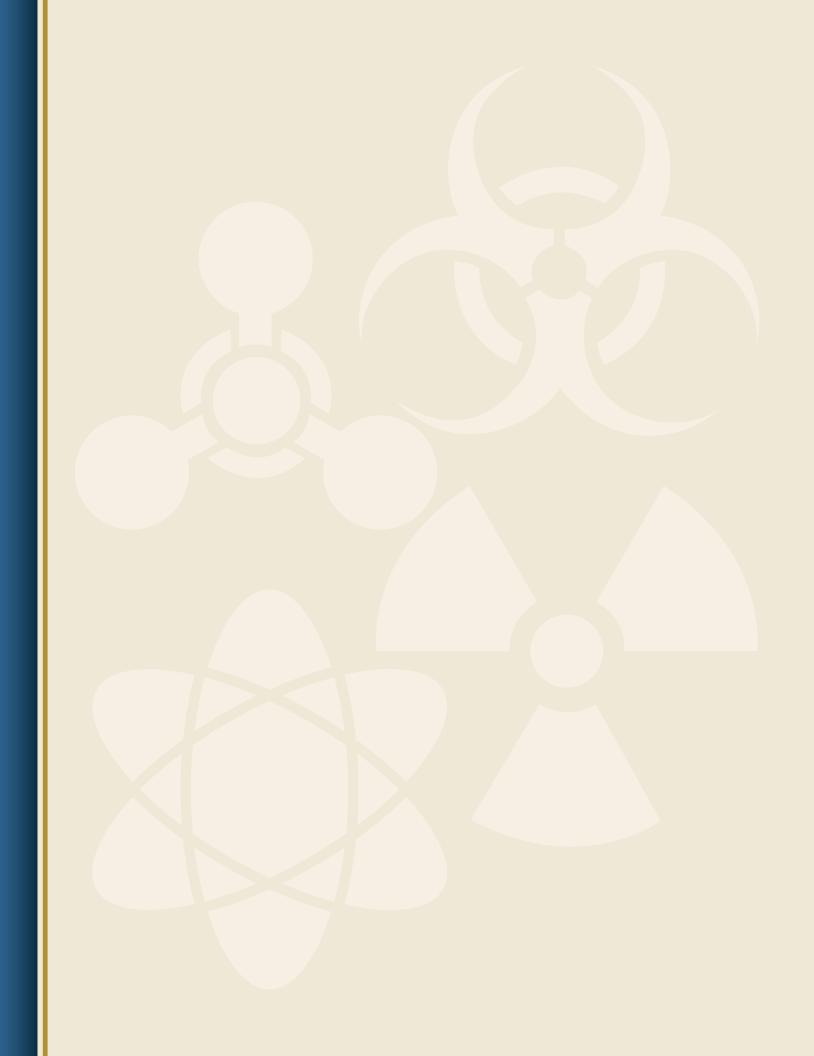


#### DECEMBER 2018

# National Strategy for Countering Weapons of Mass Destruction Terrorism







#### My fellow Americans:

As President, my most sacred responsibility is to keep the American people safe from those who would do us harm.

Over the past two decades, we have witnessed unspeakably savage terrorist attacks on our own soil and around the world. For many years, terrorists have employed assassinations, kidnappings, shootings, and bombings to gain notoriety or advance their causes. Today, they aspire to use increasingly lethal methods to commit mass murder in pursuit of their goals. We must assume that the most fanatical of these groups will gravitate toward weapons of mass destruction (WMD), including chemical, biological, radiological, and even nuclear weapons.

Several terrorist groups have made clear their desire to obtain WMD and use them against innocent people. Already we have seen ISIS use chemical weapons on Middle Eastern battlefields, and there is little doubt they, and others like them, would gladly deploy WMD against the United States if they could. To date, we have been spared such attacks because of the extraordinary efforts of our military personnel, intelligence services, and law enforcement organizations. As the threat of WMD terrorism continues to evolve, however, our defenses against it must evolve as well.

In particular, the spread of technologies that can be used for either peaceful or malicious purposes may give terrorists access to weapons that were once limited to a small handful of countries. While we harness science to generate energy and spread prosperity, terrorists would happily deploy technology to sow death and destruction around the world. One of the great challenges of our age is to place WMD and associated materials and expertise as far beyond the reach of these madmen as possible.

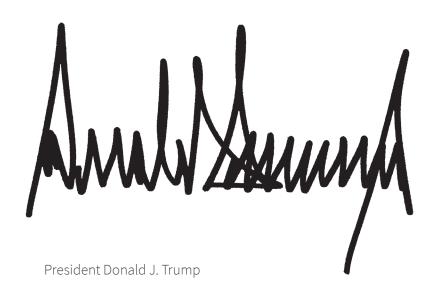
Consequently, my Administration has developed a comprehensive National Strategy for Countering WMD Terrorism to reduce the risk that terrorists are able to attack the United States and its interests with WMD. This strategy contains a number of noteworthy departures from past practices, underscoring the boldness and innovation of my Administration's approach to the WMD terrorism threat.

The new strategy is comprised of three core elements. First, the United States will lead global efforts to close off terrorists' access to WMD and related materials. Second, the United States will apply consistent pressure against terrorist groups that seek to obtain and use these weapons, including by targeting terrorist WMD specialists and facilitators. Third, as an insurance policy, the United States will strengthen its defenses against WMD threats at home and abroad.

