probably have not—given all else that was going on within the office, as you have noted some of the things—probably have not done our State and local outreach

outside of those jurisdictions already participating in our programs. But it is my intention over the next year to reach out to the chiefs of police, all the right organizations, to let them know what we are offering and what capabilities we can bring to them.

We were big players in the interagency board as a governing board for interagency—you know, State and local organizations. We funded that organization in the past, and we continue to work with them.

We also—I look forward to any opportunity to let State and locals know what we are doing. We have got a—we are pushing people out in the field. I have got folks in our regional medical operations centers to help with the public health in 5 locations over the—across the country. We have got BioWatch in 30 jurisdictions across the country. We just expanded Securing the Cities to 13 major metropolitan areas across the country.

So we are out there, and we will do a better job in letting people know. But it—Ranking Member, you hit the nail on the head. If the people don't know what we are doing, how would they know what to ask for, and how—now, I am with you. So we will do a better job——

Mrs. CAMMACK. Right.

Mr. RASICOT [continuing]. In getting the word out.

Mrs. CAMMACK. I am looking very much—I know my time has expired, but I just want to say I am looking very much forward to working with you. In fact, as I speak to you, I am sitting right now in McAllen, Texas, at the border. At 3:30 this morning, 6 of my sheriffs and I were with National Guard and Border Patrol pulling people out of the river.

Now, my fear is that, one day, someone is going to bring a dirty bomb across our open border, and that is something we are not prepared for. My local sheriffs are seeing this first-hand, and they don't even know that this office exists.

So I am very much looking forward to helping you get the word out about what you are doing for training to make sure that our front-line guys and gals have the best resources available. So thank you—thank you for that.

With that, I yield back.

Mrs. DEMINGS. The Ranking Member yields back.

The Chair will now recognize other Members for questions they may wish to ask the witnesses.

I will recognize Members in order of seniority, alternating between Majority and Minority. Members are also reminded to unmute themselves when recognized for questioning.

The Chair recognizes for 5 minutes the gentleman from New Jersey, Mr. Payne.

Mr. PAYNE. Thank you, Madam Chair.

It is good to be with you again for this very timely, as usual, hearing. I say that because I—this is a follow-up for me from a hearing that I had in October 2019, and—on the biodefense. You know, at that hearing, I was attempting to get answers from stakeholders with relation to their conversations that were going on with CWMD.

So here we still are 2 or 3 years later, so this is kind-of a follow-up for me.

So, Mr. Rasicot, as I stated in October 2019, the subcommittee heard testimony on the Nation's preparedness to confront bioterrorism. During the hearing, the witnesses spoke about CWMD's lack of coordination and communication with State and local, Tribal, and territorial as—really as the Ranking Member just mentioned. To improve its programs, CWMD must engage with SLTT partners.

Please describe the steps CWMD is taking to increase the amount of engagement with SLTT and how CWMD's staff are able to successfully partner with local governments.

Mr. RASICOT. Thank you for that question, Congressman, and good to see you again.

We have—we—I came in later in October, and I know we have met in your office several times, and I have heard you loud and clear on that. It was especially true, I think, in the BioWatch, BD21 arena, where I think initially when we were working up that program, it was done a lot of—sort-of in the basement of the Vermont Avenue building that I occupy.

We heard you. I went up to New York City. I met with everyone up there on—because they were one of the primary places we were doing some demonstration work, heard what they were saying. But then the team has been out. The team has been out to many of the jurisdictions seeking State and local input as to what our operational requirements document should look like, what our concept of operations should look like, because we need to make sure this works for the State and locals.

As you know, the whole idea behind BD21 is to try to reduce the time it takes for detection to be recognized so that we can—if it is an actual detection of an actual agent, we can quickly get to the medical countermeasures. That is—that parameter is different in every city, so we have got to be out there talking to folks.

My team has been out there, and they have held listening sessions. We have also talked to our academic folks, and we are working closely with the labs to understand what is technically feasible. It is not in anyone's interest for me to try to buy something that doesn't work. I get it.

Mr. PAYNE. Right. Good. Thank you for that.

Let me ask you one quick question.

Mr. RASICOT. Sure.

Mr. PAYNE. Are we still using that—are we still using that 1950's technology for BioWatch?

Mr. RASICOT. So, on the BioWatch, the sensors? Yes. The sensors are there, and they are proven and reliable. The problem with—we do need to expand, and we are looking with—we are working with the National labs based on the GAO reports and our own inspector general's reports to see how we can expand the number of agents. I look forward to getting that report this fall. We are also working with FBI, HHS, and CDC and seeking their input in what agents we should be expanding to.

So we are looking to improve that system, and we have also looked to—asked one of the National labs is, are we in the right places to provide the most protection for the money to the American public? So——

Mr. PAYNE. OK.

Mr. RASICOT [continuing]. We are taking some actions here, sir.

Mr. PAYNE. All right. Thank you.

Let me quickly go to Mr. Currie. Mr. Currie, I think, you know, I feel like you should be here to say, throughout this whole process, it is like, "I told you before," because it seems like some of the same issues still are persistent here.

The global nuclear detection architecture is a framework that was developed to detect, analyze, and report on nuclear and other radioactive materials.

Director Currie, based on your work reviewing CWMD's practice, do you believe CWMD is properly prioritizing its GNDA responsibilities? If not, why? Please explain the implications for your dereliction, or their dereliction. I am sorry.

Mr. CURRIE. Well, thank you, sir. Thank you for the question.

It has been a little bit of time since we have issued a full-scale report on the GNDA, but I will say this. One of the interesting things that has happened with the reorganization is the Domestic Nuclear Detection Office was merged into CWMD and combined with other offices.

As you know, the DNDO Office was a very high-performing office. The morale was very high. I think the global nuclear detection architecture was a real success in the Government in terms of their coordination with all the other Federal agencies, and it was a very clear mission space.

One of the things that we have seen and happened since the reorganization is there are some questions from partners and stakeholders about some of the things that were happening under that architecture. For example, some of the threat and risk assessments that CWMD and DNDO before it were doing to identify gaps in that architecture, which are so critical for components like CBP and the Coast Guard to understand as they monitor, you know, ports of entry and things like that.

So that is definitely an area I think where there are questions about——

Mr. PAYNE. Uh-huh.

