U.S. Government Global Health Security Strategy 2024

APRIL 2024
The COVID-19 pandemic had—and continues to have—a profound impact on our Nation and the world. More than one million Americans have lost their lives and nearly seven million Americans have been hospitalized, leaving families grieving and communities forever changed. We experienced the worst economic crisis since the Great Depression as weaknesses in our supply chains were exposed, small businesses struggled to stay afloat, and 20 million Americans lost their jobs. And we saw how this global health challenge caused local consequences for our hospitals, our schools, and our communities. No sector of the economy or society was immune.

That is why, since day one, I have been committed to ensuring that our Nation is prepared for a future pandemic and all biological threats, including strengthening and investing in global health security.

Over the last 3 years, we have more than doubled our global health partnerships—working directly with 50 countries to ensure they can more effectively prevent, detect, and control outbreaks. And we are working with partners to support an additional 50 countries to save even more lives and minimize economic losses. With strong bipartisan support from Congress, we also championed the creation of the Pandemic Fund, a new international body that has already catalyzed $2 billion in financing from 27 contributors, including countries, foundations, and philanthropies, to build stronger global health security capabilities. We are working to make life-saving medicines and vaccines more rapidly available in health emergencies, including through supporting Gavi, the Vaccine Alliance and the Coalition for Epidemic Preparedness Innovations. And we are leading efforts to ensure international financial institutions, such as the World Bank Group, scale up lending for pandemic prevention, preparedness, and response because health security, economic security, climate security, and national security are all related.

This new Global Health Security Strategy lays out the actions the United States will take over the next 5 years to ensure we continue this progress and deliver on the goals established in my Administration’s 2022 National Biodefense Strategy and Implementation Plan and the bipartisan Global Health Security and International Pandemic Prevention, Preparedness and Response Act of 2022, enacted as part of the FY 2023 National Defense Authorization Act. Through investments and cooperation with foreign partners, we will continue to build our capacity to prevent, detect, and respond to biological threats wherever they emerge. And we will rally greater support for these efforts from other countries, the private sector, and civil society to ensure long-term impact.

We stand at an inflection point in history, where the decisions we make now will determine the course of our future for decades to come. The new Global Health Security Strategy will ensure we remain vigilant to possible threats at this critical moment and help set a more secure, sustainable, and healthy course for our people and for people around the world.
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I. Vision and Strategy Statement

a. Vision Statement

A world where all people are protected from health security threats, particularly those posed by infectious diseases.

b. Strategy Statement

The United States, together with its international partners, will enhance the prevention, detection, preparation for and response to infectious disease threats, whether naturally occurring, accidental, or deliberate in origin, across sectors at home and abroad in order for our collective efforts to be more efficient, effective, sustainable, and equitable.
II. Introduction

a. Background

The world has been profoundly impacted by the COVID-19 pandemic. Nearly one billion people were infected and over seven million lives were lost, along with devastating effects on economies and health systems. We are at a critical juncture to redouble our efforts before the next pandemic, including by strengthening global health security (GHS) capacities around the world, better linking GHS programs with other investments across the U.S. Government, and collaborating with partners and allies to achieve measurable and sustainable improvements in GHS.

The COVID-19 pandemic has underscored the imperative of building a stronger GHS architecture, including the institutions, organizations, international legal frameworks, policies, and measures to address and respond to health emergencies with international implications while protecting national security and sovereignty. Achieving this will require strategic and coordinated efforts at all levels (country, regional, and global) encompassing political
commitments, financing, legal preparedness, building and maintaining core public health capacities, and developing and maintaining the necessary tools for GHS.

For two decades, spanning multiple Administrations, the United States Government has recognized the importance of strengthening health security, domestically and globally, through a whole-of-government approach (Annex I). This strategy is aligned with other national strategies, directives, and commitments, such as National Security Memorandum (NSM)-1 and NSM-15, and Executive Order (E.O.) 13747. The United States’ National Biodefense Strategy and Implementation Plan for Countering Biological Threats, Enhancing Pandemic Preparedness, and Achieving Global Health Security (NBS) defines comprehensive actions domestically, as well as globally, to strengthen multisectoral preparedness, response, and recovery from biological threats.