From the September 11, 2001 attacks to the atrocities in London, Paris, Madrid, throughout the Middle East, and around the world, terrorists have demonstrated that their barbarity is a threat to all mankind. Accordingly, as part of our new strategy, we will continue to globalize the counter-WMD fight through enhanced partnerships with our allies and partners worldwide.

As we work to defeat the poisonous ideologies that inspire terrorism, we can and will dramatically reduce the likelihood of the most dangerous weapons falling into the hands of the world's most dangerous people. In doing so, we will ensure that we deny these maniacs the outcomes they desire most – to effect wholesale changes to our foreign policy, our national character, and our way of life.

Sincerely,



The White House

December 2018

#### **EXECUTIVE SUMMARY**



The growth in terrorists' capabilities and aspirations and the spread of dual-use technology have made the threat of weapons of mass destruction (WMD) terrorism progressively more acute, requiring a comprehensive strategy to defend the United States and its interests.

The National Strategy for Countering WMD Terrorism describes the United States Government's approach to countering non-state WMD threats, emphasizing the need for continuous pressure against WMD-capable terrorist groups, enhanced security for dangerous materials throughout the world, and increased burden sharing among our foreign partners. The United States will draw on the full range of our nation's and partner nations' capabilities to place WMD and associated materials and expertise beyond the reach of terrorists. We will also strengthen our defenses at home to ensure the peace and security to which every American is entitled.

Although not every class of weapon that falls under the rubric of "WMD" is capable of producing truly large-scale casualties, chemical, biological, radiological, and nuclear weapons each have characteristics that set them apart from conventional arms. Rudimentary chemical weapons, for instance, may be difficult to disseminate widely and may thus be inefficient killing agents, yet their gruesome effects make the psychological impact of these weapons especially potent. Radiological weapons leverage the longstanding fear of radiation, potentially generating reactions to an attack that are disproportionate to its scale. Furthermore, even inefficient terrorist use of these capabilities can undermine the global norm against WMD, reducing the deterrent that generally dissuades more capable state actors from employing them in conflict. These qualitatively distinct weapon effects form the basis for a strategy focused specifically on terrorists' pursuit of WMD.

The National Strategy for Countering WMD Terrorism is designed to achieve a set of strategic objectives whose common purpose is to greatly reduce the probability that extremist groups and individuals will conduct attacks using WMD. These objectives consist of the following:

- The agents, precursors, and materials needed to acquire WMD are placed beyond the reach of terrorists and other malicious non-state actors, and the global quantity of WMD and related materials is reduced.
- States and individuals are deterred from providing support to would-be WMD terrorists.
- ❖ An effective architecture is in place to detect and defeat terrorist WMD networks.
- United States defenses against WMD terrorism are strengthened, and state, local, tribal, and territorial preparedness to contend with WMD threats is enhanced.
- The United States is able to identify and respond to technological trends that may enable terrorist development, acquisition, or use of WMD.

Achieving these strategic objectives will require a diverse set of counterterrorism and counter-WMD activ-

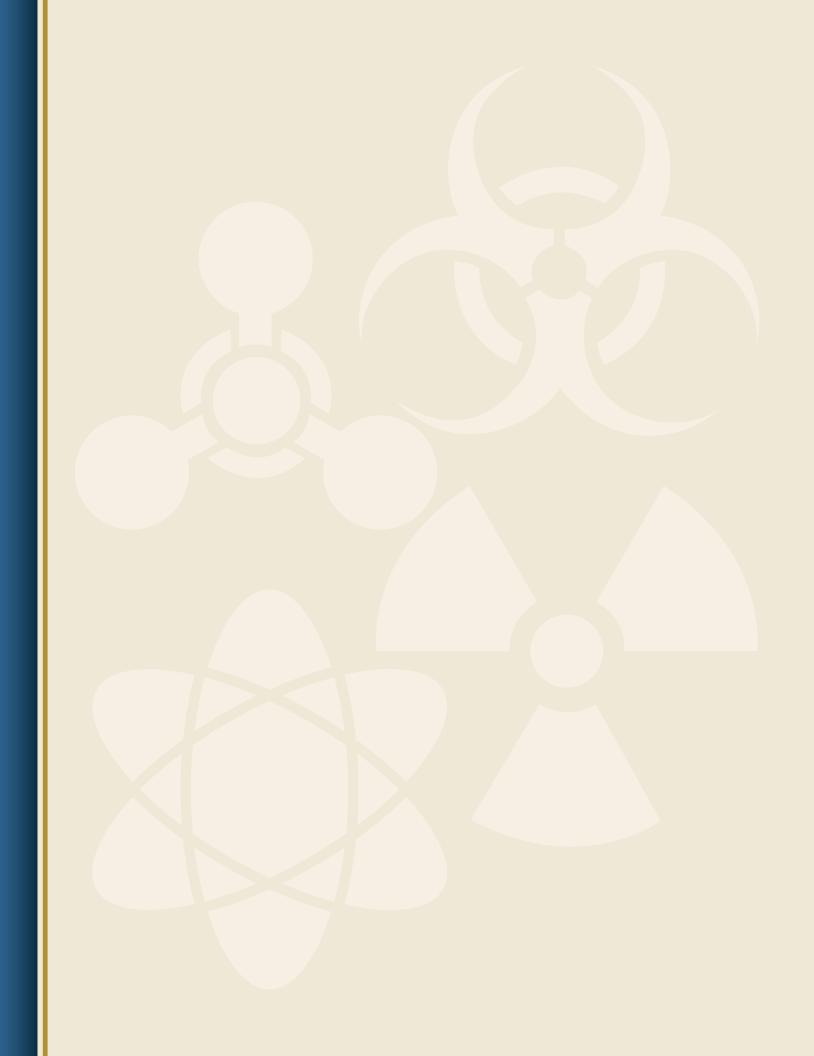
ities ranging from operations against individual terrorists to fortifying United States and partner defenses and the institutions that enforce international security more broadly. These activities are summarized under the following eight lines of effort, including activities far from our shores and measures that more directly protect the American homeland.