Mr. CURRIE [continuing]. What CWMD's role is going to be moving forward.

Mr. PAYNE. OK. Thank you.

Madam Chair, thank you for indulging me, and I yield back.

Mrs. DEMINGS. The gentleman yields back.

At this time, the Chair recognizes the gentlewoman from Iowa, Mrs. Miller-Meeks, for 5 minutes.

Mrs. MILLER-MEEKS. Thank you so much, Chairwoman Demings and Ranking Member Representative Cammack as well.

Gentlemen, please don't interpret my questions as being derogatory in any way. They come from a position where just hoping that, just like you, that we can do the best for our homeland. So I am a physician. I am the former director of the Iowa Department of Public Health, and I am also a 24-year military veteran. So I fully know, both as having been a director of a State agency and in the military, how, year after year, you are scrambling for your funding, validating the work that you do, even when oftentimes the workload makes it difficult to coordinate that and justify.

Also, in the military, I have participated in many ABCs and also drills, tabletop drills, as actual drills for warning. So I fully am understanding and comprehending how very difficult [inaudible] homeland. It is extraordinarily difficult, and I think the task that has been placed upon you is monumental.

So, as I read the reports and I understand some of the failures and the criticisms, I am also very cognizant of the fact it is so hard to detect.

So this question comes out of that. We have just faced, our homeland—and not only our homeland, but, quite honestly, the entire world has just faced the biggest threat to its security through COVID–19. We have asked repeatedly for an investigation into the origins of COVID–19. As a scientist, the scientific evidence to me indicates that this has come from a lab—the laboratory Wuhan Institute of Virology, in all likelihood a leak.

But the reason why it is important to understand [inaudible] we need to know for National security. As you indicated, Mr. Currie. We need to know for public health and how we respond to public health. We need an international community that has standards for disclosure, transparency, laboratory security, what type of research can go on in laboratories, and gain of function of research.

But, as Representative Cammack had indicated earlier, her sheriffs don't know of your existence, your Office of Weapons of Mass Destruction. COVID–19-like pandemics, as I had indicated when I was director of public health, my most top concern and what kept me up at night was a virus or a bacteria that would emanate from another country and invade the homeland. This was just after H1N1 and after we had had [inaudible]——

Mrs. DEMINGS. The gentlewoman appears to be having some connection problems. To our witnesses, if you could proceed with responding.

Mr. RASICOT. Madam Chairwoman, I will go first, and I just offer that, you know, President Biden has stated that he has asked the intelligence community to redouble its efforts as they look at the origins of COVID–19, whether it is from an animal-borne transfer, accidental—the accident at the Wuhan lab. That work is on-going, and we look forward to the results.

There is no denying the impact that the COVID–19 virus has had on the United States, and we are all working hard to mitigate its effects.

I am sorry. If there was more questions, I just couldn't hear.

Mrs. MILLER-MEEKS. My apologies. I just want to know if, to you, it has the same importance as it does to me. I think this is a critically important issue for National security and for public health, and I think there are valid things that we need to ask of the international community, and we as a Nation can be a lead in that regard.

Mr. RASICOT. Ma'am, Gary Rasicot here.

I would agree with everything you said, that it is important to ask those questions. It is also important, as we look at global health security, to reinforce that system and strengthen that system via—because, as you have heard the administration and others say, this disease isn't over for anyone until it is over for everyone.

Over.

Mrs. DEMINGS. Director Currie.

Mr. CURRIE. Well, thank you for the question.

You know, as a former director of public health, I can use the technical term of surveillance. I know surveillance is so critical, and that is one really important thing that DHS has a role in, and so does HHS. But, you know, having surveillance systems work effectively domestically and other——

Mrs. MILLER-MEEKS. Mr. Currie——

Mr. CURRIE. I am sorry. Yes, ma'am?

Mrs. DEMINGS. No, go ahead. Proceed.

Mr. CURRIE. Oh, OK. Sorry. I thought she was trying to jump in.

I was just saying that I think—the area of surveillance has been an area we have been monitoring for over a decade, and I think we have a number of findings and recommendations about how we think DHS's role in the surveillance space could be strengthened or improved.

Mrs. MILLER-MEEKS. So, if I have time, Chair Demings, per your report, do you think that the biosurveillance should be moved to another agency, or do you think that we need to reconsider what our efforts are and what our expectations are?

Mr. CURRIE. Well, one challenge is there are so many different surveillance efforts across agencies. DHS has them. CDC has it. DOD has surveillance efforts. I don't think these have been well-integrated.

In DHS's case, I don't think their specific role in the surveillance space has been made as clear as it can be and well-integrated.

For example, you know, DHS has struggled with getting data and metrics it needs from CDC and State and local public health departments to even provide surveillance information to the community that provides, you know, a benefit.

Mrs. MILLER-MEEKS. Perhaps we need to help with the definition of those and with information sharing across agencies.

So I think, Chair Demings, my time is probably up. Thank you so much, and I thank our witnesses for their testimony.

Mrs. DEMINGS. The gentlewoman yields back. We thank you for your line of questioning.

We are preparing for a second round of questions. So, if Members have additional questions, please stay with us.

Along the same lines, you know, let's go back to rearranging the deck chairs to our witnesses, you know, the pros and cons of that. We know there is much discussion about the location or where the chief medical officer is housed.

DHS officials have suggested transferring CMO to another unit within DHS. Acting Secretary, I would love to hear—Assistant Secretary, I would love to hear your thoughts on that particular position as well as Director Currie's.

Acting Secretary, we will start with you.

Mr. RASICOT. Yes. Thank you, ma'am.

So the CMO and I work closely together every day, literally, and I yield to the Secretary on, you know, we will provide him the options. We have got to take a look at the structure of DHS, see if we are doing it the most impactful way, and I look forward to us finishing up—but no decision has been made.

But I would offer that there is—that the collaboration that he and I work together—and I am—I have never met a more innovative doctor than Dr. Pritesh Gandhi, and the work he is doing and the thoughts he brings to us has been refreshing since he has gotten here in January. We are moving forward on a number of programs under his leadership, Operation VOW being just one of them, where we—you know, we went from zero to 60, literally as—right after he got here and ended up vaccinating 75,000 of our front-line work force so that they could perform their duties without the threat of, you know, catching the COVID virus.