The U.S. Government has developed internal processes and protocols that will enable us to achieve these goals domestically. This includes implementing the 2023-2026 National Health Security Strategy (NHSS), which provides a roadmap to strengthen and adapt domestic health care, public health, and emergency preparedness and response regardless of the threat. This includes an increased emphasis on equitable access to post-disaster health services and focus on meeting the needs of at-risk individuals and underserved communities. The 2023-2026 NHSS has an enhanced focus on several health care and public health challenges exacerbated by COVID-19, as well as other public health emergencies such as mpox, including supply chain

**TARGETED SHIFTS IN GHSS 2024**

- Achieving & sustaining demonstrated capacity in at least 5 GHS technical areas in 50 partner countries.
- Catalyzing other partners to achieve the same goal in 50 additional countries.
- Robust monitoring and evaluation to measure both capacities & performance.
- Promoting greater leader-level political & financial commitments for efficient, effective, sustainable, and equitable GHS capacity.
- Strengthening country ownership and resource mobilization.
- Expanding regional activities and coordination
- Ensuring a more strategic whole-of-government multi-sector approach.
- Incorporating equity and social inclusion factors to protect all people from infectious disease threats
resiliency, health care delivery, and public health workforce capacity, risk communication, and health equity.

The United States has also made domestic organizational changes that will enhance U.S. health security, including: the establishment of the White House Office of Pandemic Preparedness and Response Policy (OPPR); the National Security Council’s Global Health Security and Biodefense Directorate; the Centers for Disease Control and Prevention (CDC) Center for Forecasting and Outbreak Analytics; the Department of State Bureau of Global Health Security and Diplomacy; the U.S. Agency for International Development (USAID) Global Health Emergency Management System (GHEMS); and the Department of Homeland Security Office of Health Security. The Department of Defense (DOD) completed a Biodefense Posture Review that assessed the biological threat landscape through 2035 and seeks to increase collaboration and synchronization across the DOD enterprise to meet the Department’s biodefense requirements. The Department of Homeland Security (DHS) is currently undergoing a Biodefense Strategic Review to ensure DHS has aligned policies, programs, and activities to counter enduring and emerging biological threats against the homeland, while maintaining homeland security mission continuity. The United States is working to advance global health security via related whole-of-government strategies, such as the President’s Emergency Plan for Adaptation and Resilience (PREPARE) Action Plan. We have also committed to conduct a renewed external evaluation of United States’ health security and pandemic preparedness capacity using the new Joint External Evaluation (JEE) 3rd edition tool by the end of 2024, in line with the U.S. Government’s strong commitment to the International Health Regulations (IHR) 2005.

This updated Global Health Security Strategy lays out goals to build upon and bolster international partnerships to strengthen global health security. Building countries’ capacity to contain outbreaks at their source is central to protecting people living in the United States and around the world. In pursuit of the goal, the United States has committed to expanding its GHS partnerships to directly support at least 50 partner countries across Asia, Africa, Eastern Europe, Latin America, the Caribbean, and the Middle East to achieve demonstrated global health security capacity. Along with our directly supported partners, the United States will continue to work with a diverse set of countries around the world, including through catalytic leadership; widespread national, regional, and global partnerships; and diplomatic engagement, to achieve the same goal in an additional fifty countries. This commitment builds on the United States’ ongoing work with national, regional, and global institutions, as well as other relevant stakeholders. These partnerships also aim to build diplomatic relationships to drive political momentum for multisectoral actions needed to accelerate compliance with relevant policy frameworks that support GHS, including the IHR and the Performance of Veterinary Services (PVS) Pathway.

This updated Global Health Security Strategy acknowledges the international community can only achieve truly global and sustainable health security by working with countries and partners around the world. Multilateral fora have been crucial to catalyzing political commitments, and financing, and to increase leadership to advance GHS. Since 2014, the United States has worked

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1 The goal is for countries to achieve and maintain demonstrated capacity (for example- level 4 on the JEE scale or 80 percent achievement on the IHR MEF, or comparable assessment) in at least five key JEE technical areas.
collaboratively with global health actors and other relevant stakeholders, including more than seventy partners through the Global Health Security Agenda (GHSA), to build diplomatic relationships to drive political momentum for multisectoral actions needed to accelerate compliance with the IHR, PVS Pathway, and other relevant frameworks that contribute towards strengthening GHS.