- Deny Terrorists Access to Dangerous Materials, Agents, and Equipment
- 2. Detect and Defeat Terrorist WMD Plots
- 3. Degrade Terrorist WMD Technical Capabilities
- 4. Deter Support for WMD Terrorism
- 5. Globalize the Counter-WMD Terrorism Fight
- 6. Strengthen America's National Defenses against WMD Terrorism
- 7. Enhance State, Local, Tribal, and Territorial Preparedness against WMD Terrorism
- 8. Avoid Technological Surprise

Each of these lines of effort, elements of which are currently underway, will draw on capabilities and expertise from across the United States Government and its partners. Implementation guidance for each line of effort will be developed to establish clear roles and responsibilities, avoid duplication of effort, and ensure that activities are properly prioritized.

# Table of Contents

Intro	ODUCTION	1
Lines of Effort		
1	Deny Terrorists Access to Dangerous Materials, Agents, and Equipment	5
2	Detect and Defeat Terrorist WMD Plots	7
3	Degrade Terrorist WMD Technical Capabilities	8
4	Deter Support for WMD Terrorism	8
5	Globalize the Counter-WMD Fight	9
6	Strengthen America's National Defenses against WMD Terrorism	10
7	Enhance State, Local, Tribal, and Territorial Preparedness against WMD Terrorism	11
8	Avoid Technological Surprise	12
Conclusion		



#### Introduction



The nexus between violent ideologies and the proliferation of weapons of mass destruction (WMD) has long been recognized as a threat to global peace and prosperity. With the growth in terrorists' capabilities and aspirations and the spread of dual-use technology in the early 21st century, this threat has become progressively more acute, requiring a comprehensive strategy to defend the United States and its interests from the world's most dangerous weapons.

The National Strategy for Countering WMD Terrorism aligns with the broader United States National Security Strategy and complements the National Strategy for Counterterrorism, specifically focusing on the United States Government's approach to countering WMD terrorist threats. The strategy emphasizes the importance of maintaining continuous pressure against terrorist groups, enhancing security in troubled regions of the world where appropriate and seeking increased burden sharing among our foreign partners.

The threat of WMD in the hands of terrorist networks, extremist groups, and lone actors is not merely theoretical. Over the past four decades, multiple groups and individuals have attempted to develop or improvise such weapons and in some cases have deployed them against military and civilian targets. Hundreds of people in multiple countries have been injured and dozens killed by terrorists' use of WMD agents such as sarin and sulfur mustard, and terrorists have established programs to produce far more consequential weapons. Al-Qa'ida is thought to have pursued a homegrown nuclear weapon capability, a prospect made even more sobering by the knowledge that on at least 18 occasions since the early 1990s weapons-usable nuclear material has been seized outside of regulatory control.

More recently, ISIS has used sulfur mustard, chlorine, and other toxic industrial chemicals (TICs) on the battle-

field, raising the possibility that the group may attempt to export these weapons abroad or inspire others to pursue the use of available toxic chemicals as weapons. Moreover, multiple countries operate clandestine chemical or biological weapons programs, some in regions with high levels of terrorist activity. Not only do these programs present the danger of such weapons or their precursors falling into terrorists' hands but their proximity to some terrorist groups increases the risk that these states' technical personnel could be induced to assist terrorists' WMD efforts.

Technological advances and other global developments will compound the difficulty of restricting terrorists' access to WMD in the future. Security vulnerabilities that attend growing stocks of fissile material and renewed interest in civil nuclear power around the world may provide greater opportunities for terrorists to obtain the building blocks of a nuclear weapon. Radioactive materials suitable for radiological weapons are becoming more widely available. New technologies and manufacturing processes may also make it easier to produce fissile materials and evade detection while doing so. Advances in biotechnology could theoretically allow even a single individual working in a laboratory to engineer pathogens that could have catastrophic effects. Further, commercial technologies such as unmanned aerial systems may be weaponized to deliver lethal agents.

In response to these evolving threats, the United States will draw on the full range of our nation's and partner nations' capabilities to place WMD, delivery systems, and associated materials and expertise beyond the reach of terrorists. These tools include diplomatic outreach; threat reduction and foreign capacity-building programs; export controls on information and technology; promotion of international treaties and norms; economic sanctions; intelligence collection and law enforcement operations, to include detection and interdiction; and, when lawful and appropriate, the use of United States and allied military force. We will also strengthen our defenses at home to ensure the peace and security to which every American is entitled.