I do—if I could, I would—I was hoping maybe if I could take a step back too on the biosurveillance piece and offer something on that if——

Mrs. DEMINGS. Before we go there, Director, if you could just—I am sorry.

Mr. RASICOT. No, no.

Mrs. DEMINGS. Assistant Secretary, if you can hold off for just a second.

Director Currie, I would love to hear from you, your thoughts on moving the position of CMO to another unit within DHS.

Mr. CURRIE. Well, I don't have a strong position either way. I think the role of the CMO over the last year-and-a-half has just shown to be tremendous, and it is not just providing biodefense expertise and support to leadership of the Department, but DHS has 240,000 employees, many of which are on the front lines and touching the public.

So their role has always been to, you know, address the health and safety of the DHS work force. But, over the last year-and-a-half, it has just been incredible what they have had to do to make sure that we don't have any sort-of, you know, reduction in mission because of the COVID–19 pandemic.

So, wherever it is, I just think it is critical that its role be solidified and strengthened given their role.

Mrs. DEMINGS. Thank you so much, Director.

Acting Assistant Secretary, please, BioWatch?

Mr. RASICOT. I just want to comment on the National Biosurveillance Integration Center, or NBIC, which has been—I think it was the subject of a 2015 report—GAO report. I have to say that they have just jumped all over those recommendations. We have expanded our reach into the Department of Veterans Affairs; Interior with wildlife, so we can track animal-borne illnesses that may transmit to humans. Really, over COVID–19, they put out one of the first reports, December 31, 2019, on a pneumonia-like virus emanating from Wuhan, and that was pushed out to our—all of our stakeholders.

So, I mean, they are on the forefront of doing this stuff. Honestly, their number of reports has gone up significantly over the last year. Their readership, if you will, their poll factor, the people that want—has gone up 30 percent. We are pushing this to clients as varied as the NORTHCOM Commander all the way to State and locals. Over 500 State and local offices get their reports.

So I think we have kind-of picked up the game there since 2015, and I just—you know, the folks working that shop are dedicated. They scour all reports, do the analysis, and get the word out for

people, so I just wanted to sort-of update us from maybe that 2015 report.

Over.

Mrs. DEMINGS. Thank you so very much. We are going to pause for just a minute and see if Members have additional questions.

Are there any questions from the Ranking Member?

From the gentleman from New Jersey, Mr. Payne.

From the gentlewoman from Iowa, Mrs. Miller-Meeks.

OK. Director, we have—or to both of you, we have already talked somewhat about employee morale, and, you know, being 420 out of 420 had to be like a punch in the face to the employees. Acting Assistant Secretary, you have talked about the steps that you have been taking to actually meet, hold these town halls, which I think is a wonderful idea. It gives you a way to hear directly from the employees.

But I would like to start with you first to find out, No. 1, and I have said before, you cannot motivate—I don't believe. This is my personal opinion, that you cannot motivate people to feel better about their jobs, but you sure can create that environment that allows them to.

I would just like to hear from you your thoughts on how did we first get in this predicament with morale being so low. I think even in a survey, only 40 percent of the work force said that they would recommend the office as a good place to work. How did we get there? If you could expound a little bit more on the results of these town halls that you are having, specific recommendations that are coming from the employees, and where do we go from here?

Mr. RASICOT. Yes, thank you, Madam Chairwoman.

So I think most people know that this office is a merger of two legacy offices, the Domestic Nuclear Detection Office and the Office of Health Affairs, two offices which probably had very—well, definitely did have very different cultures.

As you, you know, bring things together, you know, the organizational behavior folks will tell you, as you try to do these things, you are going to have—you know, you are forming, storming, norming, then you are performing. Well, we were forming in 2017, 2018, and then, as the cultures came together and the law was passed in December 2018, Government shutdown. So, as people start to try to come together as an office, no one is in the office. So that was one of the—I think one of the underlying factors that probably complicated this.

But there was just a lot of cultural issues that had to be worked through, and I am not certain that the mission clarity was there in the beginning of this office, and I was not here. I was asked to come in in October 2019, right after those 420 out of 420 rankings were announced.

One of the first things I did, as I told you the other day, is just hold listening sessions and just listened to the people and understand. What I did was I didn't hold it with like an office so that their boss was sitting right with the employees. We did it by sections of employees.

We met with the scientists. We met with the public health officers. We met with the operations specialists. So there was peers telling me what—and I asked them, what do we need to do here?

Because there are no—we have the best and brightest employees in DHS here, I would suggest in the U.S. Government, be it the scientists, the physicists, the biologists, our lawyers, our procurement specialists, our operations specialists. They are all top-notch.

Some of their accomplishments that I went through that we have gotten in the last 2 years done, that doesn't happen with a disgruntled work force. So we are making progress. We have listened. We have put in standard operating procedures. All decisions are transparent. We have a great comms team. We put out a bulletin every week about what is going on, what I am hearing from the Secretary. My town halls are every week.

As I told you, my mission is to keep people safe, informed, and mission-ready, in that order. It was very critical that we do that during that COVID–19. I think that we were one of the first offices to go to max telework, and we made sure everybody had what they needed, and our productivity stayed the same.

As I told you and the Ranking Member, I actually had to make a rule because our folks were still working into the evening because we could. That is how dedicated they are to the mission, and it is my job to support that dedication. I am back for my second term because that is what I want to do. I was asked to come back; and I gladly came because I think they are mission-critical folks, they are the best and brightest within this Department, and they deserve all the support we can give them. I listen to everything they say. Why would I not listen to some of the world's foremost nuclear physicists and biologists on how to confront today's threats?

Mrs. DEMINGS. What can Congress do to better support the men and women?

Mr. RASICOT. So we have got some requests here within the 2022 budget, and we would appreciate your support there. Director Currie talked about the GNDA and the risk assessments. We are bringing that back. I think it is $5 million we are asking for to help us with that, but I want to expand it.

DNDO really hit the nail on the head with that analysis. They basically tracked human behavior from aspiration to execution in sort-of a terrorist act, and then they looked at the gaps and where measures like detection and interdiction could stop that continuum of action. I want to expand that to chem and bio, and that is why we are asking for more money and a couple more people to do risk analysis the way they were done under DNDO.