There is now increased attention in international fora and regional platforms focused on pandemic preparedness, prevention, and response, including in the Group of 7 (G7), the Group of 20 (G20), the World Health Organization (WHO), the Pan American Health Organization (PAHO), and the UN General Assembly (UNGA). These fora provide distinct opportunities to build political will, financing, and increase leadership necessary to develop lasting improved GHS capacity. The United States is supporting efforts to strengthen global policies and legal preparedness, including negotiating a Pandemic Agreement and targeted amendments to the IHR, as these two instruments have the potential to provide the international community with the opportunity to establish a shared path forward for preventing, preparing for, and responding to international health emergencies.

**b. The Challenge and Opportunity**

Even as the world recovers from the COVID-19 pandemic, the key drivers of disease emergence and spread are increasing rapidly, including the growth and mobility of populations, human encroachment on animal habitats, wildlife trade and trafficking, loss of biodiversity and the impact of climate change. These risks are further exacerbated by other social and economic factors, including complex humanitarian crises, environmental degradation, land use change, unsustainable development and rapid urbanization, globalized travel and trade networks, emerging technologies, and inequitable access to existing vaccines.

Health systems and resources continue to be stretched thin after years of concurrently responding to the COVID-19 pandemic and a number of other recent health emergencies, including unprecedented waves of mpox, Ebola, cholera, polio, dengue, and malaria. These crises have further weakened health systems; caused significant attrition among health workers; set back efforts to mitigate ongoing health challenges such as HIV and vaccine-preventable childhood diseases; been accompanied by an explosion of mis- and dis- information; and revealed critical gaps and bottlenecks in the global supply chain. While a significant challenge, the recovery of health systems offers an opportunity to build greater resilience against a range of future emergencies, and to end the cycle of panic and neglect that has characterized the international community’s response to epidemics and pandemics.

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2 GHSA is a growing partnership of more than 70 nations, international organizations, and non-governmental stakeholders that help build countries’ capacity to create a world safe and secure from infectious disease threats and elevate GHS as a national and global priority.

3 U.N General Assembly (UNGA) 2023 High Level Meeting (HLM) for Pandemic Prevention, Preparedness, and Response (PPP) Political Declaration adopted on September 20, 2023 agreed to hold the next HLM PPPR at UNGA in 2026.

4 The COVID-19 pandemic has further exacerbated the estimated global shortage of 18 million health workers by 2030 (Global Health Worker Initiative).
The global COVID-19 pandemic has offered critical lessons, including on the importance of political leadership, diplomatic engagement, strong and resilient health systems, multisectoral approaches, risk communication and community engagement, research partnerships, and improving equitable access to medical countermeasures end-to-end ecosystem (see Annex II). The pandemic response demonstrated that a timely and effective response relied on building upon existing platforms and relationships (see examples in Annex V). This strategy incorporates these lessons and builds on lessons learned from implementing over $19 billion in U.S. Government global COVID-19 assistance to more efficiently, effectively, sustainably, and equitably prepare for, prevent, detect, and respond to the evolving global health security challenges.
III. Our Approaches and Guiding Principles

Realizing a world where all people are protected from health security threats, particularly those posed by infectious diseases, will require a whole-of-government approach at home and abroad, and strong international collaborations. These goals will guide the United States’ affirmative agenda to advance global health security:

**Goal 1: Strengthen Global Health Security Capacities through Bilateral Partnerships**

**Goal 2: Catalyze Political Commitment, Financing, and Leadership to Achieve Health Security**

**Goal 3: Increase Linkages Between Health Security and Complementary Programs to Maximize Impact**

a. Approaches and Guiding Principles

The strategy will be guided by the following:

- **Cooperation and Communication:** International and multisectoral cooperation is crucial to prevent and mitigate the threat and impact of disease outbreaks. It is imperative that we communicate effectively and efficiently across sectors, both internally and with partners, and share timely, accurate information on disease threats.