#### **Desired End States**

A successful counter-WMD terrorism strategy will establish domestic and global conditions such that the following end states are achieved:

- The risk that terrorists are able to attack the United States and its interests with WMD has been reduced as far as can be practically achieved.
- Risk-informed improvements have been made to United States and allied defenses against WMD terrorism, and the United States is well positioned to anticipate and prepare for future attack modes as they continue to evolve.
- Global burden-sharing in countering WMD terrorism has been institutionalized to the greatest extent practicable.

# Strategic Objectives for Countering WMD Terrorism

In pursuit of these long-term end states, the National Strategy for Countering WMD Terrorism is designed to achieve a coherent set of strategic objectives whose common purpose is to greatly reduce the probability

that extremists will conduct attacks using WMD. These objectives consist of the following:

- The agents, precursors, and materials needed to acquire WMD are placed beyond the reach of terrorists and other malicious non-state actors, and the global quantity of WMD and related materials is reduced.
- States and individuals are deterred from providing support to would-be WMD terrorists.
- An effective architecture is in place to detect and defeat terrorist WMD networks.
- United States defenses against WMD terrorism are strengthened, and state, local, tribal, and territorial preparedness to contend with WMD threats is enhanced.
- The United States is able to identify and respond to technological trends that may enable terrorist development, acquisition, or use of WMD.

#### Lines of Effort

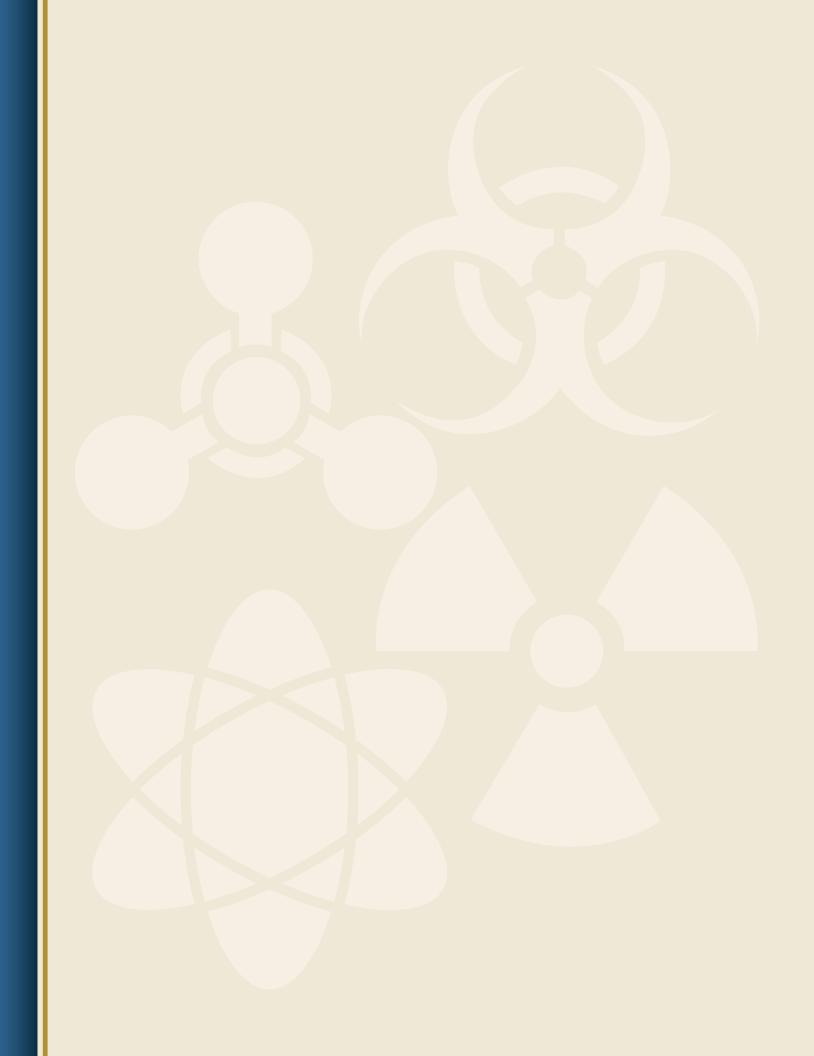
Achieving these strategic objectives will require a diverse set of counterterrorism and counter-WMD activities ranging from operations against individual terrorists to fortifying United States and partner defenses and the institutions that enforce international security more broadly. These activities are summarized under the following eight lines of effort, including activities far from our shores and measures that more directly protect the American homeland.

- Deny Terrorists Access to Dangerous Materials, Agents, and Equipment
- 2. Detect and Defeat Terrorist WMD Plots
- 3. Degrade Terrorist WMD Technical Capabilities
- 4. Deter Support for WMD Terrorism

#### INTRODUCTION

- 5. Globalize the Counter-WMD Terrorism Fight
- 6. Strengthen America's National Defenses against WMD Terrorism
- 7. Enhance State, Local, Tribal, and Territorial Preparedness against WMD Terrorism
- 8. Avoid Technological Surprise

Each of these lines of effort, elements of which are currently underway, will draw on capabilities and expertise across the United States Government and its partners. Implementation guidance will be developed to establish clear roles and responsibilities, avoid duplication of effort, and ensure that activities are properly prioritized.