So that is one way—we got a request that we would like to enhance our work on chemical. I think that is an underserved area right now. We have got a budget request asking for $3 million in chem. We are also looking to put another $3.5 million into the NBIC as I described. Everybody wants their products, and I need to put more staff there to keep up with the demand. I have asked for $2.2 million to increase our exercise program. I want to be directly responsive to the State and locals who are asking for more exercises.

I have got one more, $5 million in Securing the Cities because you offered some of the criticisms from I think 2018 and 2019, and we took those to heart. We are doing sustainment now. We heard the State and locals. We were giving them this fantastic equip-

ment, but in some of the smaller cities, it is tough to maintain that stuff. It is high-tech stuff.

So we are going to start in 2022 giving them the money to sustain that equipment: $1.5 million per city as they start, building to $2.5 million a year sustainment. We just put in a Securing the Cities implementation plan. I just released it. It was later than I wanted it to be, but I wanted to solve the sustainment problem before we showed you how we were going to, you know, document implementing the program. Over.

Mrs. DEMINGS. Thank you.

Director Currie, if we could go back to employee morale. As I said earlier, 420 out of 420 had to be like a punch in the face. So, based on your perspective of how we kind-of got there—the assistant acting secretary talked about kind-of the merger of the two departments and the town halls and all, talking directly to the employees. I think it is always a good thing to do, getting suggestions from them, but also the how do we maintain and retain and where do we go from here, your perspective, please.

Mr. CURRIE. Thank you. Well, morale is such a complicated issue, and there is often—there is also—sometimes there is a lag between when you get the results to what is actually going on in the organization. So I think what we have seen in other organizations is that oftentimes when employee morale is really low, employees don't feel like they are being heard by top leadership, and they don't feel like they are being supported. Because of those things, you will often, you know, get responses like, "We don't feel like we are accomplishing our mission as good as we could." So there are so many complicated things that go into it.

On the positive front, I think if you look at the morale scores, they have gone up in the last year. One of the key questions that has gone up is about, you know, top leadership. So I think, you know, Assistant Secretary Rasicot deserves a lot of credit for that. Obviously something has really changed for the scores in that particular question to change.

Everything I am hearing today and we have heard about the efforts aligns with the things we have talked about, about engaging employees, listening to employees, including employees, and then communicating with them about what is being done to address the challenges.

You know, as he said, these are some incredible folks, and I think they work incredibly hard. It sounds to me like they just want the support and the recognition of those things moving forward. So I am cautiously optimistic that maybe they are going in the right direction.

We have seen this in the past at DHS, by the way. The Science and Technology Directorate at DHS had some serious morale problems years ago, and they worked really hard to do some of these same things, and now their morale is some of the highest in the Department. So it is possible to turn this around.

Mrs. DEMINGS. This will be my final question, and, Director Currie, we will start with you. I would like to hear, based on GAO's reporting and the lead-up to and since the creation of CWMD, how confident are you in CWMD's ability to be able to successfully fulfill its mission and to guard the homeland against CBRN threats?

Mr. CURRIE. I think that they are absolutely capable of performing their mission with the resources they have and that they are requesting. I think the CWMD Act of 2018 was very good because it actually authorized the office. One of the worst things that can happen in Government is when you have someone performing a mission and there is no authorization telling you what to do.

I think the key is going to be though focusing in on the key responsibilities and the things it does well and really communicating and drilling down into those issues. For example, one of their primary missions is working—as we have heard today, is working with State and local partners and communicating with them.

I think throughout the—at the beginning of the transition, maybe that had slipped a little bit, and some of the things they were doing were not being done quite as well. It sounds like there is going to be a lot more effort put into that, and I think that is a very good thing.

So you also don't need to try to do more than you can do. With a budget of $400 million and 300 people, there is only so much that can be done, and so they really need to focus on those things they are good at and that they can achieve, and I think that will help the morale issue too.

Mrs. DEMINGS. Acting Secretary Rasicot, any comments from you?

Mr. RASICOT. Well, we appreciate your support, Madam Chairwoman, and we appreciate the support of the committee, and we look forward to, you know, on-going discussions on renewing our authorization because I think this office is doing what it was asked to do. We probably had a couple of false starts as we have described, but we are really starting to hit our stride.

COVID brought us through that norming phase, and we are now performing. You know, I talked a little bit about the exercise that we conducted, a series of three exercises, starting with CWMD, then across DHS, then across the interagency. Honestly, I will just—with the interagency one, we had at the deputy assistant secretary-level people from CDC, HHS, Department of State, FBI.

I gave the kickoff speech at 9 o'clock; there is 116 people on the screen. I come back at 12:30 for the after-action; there is 116 people on the screen. That is must-see TV. People are interested in this mission. As we coordinate it and bring people back, that is what we are doing.

We will—I think that we—I agree with Director Currie, we have most of the resources we need. We look forward to your support on the fiscal year 2022 budget as we try to address some of the areas that were brought up in the committee—excuse me, brought up in the hearing. But I think we are on the right path. I think we are doing what we were asked to do in the CWMD Act, and I look forward to keeping you updated.

Mrs. DEMINGS. With that, I want to thank the witnesses for their testimony and the Members for their questions.

The Members of the subcommittee may have additional questions for the witnesses, and we ask that you respond expeditiously in writing to those questions. The Chair reminds Members that the committee record will remain open for 10 business days.

Without objection, the subcommittee stands adjourned.

[Whereupon, at 11:13 p.m., the subcommittee was adjourned.]

APPENDIX

QUESTIONS FROM CHAIRWOMAN VAL BUTLER DEMINGS FOR GARY C. RASICOT

CWMD'S BIODEFENSE EFFORTS

Question 1. The BioWatch Program within DHS's Countering Weapons of Mass Destruction Office was developed to support the Nation's information-sharing capabilities needed to effectively prepare for, detect, and respond to bioterrorism threats. However, a report from the DHS Office of Inspector General (OIG), OIG–21–22, released earlier this year, found that the BioWatch Program has "information-sharing challenges that reduce Nation-wide readiness to respond to biological terrorism threats." Considering the report from DHS OIG, what actions are you taking to ensure our Nation prepares for, effectively detects, and rapidly responds to bioterrorism threats?

Answer. Response was not received at the time of publication.

Question 2a. CWMD is in the process of advancing its efforts to acquire new biodetection technology through its BD21 multi-year acquisition effort. In a recent GAO report on the effort, GAO–21–292, GAO found that, "BD21 faces technical challenges due to inherent technological limitations and uncertainties with combining technologies." What is the current status of the BD21 acquisition project?