- ** Whole-of-Government, Science Based Approach:** U.S. Government capabilities, when coordinated effectively, are a tremendous tool in preventing, detecting, and responding to infectious disease outbreaks more efficiently, effectively, sustainably, and equitably. We deploy science-based approaches to improve and sustain GHS capacities.

- **Country Ownership:** The U.S. Government supports country-driven processes that identify country-specific needs, establish clear and measurable goals to enhance community capacity and resilience to prevent and mitigate infectious disease threats and emergencies, and ensure partner country ownership of GHS strategies, data management, programs, and outcomes.

- **Equity and Inclusion:** The U.S Government commits to addressing numerous barriers, including gender, ethnic/racial, socioeconomic, geographic, age, to advance the goal of ensuring that all people, regardless of their background, have access to the services they need to remain healthy, including in times of emergency.
b. Results Framework

The GHSS Results Framework outlines the strategic approaches the U.S. Government is employing to achieve the three goals of the GHSS and how they contribute to intermediate and long-term results.

<table>
<thead>
<tr>
<th>Global Health Security Strategy Results Framework</th>
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<tbody>
<tr>
<td><strong>VISION:</strong> A world where all people are protected from health security threats, particularly those posed by infectious diseases.</td>
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<tr>
<td><strong>STRATEGY:</strong> The United States, together with its international partners, will enhance the prevention, detection, preparation for and response to infectious disease threats, whether naturally occurring, accidental, or deliberate in origin, across sectors at home and abroad in order for our collective efforts to be more efficient, effective, sustainable, and equitable.</td>
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<tr>
<th>GOALS</th>
<th>STRATEGIC APPROACHES</th>
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<th>LONG TERM RESULTS</th>
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<tbody>
<tr>
<td>1</td>
<td>Technical Support</td>
<td>Collaborative partnerships with target countries result in the development of joint action plans guided by assessments such as the JEE/SPARS, 7-1-7, AARI, among others.</td>
<td>Partner countries institutionalize health security efforts by dedicating funding, making commitments, and demonstrating political will to maintain a high level of health security.</td>
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<td></td>
<td>Sustainability</td>
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<td>Performance Assessment</td>
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<td>2</td>
<td>Diplomacy</td>
<td>Partner commitments are leveraged to mobilize additional resources and leadership at national, regional, and global levels, addressing critical preparedness gaps, catalyzing support for the 50 additional countries, and sustaining and maintaining pandemic financing.</td>
<td>Funding and leadership for health security is sustained at country, regional, and global levels facilitating rapid and effective response to outbreaks.</td>
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<td>3</td>
<td>U.S. Government Coordination</td>
<td>Health security programming is effectively integrated and coordinated with other relevant programs fostering synergies in One Health, Security/Defense, and Development.</td>
<td>Health security activities support broader health goals enhancing the overall resilience of health systems and promoting alignment with One Health, Security/Defense and Development initiatives.</td>
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**Technical Support:** The United States Government will provide capacity strengthening support tailored to at least 50 countries’ needs in order to support demonstrated improvements in country capacity for effective prevention, detection, and response in at least five select health security technical areas (see Goal 1 and Annex IV for description of technical areas and goals).

**Sustainability:** The United States Government will promote country ownership of programs, systems, and human resources necessary for GHS by engaging key stakeholders in designing, planning, and implementing health security programs and policies aligned to countries’ identified priorities.

**Performance Assessment:** To monitor progress toward building GHS capacity, the United States Government will support implementation of robust program monitoring and evaluation based on international assessments including the IHR Monitoring and Evaluation Framework.

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5 The goal is for countries to achieve and maintain demonstrated capacity (for example- level 4 on the JEE scale or 80 percent achievement on the IHR MEF, or comparable assessment) in at least five key JEE technical areas.
(MEF) and performance assessments, such as 7-1-7\textsuperscript{6} bottleneck analyses, which set targets for fast detection, reporting, and responses targets.