#### Lines of Effort



#### Deny Terrorists Access to Dangerous Materials, Agents, and Equipment

Historical terrorist efforts to develop chemical, biological, radiological, and nuclear weapons have generally been rudimentary, falling short of the ability to produce mass casualties using these weapons in a single attack. To ensure that extremists do not acquire new or more lethal WMD capabilities, the United States will prioritize its efforts to keep WMD-related materials and associated technology and expertise beyond the reach of terrorists and other malicious non-state actors.

Although securing dangerous biological agents, controlled chemical precursors, and nuclear and radiological materials is principally the responsibility of the states that hold them, it is manifestly in the United States' interest that these states have both the political will and the ability to discharge this responsibility. Consequently, we will work with partner nations and international organizations to improve their capacity to secure

dangerous materials, in particular by sharing expertise to establish effective and sustainable infrastructure, human capital, and regulatory frameworks to counter the WMD threat. Where political will is lacking, we will tailor our approach to most effectively convince foreign leaders to uphold their obligations under international law and prevent WMD threats from materializing.

**CHEMICAL WEAPONS AND PRECURSORS:** Chemical terrorism encompasses a wide range of agents with varying sophistication and lethality. Some chemical agents can be diverted from legitimate uses or gen-

erated using widely available materials and rudimentary technical skill, whereas synthesizing certain highly lethal nerve agents requires advanced chemistry expertise, specialized equipment, and internationally controlled chemical precursors. Our strategy to deny terrorists access to chemical weapons (CW), precursors, and associated equipment must therefore match the diversity of the threat in its approach.

"It is in the vital national security interest of the United States to prevent and deter the spread and use of deadly chemical weapons."

> PRESIDENT DONALD J. TRUMP

To place these materials beyond the reach of terrorists, the United States will promote universal membership in, and full implementation of, the Chemical Weapons Convention and assert leadership in institutionalizing international norms against the development, possession, and use of CW. Likewise, we will not hesitate to take action against individuals or extremist groups that are pursuing and using CW. In coordination

with the Organisation for the Prohibition of Chemical Weapons (OPCW), we will continue to assist partner nations in securing and disposing of CW stockpiles and implementing verification procedures to reduce the risk of CW proliferation and use. We are also exploring ways for the OPCW to address current and emerging issues, to include non-state actor interest in and use of CW and efforts by some countries to pursue other chemical weapons, including pharmaceuticals, in ways intended to evade international restrictions. Additionally, we will track and interdict potential transfers, diversions, or thefts of pro-

liferation items – including by tracking the financial arrangements that enable this illicit activity – to and from facilities and organizations of concern.

To reduce the risk that TICs and dual-use chemicals can be co-opted for malign purposes, the United States will strengthen domestic and international chemical security practices within the academic and industrial sectors. We will raise awareness about chemical threats, promote best practices in chemical security at academic institutions, chemical facilities, and during transport, and prevent the theft of chemical agents at industrial facilities.

The United States will also consider the development of, or revisions to, national and international regulatory frameworks, standards, policies, and best practices for responsible conduct in the life sciences and the protection of CW-applicable materials. We will weigh the benefits of such measures against the risk of inadvertently restricting United States opportunities to leverage technological advances.

**BIOLOGICAL AGENTS:** In contrast to chemical, radiological, and nuclear weapons, some biological agents are contagious and may thus spread

in an uncontrolled manner. Furthermore, such agents are the only other class of WMD that has the potential to match nuclear weapons in the scale of casualties they produce. Due to the risks associated with biological threats, the United States has developed a comprehensive National Biodefense Strategy to prevent accidental, naturally occurring, and deliberate biological threats and incidents and minimize the impact of those events, while facilitating innovation and legitimate uses of the life sciences and biotechnology. A chief objective of this strategy is to prevent the acquisition of equipment, expertise, and pathogenic material for illicit purposes.

The United States will seek to improve biosafety, biosecurity (including cybersecurity), and oversight prac-

tices for laboratories and other facilities in the United States and abroad, as well as strengthen best practices for end-to-end management of samples and specimens to prevent nefarious diversion. We will also promote effective oversight concerning dual-use research and research where biosafety and biosecurity lapses could have tragic consequences, such as those involving potentially pandemic pathogens.

The United States will also engage the health, scientific, biotechnology, enthusiast, and security communities at home and overseas to promote national and interna-

tional policies, guidance, and training across these communities to reduce the risk of misuse. Finally, we will encourage other countries to implement their obligations under the Biological and Toxins Weapons Convention and United Nations Security Council Resolution 1540 and support their efforts to do so. These frameworks are designed to establish and enforce laws to prevent the acquisition, development, financing, and transfer of biological weapon-related materials, equipment, and delivery systems. Given the worldwide

ery systems. Given the worldwide availability of biological materials, technologies, and expertise, and the potential for infectious disease to spread across borders, such an international approach is crucial to ensure that detection of and defenses against bioterrorism are global in scope.

NUCLEAR AND RADIOLOGICAL MATERIALS: Unlike chemical and biological weapons, which can be produced with varying degrees of technical difficulty, nuclear and radiological terrorism requires materials that even the most sophisticated terrorists have not to date been able to produce. Because these materials must be acquired, whether through theft or illicit purchase, securing them at their source is among the most urgent security requirements of our age.