When can we expect to have a fully operational BD21 system deployed across to country guard against biothreats?

Answer. Response was not received at the time of publication.

Question 2b. Please provide the operational requirements document(s) for BD21.

Answer. Response was not received at the time of publication.

Question 2c. Please provide the list of State and local entities CWMD consulted with to develop the operational requirements document(s) for BD21.

Answer. Response was not received at the time of publication.

Question 2d. Does CWMD have a contingency plan if BD21 technology is unable to reach full maturity? If so, please provide this contingency plan.

Answer. Response was not received at the time of publication.

Question 3. Speed is a crucial component to fighting the spread of infectious diseases, like COVID–19. To that end, the Biden administration has called for the creation of a National Center for Epidemic Forecasting and Outbreak Analytics, "to modernize global early warning and trigger systems to prevent, detect, and respond to biological threats." DHS may also be able to provide insight into this project. In fact, with additional resources from Congress, the National Biosurveillance Integration Center may provide a workable foundation to develop such capabilities. To the extent it accords with the administration's plans for a National Center for Epidemic Forecasting and Outbreak Analytics, please explain how CWMD is developing infectious disease forecasting capabilities.

Answer. Response was not received at the time of publication.

CWMD'S CHEMICAL DEFENSE EFFORTS

Question 4. In August 2018, GAO released a report, GAO–18–562, on the need for a DHS strategy and implementation plan for the Department to better manage its fragmented chemical defense programs and activities. The report stated that a strategy and implementation plan would help the CWMD office, "mitigate the risk of fragmentation among DHS programmers and activities, and establish goals and identify resources to achieve these goals." GAO's report was released in 2018, what has DHS, and in particular, CWMD, done to better manage the fragmentation of DHS's chemical defense programs and activities? When will CWMD produce an implementation plan, recommended by GAO years ago, to help address the problem?

Answer. Response was not received at the time of publication.

CWMD'S NUCLEAR AND RADIOLOGICAL DEFENSE EFFORTS

Question 5. As calls grow for our country to take the threat of domestic nuclear terrorism more seriously, according to GAO, DHS's nuclear and radiological weapons detection and deterrence efforts also face significant challenges. For example, see GAO–19–327. There have also been reports of a lack of communication between DHS and cities within the CWMD's Securing the Cities program (STC). What is CWMD doing to increase the Department's communication with STC cities?

Answer. Response was not received at the time of publication.

CWMD'S HEALTH SECURITY AND FOOD, AGRICULTURE, AND VETERINARY DEFENSE EFFORTS

Question 6a. Detecting and protecting against biological threats is supposed to be one of the key aspects of CWMD's mission, yet, during the COVID–19 pandemic, CWMD's response role was limited. Other DHS components took the lead in many facets of DHS's response to COVID–19. What lessons did CWMD learn from its experience during the COVID–19 pandemic?

Answer. Response was not received at the time of publication.

Question 6b. Are you planning to formally compile lessons learned? If so, will you commit to sharing such information with Congress?

Answer. Response was not received at the time of publication.

Question 6c. Is the Office considering reforms to potentially increase the Office's role in the event of a future infectious disease outbreak or pandemic?

Answer. Response was not received at the time of publication.

ADDRESSING RECOMMENDATIONS

Question 7. GAO and DHS OIG have issued numerous recommendations to improve CWMD and the Department's counter CBRN programs; however, though CWMD concurs with many of these recommendations, many of them remain open. Will you commit to implementing each of these recommendations by this time next year?

Answer. Response was not received at the time of publication.

QUESTIONS FROM RANKING MEMBER KAT CAMMACK FOR GARY C. RASICOT

Question 1. Through the National Security Presidential Memorandum (NSPM)–35, certain nuclear forensic capabilities held by CWMD are being realigned to the Department of Energy. Are there any additional areas within the office that CWMD is considering realigning to another department? Is the current mission set of CWMD too broad?

Answer. Response was not received at the time of publication.

Question 2. At the beginning of the COVID–19 pandemic in the United States, the CWMD office assisted the U.S. Government's efforts to stop the spread of the virus by providing enhanced screening operations at airports. How else did CWMD contribute to COVID–19 response measures? Given their overall mission with regards to biological threat detection and biosurveillance activities through the National Biosurveillance Integration Center (NBIC), what should their role be in future large-scale health threats?

Answer. Response was not received at the time of publication.

Question 3. In January 2020, you issued a report detailing the fiscal year 2020 Implementation Plan for CWMD. Can you briefly discuss any progress that has been made at CWMD as a result of this plan?

Answer. Response was not received at the time of publication.

QUESTION FROM HON. ANDREW GARBARINO FOR GARY C. RASICOT

Question. The United States Government needs to adopt a comprehensive and integrated approach to the dangers that illicit fentanyl and its many chemical analogues (collectively "fentanyls") pose to the American people. Fentanyls are terrifyingly lethal. A quantity of fentanyl equal in mass to a single packet of sweetener (1 gram) can kill 500 people. A similar amount of carfentanil, a fentanyl analogue, can kill 50,000. Fentanyls can enter the body through ingestion, inhalation, and absorption through the skin and kill quickly, often before an antidote can be administered. Domestically, fentanyls are treated as illegal narcotics yet fentanyl-related deaths are skyrocketing. At the same time, the Department of Defense and other agencies sharing responsibility for National security consider fentanyls to be dangerous chemical weapons with the potential to cause massive casualties. Both views are accurate. Approaching domestic fentanyl policy solely as a narcotics issue, how-

ever, is placing millions of Americans at risk. A WMD declaration for fentanyls could be crafted to preclude any unintended interference with legitimate uses of these chemicals. Legally manufactured, appropriately regulated, and carefully distributed fentanyls have significant medical and veterinary uses and present no extraordinary threat. The same cannot be said for illicit fentanyl.

Based on those conclusions from Republican and Democrat administrations alike, does the Department of Homeland Security support a decision to declare these chemicals as potential Weapons of Mass Destruction (WMD)?

Answer. Response was not received at the time of publication.