**Enhance Commitments through Diplomacy:** By enhancing diplomatic engagement, leveraging international frameworks and initiatives, and building strong partnerships, the United States Government will drive increased prioritization of and investment in global health security; forge innovative solutions; and advance science-based policies. Types of engagements include:

- **Bilateral Engagements:** Collaborate with partner countries to identify and address gaps in preparedness, prevention, detection, and response.

- **Regional Engagements:** Foster cooperation, coordination, and capacity building within regions to enhance and harmonize cross-border collaboration, disease surveillance and early warning systems, policy development, and increase financial resource mobilization.

- **Multisectoral and Multilateral Engagements:** Encourage more significant political and financial commitments through multilateral channels to ensure health security remains a global leader-level and multisectoral priority.

- **Non-governmental Engagements:** Expand existing and develop new partnerships with non-governmental actors to ensure a whole-of-society approach to national, regional, and global health security.

**U.S. Government Coordination:** The U.S. government will foster strong partnerships among federal departments and agencies and increase linkages between health security and complementary programs to maximize impact, leveraging collective expertise, resources, and knowledge to advance multi-sectoral GHS goals.

\textsuperscript{6} https://preventepidemics.org/preparedness/7-1-7/ Every suspected outbreak is detected within 7 days of emergence and reported to public health authorities within 1 day of detection, and seven early response actions are completed within 7 days from reporting to public health authorities.
IV. Goal 1. Strengthen Global Health Security Capacities through Bilateral Partnerships

National governments are the cornerstone of collective efforts to prevent, detect and respond to global health threats. Each country is responsible for establishing and maintaining its own national health system, monitoring the occurrence and spread of diseases within its borders, and preparing to respond swiftly and effectively to health emergencies. Realizing an effective response to any infectious disease threat also requires collaboration between countries and regions. The United States Government will continue to partner with countries, non-governmental organizations, the private sector, and regional and international organizations to strengthen national, regional, and global capacities needed to prevent, detect, and respond to infectious disease threats when and where they emerge. The first two goals of this strategy are closely linked since the health security capacities developed in countries, as described in Goal 1, can only be sustained through the political commitment, diplomatic engagement, financing, and leadership described in Goal 2.

a. Expanded Country Partnerships

Core to the U.S. Government strategy is working with countries around the world to ensure they are better able to prevent, detect, and respond to global health security threats. Building upon efforts launched in 2014 to support seventeen countries in global health security, the U.S. Government has expanded bilateral support to at least fifty countries. The goal is for each partner country, or regional entity, to achieve demonstrated capacity\(^7\) in at least five health security technical areas (e.g., laboratory systems, surveillance, antimicrobial resistance, detailed in Annex IV) based on individual country priorities. The U.S. Government identifies potential partner countries or regions based on several factors, including health security capacity needs; the likelihood, vulnerability, and impact of outbreaks; and the ability to effectively partner. Through these U.S. Government bilateral partnerships, countries will be better able to prevent, detect, and respond quickly to infectious disease outbreaks within their borders to reduce the risk of the next outbreak becoming a pandemic.

The U.S. Government will work with GHS partners to build on existing global health programs and initiatives to further strengthen and sustain health security capacities over time. To achieve demonstrated capacity, we work closely with GHS partners to support the planning for and implementation of the WHO International Health Regulations Monitoring and Evaluation

\(^7\) Demonstrated Capacity is achieved by reaching a level 4 on the JEE scale or 80 percent achievement on the IHR MEF, or other relevant assessments) in at least five key JEE technical areas (e.g., lab systems, surveillance, antimicrobial resistance (AMR).
Framework (IHR MEF). By aligning with the IHR MEF, GHS countries will be able to demonstrate enhanced health security capacities in a manner consistent with their national health security plan. To this end, we will continue to support governments to develop, routinely update, and make publicly accessible long term National Action Plans for Health Security (NAPHS) or equivalent, and short-term operational planning to help prioritize and cost activities to bolster GHS capacities in coordination with other donors. We will also partner in applied research and innovation, developing and incubating, putting into practice, and scaling effective locally-relevant approaches. We will also leverage diplomatic engagement to encourage partners to increase domestic resource mobilization and national health spending.