"The use of biological
weapons or their
proliferation by state or
non-state actors presents
a significant challenge to
our national security, our
population, our agriculture,
and the environment."

NATIONAL BIODEFENSE STRATEGY However, the diversity of uses, configurations, locations, and potential harms of these materials around the world requires a similarly diverse approach to their security. Recognizing the importance of the civil nuclear sector, our efforts to counter nuclear and radiological terrorism will seek to eliminate or minimize superfluous stocks of these materials, improve their security to prevent acquisition by terrorists, locate and secure materials outside of regulatory control, and counter illicit materials trafficking, including the means used to finance their acquisition.

As outlined in the Integrated Nuclear Security Strategy, the United States will continue to work with

foreign partners to eliminate and consolidate unneeded materials to locations for permanent disposition in forms that are unusable in a weapon. Consistent with this approach, we will prioritize the nuclear and radiological materials that pose the highest risk for terrorist acquisition and use in an improvised nuclear device or radiological dispersal device. We will also work with partners to decrease the

risk associated with the theft or sabotage of materials currently in use by collaborating to improve storage and transport security. Emphasizing a risk-based approach to security based in part on material attractiveness may also improve the afford-

ability and sustainability of many countries' security posture, incentivizing their participation in an enhanced nuclear security regime.

We will reduce the overall need for highly attractive nuclear and radiological materials, leading efforts to convert research reactors and isotope production facilities from the use of highly enriched uranium to low enriched uranium and promote technologies that do not require radioactive sources. For materials that remain necessary for commercial, medical, or research purposes, we will assist in improving our partners' capacity to guard against both external and insider threats—in storage, in use, and in transit. Should nuclear or radiological mate-

rials somehow escape regulatory control, we will counter their smuggling across all pathways (air, land, and sea) through deterrence, detection and reporting, and interdiction. In particular, we will work with our foreign partners to deploy technologies and investigative methodologies to ensure that threat materials are detected and interdicted before they can be used against the United States and its interests.

Each of these efforts will require close collaboration with and support to industry and public-private partnerships, as well as key international institutions and programs such as the International Atomic Energy Agency, INTERPOL, and the Global Initiative to Combat Nuclear Terrorism, which establish and depoliticize nuclear security best practices and promote their implementation.

"[W]e must prevent nuclear weapons and materials from coming into the hands of terrorists and being used against us, or anywhere in the world..."

PRESIDENT DONALD J. TRUMP



## 2 Detect and Defeat Terrorist WMD Plots

In tandem with efforts to restrict the supply of dangerous materials worldwide, we will be relentless in our campaign to eliminate terrorists who seek WMD

or the capability to develop them. In particular, the United States will detect emerging and active WMD terror plots through intelligence collection, data

sharing and analytics, technical detection, law enforcement, and other interdiction capabilities. We will prioritize our collection and targeting operations to detect and defeat efforts by terrorist organizations that may desire to conduct WMD attacks outside regions of active conflict, particularly those aimed at the United States homeland. We will exploit travel, passenger, and biomet-

ric databases to track the movement of individuals associated with WMD networks and use data ana-

"Nuclear terrorism remains among the most significant threats to the security of the United States, allies, and partners."

> NUCLEAR POSTURE REVIEW, 2018

lytics to identify threat-based trends related to technological development, illicit procurement, financial transactions, and terrorist travel. Finally, terrorists' WMD programs may rely upon discrete facilities to prepare and store these weapons. Once identified, we will work with foreign partners to systematically seize or destroy these facil-

ities to degrade terrorists' capacity to conduct mass casualty attacks using WMD.



## 3 Degrade Terrorist WMD Technical Capabilities

Terrorists' development and use of WMD may depend on a limited cadre of technical specialists and administrators, many of them highly educated and difficult to replace. Given their centrality to potential WMD plots, we will direct counterterrorism operations to prevent these individuals from threating the United States or our interests. Additionally, we will endeavor to prevent terrorist groups from replenishing technical personnel or acquiring the technical expertise to develop WMD. We will also continue

to work with scientists, academics, technical specialists, and international organizations around the world to develop voluntary codes of conduct for the responsible publication of research that could aid terrorists' WMD aspirations. Similarly, consistent with the United States' respect for free speech and open scientific exchange, we will harness all available tools to deny terrorists the use of the Internet, social media, and other digital platforms to acquire or disseminate WMD-related information



## 4 Deter Support for WMD Terrorism

The difficulty of deterring terrorists from conducting WMD attacks is self-evident: threats of retaliation do not resonate among fanatics who do not value human life, including their own, who may lack sanctuary to occupy or destroy, and who may even welcome retaliation as a means of galvanizing popular support. This strategy therefore emphasizes activities where deterring terrorists may be successful—in particular

by making WMD and related materials sufficiently difficult to acquire that terrorists' focus shifts elsewhere. Yet, terrorists may seek outside assistance to acquire or develop the most lethal varieties of WMD, including from cooperative states and non-state actors. Fortunately, deterrence remains applicable to both governments and individuals who might assist these WMD acquisition efforts. All parties must under-

stand that we will identify those who plan, conduct, or facilitate WMD terrorism and that the costs of doing so will far outweigh any perceived benefits.