QUESTIONS FROM CHAIRWOMAN VAL BUTLER DEMINGS FOR CHRIS P. CURRIE

Question 1. The BioWatch Program within DHS's Countering Weapons of Mass Destruction Office was developed to support the Nation's information-sharing capabilities needed to effectively prepare for, detect, and respond to bioterrorism threats. However, a report from the DHS Office of Inspector General (OIG), OIG–21–22, released earlier this year, found that the BioWatch Program has "information-sharing challenges that reduce Nation-wide readiness to respond to biological terrorism threats." Based on your reporting, is the BioWatch program salvageable, or should the Federal Government redirect funds to other biodetection technologies and research and development efforts?

Answer. We have previously reported that funds should go to programs that can demonstrate performance. However, as we reported in 2015, DHS lacks reliable information about BioWatch's technical capabilities to detect a biological attack and therefore lacks the basis for informed cost-benefit decisions about upgrades to the system.[1] Specifically, while DHS had commissioned several tests of the technical performance characteristics of the current system, it had not developed performance requirements that would enable it to interpret the test results and draw conclusions about the system's ability to detect attacks. Therefore, we recommended in 2015 that DHS: (1) Establish technical performance requirements; (2) assess the BioWatch system against these performance requirements; and (3) produce a full accounting of statistical and other uncertainties and limitations in what is known about the system's capability to meet its operational objectives. DHS has not yet addressed our 2015 recommendation.

DHS is currently pursuing options to replace the BioWatch program with Biological Detection for the 21st Century (BD21), and we continue to monitor the extent to which these efforts are consistent with our recommendation. However, as a replacement to BioWatch, BD21's detection capability will narrowly address the threat of an aerosolized biological attack and does not cover the broader biological threat landscape. In June 2019, we testified that the National Biodefense Strategy and its interagency governing leadership offer an opportunity to better define the role of detection technologies within a layered, National biodefense capability. We stated that this would help those that pursue these technologies better articulate their mission needs and align requirements and concepts of operation accordingly.[2] As part of the implementation of the National Biodefense Strategy, DHS and its interagency partners will have the opportunity to assess the role of and investment in biodetection of aerosolized attacks in a layered approach to mitigating risks of a variety of biological threats.

Question 2. CWMD is in the process of advancing its efforts to acquire new biodetection technology through its BD21 multi-year acquisition effort. In a recent GAO report on the effort, GAO–21–292, GAO found that, "BD21 faces technical challenges due to inherent technological limitations and uncertainties with combining technologies." Given these challenges, it is beginning to seem like BD21 is heading toward the same problems and inefficiencies within BioWatch. What level of confidence should Congress place in CWMD to successfully acquire technology capable of detecting biological threats across the country?

Answer. As we found in our May 2021 report, DHS has shown improvement in conducting its acquisition efforts.[3] Specifically, regarding DHS's on-going acquisition of biodetection technology to replace BioWatch, we found CWMD was following DHS's acquisition policy and guidance. In addition, to help mitigate risk in the acquisition, the program office conducted an alternatives analysis and was testing the

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[1] GAO, *Biosurveillance: DHS Should Not Pursue BioWatch Upgrades or Enhancements Until System Capabilities Are Established,* GAO–16–99 (Washington, DC: Oct. 23, 2015).

[2] GAO, *Biodefense: The Nation Faces Longstanding Challenges Related to Defending Against Biological Threats,* GAO–19–635T (Washington, DC: June 26, 2019).

[3] GAO, *Biodefense: DHS Exploring New Methods to Replace BioWatch and Could Benefit from Additional Guidance,* GAO–21–292 (Washington, DC: May 20, 2021).

basic proof of concept of the anomaly detection algorithm in a technology demonstration. In our prior work evaluating the current BioWatch program and other acquisition efforts to replace BioWatch, we identified issues related to requirements development, stakeholder involvement, testing, cybersecurity, and accounting for uncertainty.[4] DHS agreed to implement our prior recommendations to address these past problems and said the steps they are taking during the BD21 acquisition are designed to address them, but their work is on-going.

In our May 2021 report regarding BD21 we noted challenges DHS faces due to the inherent limitations in the technologies and uncertainties with combining technologies for use in biodetection. Unlike efforts to detect chemical, radiological, or nuclear agents, which have specific structures that can be used in designing a detection system, developing biological detection technologies faces unique challenges, because of the variability and unpredictability of biological agents. As such, DHS has faced challenges in acquiring biodetection capabilities to replace BioWatch. For the BD21 acquisition, DHS intends to use biological aerosol sensors that monitor the air to provide data on biological material in the environment, but common environmental material such as pollen, soil, and diesel exhaust can emit a signal in the same range as a biological threat agent, thereby increasing false alarm rates. Program officials reported that the risk of false alarms produced by biological sensor technologies could be reduced by using an anomaly detection algorithm in addition to the sensor. However, it is too early to determine whether integration of an anomaly detection algorithm will successfully mitigate the false alarm rate, specifically because the algorithms have never been developed and used for the purpose of biodetection in an urban, civilian environment. To ensure decision makers and program managers have the information necessary to make informed decisions at key acquisition decision events, we recommended that, among other things, the BD21 program office conduct technology readiness assessments that follow our best practices prior to the program's acquisition decision events. DHS concurred with our recommendations and provided additional information on the steps the agency has taken or plans to take to address them. We will continue to monitor their progress.

Question 3. In August 2018, GAO released a report, GAO–18–562, on the need for a DHS strategy and implementation plan for the Department to better manage its fragmented chemical defense programs and activities. The report stated that a strategy and implementation plan would help the CWMD office, "mitigate the risk of fragmentation among DHS programmers and activities, and establish goals and identify resources to achieve these goals." Please describe the current chemical defense fragmentation within DHS and describe why it's important for DHS to produce the implementation plan.