CDC and USAID are the principal implementers of these bilateral health security capacity strengthening activities overseas for the U.S. Government. Numerous other departments and agencies, including the Department of Agriculture (USDA), Department of Defense (DOD), the Department of State, the Federal Bureau of Investigation (FBI), and other components of the Department of Health and Human Services (HHS), also contribute to bilateral GHS capacity building in partner countries and regions. In-country efforts are coordinated by the Department of State through the U.S. Embassy Chief of Mission authority. The Department of State also leads an interagency effort to jointly track progress with reports every six months, and to develop annual country strategic plans that seek to align and coordinate U.S. interagency in-country GHS activities. Per E.O. 13747, the National Security Council (NSC) staff convenes an Interagency Review Council quarterly to strategically plan and review progress.

The sections below highlight the goals within each technical area, based on the JEE, where the U.S. Government can work to help partners build GHS capacities. Annex IV provides a list of example activities for United States’ engagement related to selected JEE Technical Areas. Technical areas are prioritized based on countries’ identified needs, as well as the availability of funds, programs, and other resources.

**Multisectoral Coordination:** Mechanisms are established to coordinate the leaders, Parliamentarians, and Ministries responsible for finance, commerce, trade, tourism, emergency management, security, and communication; and to rapidly report a potential health emergency in line with the IHR.

**Legal Preparedness:** Countries map, develop, refine, and use legal instruments that enable the implementation of capacities across sectors to prevent, prepare for, detect, respond to, and recover from health emergencies. Countries are legally prepared to access medical countermeasures (e.g., liability risk management, regulatory system strengthening).

**Financing:** Countries have budgets and/or other mechanisms that allow for timely access to financing for readiness and initial national response to infectious disease threats, including IHR

8 This includes the mandatory State Party Self-Assessment Annual Report (SPAR) and the voluntary Joint External Evaluation (JEE) to assess gaps and progress.

9 Legal instruments (e.g., constitutions, legislation, decrees, regulations, etc.) to support and enable efforts to advance GHS and to enhance pandemic prevention, preparedness and response, including the ability to implement all their obligations under the IHR.

10 GHSA’s Legal Preparedness Action Package: https://globalhealthsecurityagenda.org/legal-preparedness/
and PVS implementation. Countries, regions, and other institutions identify resources that can be quickly activated in response to health emergency declarations under the IHR.

**Antimicrobial Resistance (AMR):** Countries have a functional system in place to address the emergence and spread of AMR including implementation and monitoring of costed national multisectoral AMR action plans; optimal use of antimicrobial medicines in human and animal health including implementation of internationally endorsed guidelines and practices for proper antimicrobial stewardship; and increased AMR surveillance and reporting capacity including the integration and analysis of data across sectors.¹¹

**Infection Prevention and Control (IPC):** Countries have strong, effective infection prevention and control programs that enable safe health care and essential services delivery; can prevent healthcare-associated infections (HCAIs) in accordance with WHO guidance¹² across healthcare services; and include safe built environments in health facilities.

**Zoonotic Disease:** Countries implement multi-sectoral mechanisms and policies to prevent, mitigate the risks, and minimize the transmission of zoonotic diseases including implementation of sanitary animal production practices across all major animal value chains in accordance with international standards (e.g., OIE Terrestrial and Aquatic Codes, Codex Alimentarius); multisectoral surveillance systems for priority emerging and endemic priority zoonotic diseases; and operational mechanisms for coordinated multisectoral response to outbreaks of endemic, emerging or re-emerging zoonotic diseases.

**Food Safety:** Countries have multisectoral surveillance, prevention, and information sharing, and timely response related to foodborne outbreaks and food-related public health incidents.

**Biosafety and Biosecurity:** Countries promote and implement international norms related to biosafety and biosecurity.¹³ Countries understand and mitigate potential risks associated with emerging biological technologies, such as synthetic biology, so that these can be safely harnessed. Countries implement a whole-of-government multisectoral national biosafety and biosecurity system with high consequence biological agents identified, secured and monitored in a minimal number of facilities according to best practices.