Deterring hostile states and individuals from supporting WMD terrorists requires the means to quickly and accurately attribute such support, which is achieved through traditional intelligence collection, law enforcement, and advanced scientific tools. In particular, the United States continues to refine the accuracy, timeliness, and confidence of forensic

capabilities to identify the source of chemical, biological, radiological, or nuclear materials, weapons, or components used in terrorist attacks. The expectation that the United States can reliably attribute support for WMD terrorism, coupled with clarity about the consequences of doing so, will help dissuade hostile governments and individuals from complicity in mass murder.

"Nuclear, chemical, and biological agents pose uniquely destructive threats. They can empower a small group of actors with terrible destructive potential. Thus combatting [WMD] as far from our homeland as possible is a key mission for the U.S. military."

JOINT CHIEFS OF STAFF, 2015 In addition to deterring known or suspected state sponsors of terrorism, the United States will seek to deter individuals and institutions who are beyond state control from aiding and abetting WMD terrorism, including through targeted sanctions and other means of exposing their activities. While these facilitators may be terrorist sympathizers, they may just as easily be opportunists motivated by simple greed, including financiers who raise and move terrorists' money, insiders at sensitive facilities who peddle dangerous materials, or smugglers who transfer these materials into terror-

ists' hands. Whether or not facilitators are part of a terrorist group, we will hold them accountable under the law for their role in enabling WMD terrorism. The United States will also work with foreign partners and institutions to ensure that appropriate legal frameworks are in place to swiftly disrupt and punish the facilitators of WMD terrorism, taking action unilaterally when lawful and necessary.



## 5 Globalize the Counter-WMD Fight

Globalizing the campaign against WMD terrorism requires that we correct the misperception that this threat is remote and affects only a handful of Western countries, which are widely expected to shoulder the burden of combating it. In truth, the political and economic aftershocks of mass casualty WMD terrorism could be felt worldwide. An act of nuclear terrorism, for example, would gravely damage the global economy, affecting millions of people in the world's most economically vulnerable societies. Given the universality of this threat, our leaders and diplomats will underscore the need to treat WMD terrorism as a collective threat to humanity.

In hand with the message that our foreign partners must help shoulder the burden for countering this threat, we will continue to assist in increasing their capability to combat WMD terrorism where necessary. In addition to supporting the security of sensitive facilities, we will make available equipment, training, and related assistance as appropriate to create a sustainable global defense against this threat. This assistance will include sharing technology that allows partners to screen cargo and baggage for WMD materials and precursors. We will also encourage foreign governments to codify the laws and regulations necessary to support border security and law enforcement interdictions of material outside of reg-

ulatory control, assisting in this endeavor where necessary. Likewise, we will also work with foreign intelligence services, law enforcement bodies, customs services, and finance and education ministries to investigate and dismantle illicit trafficking networks and criminal organizations that associate with terrorist groups.

Finally, in light of the potential intersection of state chemical, biological, and nuclear weapons programs and WMD terrorism, the United States will seek to strengthen the international institutions and norms that serve to penalize state behavior that is

outside the realm of acceptable conduct. Following the Syrian regime's use of chemical weapons against innocent civilians, the United States' military action underscored its resolve to enforce the global norm against the use of these abhorrent weapons. We stand ready to reinforce this message in the future even as we work to persuade outlier regimes to relinquish these weapons and rejoin the community of respectable nations. We will also work in concert with international institutions that investigate violations of WMD-related treaties and accords.





# Strengthen America's National Defenses against WMD Terrorism

Among the United States Government's many responsibilities, none is more sacred than keeping its citizens safe from threats on their own soil. The United States' approach to defending the homeland from WMD terrorism emphasizes "defense in depth," where terrorists must pass through multiple layers of security to deliver WMD to our territory. For example, the United States operates an array of programs to detect and counter the smuggling of nuclear and radiological weapons and materials, deploying radiation detectors at airports, borders, maritime ports, and other locations throughout Europe, Latin America, Asia, Africa, the Middle East, and the Caribbean. These capabilities complement the tens of thousands of radiation detectors operating at United States air and seaports, borders, and within the interior of the United States.

To ensure a truly continental defense against WMD terrorism, we continue to conduct risk analyses to identify domestic vulnerabilities and allocate detection and interdiction resources optimally across pathways to the United States. In addition to visible detection assets and other defenses, the United States deploys a range of non-visible capabilities in strategic locations nationwide, which degrades the ability of ter-

rorists to plan their attempts to enter and transit the country based on known deployments of defensive countermeasures. These capabilities include highly mobile, responsive counter-WMD teams that can search for dangerous materials over wide areas based on a variety of threat intelligence. The deployment of layers of technical detection, law enforcement, and intelligence capabilities makes it difficult for terrorists to attack the United States successfully, shifting the threat away from the American homeland.

Although every attempt will be made to keep WMD threats far from our shores, the United States maintains specialized assets to locate, interdict, and disable WMD devices as a last line of defense. These technical assets are being distributed across the country and can be rapidly deployed anywhere in the United States in response to imminent WMD threats. Additionally, while counter-WMD personnel are trained to stop a WMD device from functioning or to mitigate its effects, the United States will strengthen its capacity to respond to WMD attacks in ways that minimize casualties, including through the provision of medical care and countermeasures, and position communities to recover quickly from such events.