Answer. As we reported in August 2018, DHS officials acknowledged that DHS had not fully integrated and coordinated its chemical defense programs and activities.[5] Several components—including CBP, U.S. Coast Guard, the Office of Health Affairs, and S&T—conducted similar activities, such as acquiring chemical detectors or assisting local jurisdictions with preparedness, separately, without DHS-wide direction and coordination. As components carry out chemical defense activities to meet mission needs, there remains a risk that DHS may miss an opportunity to leverage resources and share information that could lead to greater effectiveness addressing chemical threats. Given the breadth of DHS's chemical defense responsibilities, we found that a strategy and implementation plan would help the CWMD Office: (1) Mitigate the risk of fragmentation among DHS programs and activities, and (2) establish goals and identify resources to achieve these goals, consistent with principles outlined in the GPRA of 2010.[6] We recommended that DHS develop a strategy and implementation plan for chemical defense. In December 2019, CWMD issued its chemical defense strategy, which included overarching goals to drive CWMD's mission in protecting American safety and security from chemical threats and incidents. However, a strategy is only as good as its implementation. CWMD

[4] GAO–16–99 and GAO, *Biosurveillance: DHS Should Reevaluate Mission Need and Alternatives before Proceeding with BioWatch Generation–3 Acquisition,* GAO–12–810 (Washington, DC: Sept. 10, 2012).

[5] GAO, *Chemical Terrorism: A Strategy and Implementation Plan Would Help DHS Better Manage Fragmented Chemical Defense Programs and Activities,* GAO–18–562 (Washington, DC: Aug. 22, 2018).

[6] The Government Performance and Results Act of 1993 (GPRA), as updated and expanded by the GPRA Modernization Act of 2010 (GPRAMA), requires agencies to establish annual performance goals with target levels of performance to measure progress toward those goals. See Pub. L. No. 111–352, 124 Stat. 3866 (2011) (updating Pub. L. No. 103–62, 107 Stat. 285 (1993)). While GPRAMA is applicable to the department or agency level, performance measures and goals are important management tools at all levels of an agency, including the program, project, or activity level.

has yet to issue an implementation plan for chemical defense, but reported to us in July 2021 that it plans to do so by September 2021. Without implementation specifics defined, we do not have assurance that the state of DHS's fragmented chemical defense programs has changed since we reported on the issue in August 2018, and DHS remains at risk of these programs conducting highly similar activities in an uncoordinated manner.

Question 4. The President's fiscal year 2022 DHS CWMD budget proposal is roughly $428 million and is roughly $25 million larger than the fiscal year 2021 enacted figure. Based on GAO reporting, which area of CWMD's portfolio do you believe CWMD should invest significant portions of the Office's budget? Please explain.

Answer. GAO is not in a position to opine on CWMD's budget allocation across its mission areas. Nonetheless, we have on-going work looking at CWMD management and morale issues that we expect to issue in early 2022. That work may have recommendations or findings that could be helpful to Congress in setting priorities for CWMD's budget. In addition, GAO's priority open recommendations to DHS include areas for CWMD to address that may also help inform Congressional decision making, such as issuing an implementation plan for coordinating chemical defense programs across DHS.[7]

Question 5. Detecting and protecting against biological threats is supposed to be one of the key aspects of CWMD's mission, yet, during the COVID–19 pandemic, CWMD's response role was limited. Other DHS components took the lead in many facets of DHS's response to COVID–19. What actions should DHS take to ensure CWMD is prepared to respond to possible future infectious disease outbreaks and pandemics?

Answer. Effectively preparing for and responding to biological incidents, including infectious disease outbreaks and pandemics, requires engagement and commitment from the entire biodefense enterprise. Unlike, for example, the Federal Emergency Management Agency, CWMD is not an operational component of DHS, and therefore it does not have the same kind of responsibility, authority, and resources to provide incident command in a response. Among other things, CWMD leads DHS's efforts to develop and enhance capabilities to defend against biological weapons and combat naturally-occurring bio-threats and pandemics. As the DHS lead for developing biodefense strategy and policy, and coordinating the Department's efforts to defend U.S. food, agriculture, and veterinary systems against terrorism and other high-consequence events, CWMD plays an important role not only for DHS, but among interagency partners as well.

Specifically, within CWMD, the chief medical officer is the principal advisor on medical and public health issues to the Secretary and other DHS officials.[8] As such, the chief medical officer coordinates with other Federal agencies with respect to medical and public health matters, such as the Centers for Disease Control and Prevention and the Assistant Secretary for Preparedness and Response at the Department of Health and Human Services, as well as with non-Federal partners. The chief medical officer is to provide operational medical support to all components of DHS and coordinate with the under secretary for management to oversee activities within DHS related to the human and animal health personnel. For example, as part of DHS's on-going work during the pandemic, the chief medical officer has led an internal effort to voluntarily vaccinate more than 75,000 front-line and mission-critical DHS employees against COVID–19.

CWMD officials are also responsible for leading the National Biodefense Strategy's implementation at DHS, and CWMD officials represent DHS on the Biodefense Coordination Team, which consists of experts from agencies with biodefense responsibilities. The Biodefense Coordination Team helps carry out the strategic goals and objectives of the National Biodefense Strategy on behalf of the secretaries of participating departments and agencies, including the Secretary of Homeland Security. As a cross-disciplinary, interagency body, the Biodefense Coordination Team has the opportunity to help shape the direction of the Nation's biodefense efforts. At the highest level, National strategies, such as the National Biodefense Strategy, are designed to help guide preparedness activities by providing long-range strategic vision to guide policy making. DHS was one of four agencies required by law to jointly de-

[7] GAO–21–377PR.

[8] Specifically, since December 2018, the role and responsibilities of the Department's chief medical officer resides within the CWMD. This official serves as the principal advisor to DHS leadership on medical and public health issues related to natural disasters, acts of terrorism, and other man-made disasters. The chief medical officer also provides operational medical support to DHS components and coordinates with Federal and non-Federal stakeholders on medical and public health matters.

velop a National biodefense strategy and associated implementation plan.[9] The strategy outlines a whole-of-Government approach intended to help the United States actively and effectively assess, prevent, prepare for, respond to, and recover from all types of biological threats, whether they are natural, accidental, or deliberate.

In August 2021, we reported that the Biodefense Coordination Team, of which CWMD is a key part, is uniquely positioned to carry out activities to enhance preparedness and response for future biological incidents.[10] For example, based on our analysis of after-action reports for selected interagency biological incident exercises and real-world incidents, as well as findings from the COVID–19 response, we found that the biodefense enterprise has gaps in its capabilities-based approach to response planning. Specifically, we found the biodefense enterprise lacked elements necessary for preparing for Nationally significant biological incidents, including:

- a set of defined capabilities that account for the unique elements specific to responding to Nationally significant biological incidents;
- a process at the interagency level for agencies to assess and communicate priorities for exercising capabilities;
- a process to consistently report on those capabilities in after-action reviews; and
- routine monitoring at the interagency level of exercises and real-world incidents in order to evaluate lessons learned across the Government, identify patterns and possible root causes for systemic challenges, and make recommendations to address these challenges.