**Immunization:** Countries have functional nationwide vaccine delivery systems, effective cold chains, and quality control to protect populations, including marginalized groups, against endemic and emerging disease threats, and utilize social science to increase public understanding and acceptance of vaccines and other public health interventions. Research collaborations are established to develop new vaccines for endemic and emerging infectious diseases.

**National Laboratory System:** Countries establish and maintain a safe and secure national multisectoral laboratory system that is capable of safely and accurately detecting and efficiently reporting pathogens, and strains or variants, causing epidemic diseases from known and novel pathogens. Capacity to deploy and utilize accurate, reliable, safe, secure, and affordable

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¹¹ **U.S. National Plan for Combatting Anti-biotic-resistant bacteria**

¹² **Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level (who.int)**

¹³ Including WHO **Global guidance framework for the responsible use of the life sciences: Mitigating biorisks and governing dual-use research** and other appropriate policies and guidance.
appropriate diagnostics tests; and to sequence pathogens and readily share information, which is crucial for the public health response and accelerated development of vaccines, therapeutics, and diagnostics.

**Surveillance:** Countries establish and maintain functional national surveillance systems with rapid data and information sharing across public health levels; among surveillance systems, laboratory networks, and clinical care facilities. Surveillance is conducted across human, animal, and environmental health sectors, as well as regionally and globally.

**Human Resources:** Countries train and sustain, including through reliable and equitable pay, skilled and competent health workers and professionals across health sectors, including animal and environmental health, using multisectoral approaches in pre- and in-service training.

**Health Emergency Management:** Countries develop and maintain operational readiness including: all hazards risk profiles and readiness plans; networks of emergency operations centers; incident management structures; systems to activate and coordinate health personnel teams during an emergency; logistics and supply chain management systems; and regulatory bodies able to review, authorize, and enable the emergency use of human and veterinary drugs, biological products, and medical equipment.

**Risk Communication and Community Engagement:** Countries build capacities in multisectoral and multifaceted risk communication to adequately respond to health emergencies, including real-time exchange of information preventive actions. These measures comprise the full range of communication channels, including traditional and social media, mass awareness campaigns, health promotion, social mobilization, and community engagement.

**Linking Public Health and Security Authorities:** Countries have the ability to conduct rapid responses that involve health and security authorities, including having frameworks that outline the roles and best practices for coordination between the appropriate human and animal health, law enforcement, security, and other personnel during health emergencies.

**Border Health:** Countries maintain up-to-date plans and procedures, well-trained staff, and the legal authorities to implement travel measures affecting the movement of people or goods for public health purposes.

**Health Services Provision:** Countries have plans developed for minimal disruption in health service utilization before, during and beyond a health emergency and across the varied contexts within.

## b. Country Ownership and Sustainability

Country-led processes are essential for fostering national and local ownership of health security and sustainable progress toward the GHS goals. The goal of the U.S. Government’s GHS work is for partner countries to have full ownership and strong capacities, with political, legislative, and financial support for the programs, human resources, and systems necessary to maintain a high level of health security. To promote sustainability, country ownership, and long-term impact, U.S. Government assistance, as appropriate, will: (1) engage key local stakeholders in the design, planning, and implementation of health security programs to encourage active multisectoral participation and ownership from the outset; (2) align with national priorities and tailor programs
to specific needs and challenges of the local context; (3) support the development and strengthening of local institutions such as national public health institutes (NPHIs); (4) prioritize country and local leadership in planning, coordinating, implementing, monitoring, and evaluating programs; (5) identify opportunities for synergies with complementary programs; (6) collaborate with partners to develop sustainable financing including innovative funding models, domestic resource mobilization and public-private partnership; (7) support legal preparedness (including legislative, administrative, and regulatory) and sustainable financing measures needed for durable and comprehensive health security plans that account for secondary impacts such as food insecurity; and (8) develop comprehensive transition plans that allow governments and partners to ensure a smooth handover of responsibilities and resources to national human, animal, and environmental health entities.