# 7 Enhance State, Local, Tribal, and Territorial Preparedness against WMD Terrorism

Whether the United States is threatened by natural disasters or man-made threats, the most successful responses to these events often depend on the degree to which state, local, tribal, and territorial authorities are empowered and prepared. The same is true for WMD terrorism, which can-

not be combatted exclusively by Federal authorities. Law enforcement personnel, first responders, health care professionals, industry stakeholders, and many others play key roles in defending the United States homeland against WMD threats, from identifying vulnerabilities and strengthening critical infrastructure to detecting and disrupting terrorist plots before they become operational.

The United States will continue to raise WMD threat awareness and increase information sharing among these entities, describing nefarious uses of widely available materials, potential WMD dispersal means, weapons effects,

and other relevant information. In addition to helping identify and contend with WMD incidents, this outreach establishes lines of communication with Federal agencies that greatly improve coordination before, during, and after an event. We will also continue to provide training and equipment to state, local, tribal, and territorial entities on particularly

high-consequence threats, with the aim of creating self-sustaining capabilities that are not continually dependent on Federal assistance.

Finally, in addition to empowering state and local governments, we must also strengthen the most

"At our borders and within our territory, we will bolster efforts to detect nuclear, chemical, radiological, and biological agents and keep them from being used against us. We will also better integrate intelligence, law enforcement, and emergency management operations to ensure that frontline defenders have the right information and capabilities to respond to WMD threats from state and non-state actors."

NATIONAL SECURITY STRATEGY basic level of our society by fostering the resilience of individual Americans. The visceral fear that chemical, biological, radiological, and especially nuclear weapons invoke makes these capabilities coveted among terrorists, whose principal aim is often less to produce death and destruction for its own sake than to terrorize people more broadly. Our strategy must therefore address both elements of this construct—keeping WMD out of the hands of terrorists while also taking measures to mitigate their effects on the public's psyche, which can be disproportionate to their physical or medical consequences. A truly resilient nation is one whose citizens' physical and

psychological preparedness is such that they remain orderly in the face of disaster, minimize unnecessary casualties, recover quickly, and avoid counterproductive responses to adverse events.

To nurture the public's resilience, we will continue educational campaigns to encourage optimal behaviors following a WMD attack. For example,

sheltering within sturdy structures after a nuclear or radiological event can dramatically reduce radiation casualties, avoid panicked evacuations from a stricken city, and maximize aid to those most urgently in need. Although every level of government will be involved in the response to a WMD event, we will underscore the role that individual

Americans can play in denying terrorists a victory by remaining resilient and steadfast in the face of a WMD attack. Furthermore, we will emphasize preparedness efforts that are applicable to a wide range of attack modes, ensuring that our society is resilient to both present and future dangers.



## Avoid Technological Surprise

Although most analyses of future threats focus on the evolution of existing capabilities, such as more powerful explosives or more lethal biological strains, we must not discount the possibility of altogether novel forms of WMD in the future. The brief span between the discovery of the neutron in 1932 and the use of nuclear weapons in 1945 illustrates the stunning pace with which unexpected threats can materialize. Yet,

future WMD threats might arise not only from exotic new capabilities but also from reduced barriers to extant technology. Others may stem from novel combinations of technologies to produce unforeseen effects, a phenomenon foreshadowed by our adversaries' increasingly creative coupling of cyber attacks with disinformation campaigns.

Because the WMD terrorism threat will inevitably evolve, we must

remain vigilant in identifying and responding to technological trends with nefarious applications. Such attentiveness will require a wide-ranging approach that harnesses the ingenuity of the Intelligence Community, our national laboratories, and other centers of science and technology. We will also strengthen

collaboration between the public and private sectors, the latter of which often possesses the most comprehensive understanding of emerging technologies and their applications. Artificial Intelligence (A.I.) alone, soon to be a ubiquitous presence in our daily lives, is certain to produce security implications that are beyond our current understanding. As this technology races forward, its potential for delib-

erate or unintentional harm merits close scrutiny. Above all, we will be mindful of the great paradox of the modern age—that the technological advances that make our lives ever more safe and comfortable can often be twisted for malevolent purposes.

Notwithstanding the threats that advanced technologies may present, they also offer considerable potential to improve defenses against terrorism,

including the use of WMD. From advanced data analytics and network analysis to machine learning and early A.I. applications, digital capabilities hold immense promise to synthesize data, helping us to identify trend lines and insights that are beyond the grasp of human analysis alone.

"The danger from hostile state and non-state actors who are trying to acquire nuclear, chemical, radiological, and biological weapons is increasing."

> NATIONAL SECURITY STRATEGY

#### Conclusion



Despite our technological and military advantages, we cannot eliminate all pathways for terrorists to conduct a WMD attack against the United States and its interests.

Nonetheless, we can significantly reduce the probability and consequences of such attacks. Although WMD events could produce reactions that are disproportionate to their physical effects, our efforts

to reduce their frequency and scale will deny adversaries the outcomes they most desire—to effect wholesale changes to our foreign policy, our national character, and our very way of life.

"When it comes to terrorism, we will do whatever is necessary to protect our nation."

PRESIDENT DONALD J. TRUMP