We made four recommendations to DHS to help ensure the Biodefense Coordination Team develops ways to address the above-stated deficiencies. We reported that the ability to monitor and assess the outcomes of interagency biological incident exercises and real-world events could be instrumental in identifying persistent challenges and their root causes before they become systemic, intractable problems. Identifying these issues could also help agencies prioritize which capabilities need further development or exercising. As part of the Biodefense Coordination Team, CWMD officials should play a key role in ensuring the Nation develops the capabilities necessary for the next biological incident that requires a whole-of-Nation response.

At the time we concluded our review, an interagency after-action report for the COVID–19 pandemic was a topic of conversation among Biodefense Coordination Team members, but because of the on-going nature of the pandemic, such a report had not been prepared. After-action reviews can be an important means to identify how to close capability gaps. After-action reviews can also help to identify corrective actions and assign responsibility for ensuring those actions are implemented. This was a key element we built into our fourth recommendation to DHS and its partners in our August 2021 report to help ensure accountability for addressing corrective actions. As a member of the Biodefense Coordination Team, CWMD is well-positioned to engage in an after-action review, along with its interagency partners, for the whole-of-Nation response to COVID–19.

CWMD can also take steps to evaluate its own actions during the COVID–19 pandemic by conducting an after-action review of its activities and policies. For example, one of CWMD's responsibilities during the pandemic has been to help ensure the health and safety of DHS's workforce—many of whom interact with the public daily, such as Transportation Security Officers and Customs and Border Protection Officers. Determining what went well and identifying areas for improvement can help CWMD better prepare DHS for biological incidents in the future.

Question 6. Despite its food, agriculture, and veterinary defense responsibilities, according to a DHS OIG 2020 report, "CWMD has not yet carried out a program to meet [statutory] requirements . . . [and therefore,] CWMD has limited awareness of DHS's on-going efforts and cannot ensure it is adequately prepared to respond to a terrorist attack against the Nation's food, agriculture, or veterinary systems." Shoring up our country's food, agriculture, and veterinary defense programs is critical. Why do you believe CWMD has been unable to fulfill its statutory requirements and improve homeland food, agriculture, and veterinary defenses?

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[9] Signed into law on December 23, 2016, the National Defense Authorization Act for Fiscal Year 2017 required the Secretaries of Defense, Health and Human Services, Homeland Security, and Agriculture to jointly develop a National biodefense strategy and associated implementation plan, which shall include a review and assessment of biodefense policies, practices, programs, and initiatives. Such Secretaries shall review and, as appropriate, revise the strategy biennially. See Pub. L. No. 114–328, div. A, title X, subtitle G, § 1086, 130 Stat. 2000, 2423–24 (2016) (classified, as amended, at 6 U.S.C. § 104).

[10] GAO, *Biodefense: After-Action Findings and COVID–19 Response Revealed Opportunities to Strengthen Preparedness,* GAO–21–513 (Washington, DC, Aug. 4, 2021).

Answer. To date, we have not evaluated CWMD's fulfillment of statutory requirements to improve food, agriculture, and veterinary defenses. However, we have previously reported that biodefense is a shared endeavor among multiple partners at the Federal and non-Federal level.[11] Many of the activities and responsibilities for conducting biosurveillance of food, agriculture, and veterinary health are shared among the Departments of Health and Human Services, Agriculture, and Interior, in addition to DHS.[12] As part of DHS's responsibilities to implement the National Biodefense Strategy, opportunities exist for the Department to work with its partners to identify biodefense capabilities, identify gaps, and to facilitate enterprise-wide decision-making and budget trade-off decisions to help ensure the most efficient use of the Nation's biodefense resources.

QUESTION FROM HON. ANDREW GARBARINO FOR CHRIS P. CURRIE

Question. The United States Government needs to adopt a comprehensive and integrated approach to the dangers that illicit fentanyl and its many chemical analogues (collectively "fentanyls") pose to the American people. Fentanyls are terrifyingly lethal. A quantity of fentanyl equal in mass to a single packet of sweetener (1 gram) can kill 500 people. A similar amount of carfentanil, a fentanyl analogue, can kill 50,000. Fentanyls can enter the body through ingestion, inhalation, and absorption through the skin and kill quickly, often before an antidote can be administered. Domestically, fentanyls are treated as illegal narcotics yet fentanyl-related deaths are skyrocketing. At the same time, the Department of Defense and other agencies sharing responsibility for National security consider fentanyls to be dangerous chemical weapons with the potential to cause massive casualties. Both views are accurate. Approaching domestic fentanyl policy solely as a narcotics issue, however, is placing millions of Americans at risk. A WMD declaration for fentanyls could be crafted to preclude any unintended interference with legitimate uses of these chemicals. Legally manufactured, appropriately regulated, and carefully distributed fentanyls have significant medical and veterinary uses and present no extraordinary threat. The same cannot be said for illicit fentanyl.

Based on those conclusions from Republican and Democrat administrations alike, does the Department of Homeland Security support a decision to declare these chemicals as potential Weapons of Mass Destruction (WMD)?

Answer. This question was included in questions for GAO, but is directed to the Department of Homeland Security. However, DHS's 2019 Chemical Defense Strategy lists identifying current, emerging, nontraditional, and forecasted chemical threats as one of the strategy's primary objectives. Consideration of illicit fentanyls as a chemical threat could potentially be considered under that strategic objective.

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[11] GAO, *Biosurveillance: Efforts to Develop a National Biosurveillance Capability Need a National Strategy and a Designated Leader,* GAO–10–645 (Washington, DC: June 30, 2010); and *National Biodefense Strategy: Additional Efforts Would Enhance Likelihood of Effective Implementation,* GAO–20–273 (Washington, DC: Feb. 19, 2020).

[12] Biosurveillance, as defined by the July 2012 National Strategy for Biosurveillance, is the on-going process of gathering, integrating, interpreting, and communicating essential information related to all-hazards threats or disease activity affecting human, animal, or plant health, for the purpose of: (1) Achieving early detection and warning, (2) contributing to overall situational awareness of the health aspects of the incident, and (3) enabling better decision making at all levels.