c. Monitoring, Evaluation, Learning, Adapting, and Country Considerations

The U.S. Government works with partners to enable effective monitoring and evaluation of progress towards building and sustaining GHS capacity. Monitoring and evaluation activities rely on internationally recognized assessment tools, including the IHR MEF. These assessments will focus on the development of global health security capacities, how effectively these capacities are operationalized during an emergency, and the sustainability of the capacities once developed. Tools like the JEE and SPAR assessments can help countries assess the current status of their capacities and serve as a baseline for monitoring progress over time. Intra- and After-Action Reviews (IAR, AAR) and simulation exercises, when paired with metrics that assess timeliness of actions, can offer valuable feedback to countries on how their capacities are operationalized during real-world events. Additionally, improved indicators in the revised editions of the JEE and SPAR, standardized AARs, and operational evaluations such as the 7-1-7 targets\(^{14}\) for outbreak detection, notification, and early response, further enhance the relevance and effectiveness of these metrics. The U.S. Government will assess selected capacity scores twice a year through a country-led process using the frameworks described above, adjust programming as needed, and produce a public annual report highlighting the achievements. The United States’ IHR National Focal Point will foster collaboration with other countries’ Focal Points to support the global surveillance network for rapid information sharing of potential international health emergencies, as well as exchanging of experiences on country-level monitoring and evaluation of IHR core capacities.

d. Gender Equity, Equality, and Social Inclusion

The United States will actively promote the incorporation of gender-responsive and social inclusion considerations into GHS programming, to reduce public health risks and adverse health impacts on marginalized populations during and in between future outbreaks. This will include considerations of gender equity and equality, in addition to other drivers of inequality. Recognizing and addressing the unique needs, roles and experiences of individuals based on their

\(^{14}\) https://preventepidemics.org/preparedness/7-1-7/
gender identity is essential for building effective health security. The Ebola outbreaks, COVID-19 pandemic, HIV/AIDS pandemic, and manifold climate-related health emergencies have demonstrated the profound adverse economic, social, and health impacts on marginalized and underserved populations. In many parts of the world, men engage less with health services than women, are less likely to seek preventive services, and are more likely to drop out of care. Inclusion of gender considerations around animal health are especially crucial because women comprise most of the world’s 600 million poor livestock keepers and engage in day-to-day farm animal management, including the processing, marketing and selling of animal products. Special attention is also required for marginalized populations such as refugees, displaced persons, and migrants who face heightened barriers to health services, and may also be at increased risk of exposure to infectious disease threats. To adequately address the barriers faced by marginalized individuals and community groups, and promote equitable delivery of services, GHS programs should consider program adaptations that address harmful social norms that undermine infectious disease prevention and response efforts.

As GHS efforts are undertaken, gender equity and social inclusion considerations will be incorporated where possible in health security analysis. Examples include tailoring and targeting of health messaging to key groups, empowering local leaders and trusted community members to be health information messengers, and promoting women in leadership roles in health security initiatives. For GHS programming and activities, we will, as appropriate, (1) conduct content-specific gender and social inclusion analyses and incorporate the findings into program design; (2) strengthen Infection Prevention and Control (IPC) and biosafety programs to ensure that frontline health workers, who are often predominantly female, are better protected in their workplaces; (3) incorporate gender-disaggregated metrics into GHS indicators to inform future programming; (4) address stigma-related issues that may be associated with patients recovering from endemic and emerging infectious diseases; (5) prioritize working with women-led and marginalized populations’ civic and local organizations to strengthen GHS capacities; (6) take action during outbreak responses and other GHS activities to extend services to the under- or unserved; (7) and prevent sexual exploitation and abuse and sexual harassment.

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15 International Livestock Research Institute. Empowering women enhances the health of people, animals and the environment (2023).
V. Goal 2. Catalyze Political Commitment, Financing, and Leadership to Achieve Health Security

The United States Government seeks to inspire increased interest and engagement in health security, ensuring that it remains a priority at the national, regional, and global levels. Through diplomatic efforts, coalition-building, partnerships, and advocacy, the United States Government will work to increase political leadership and investments in health security. These efforts will also strengthen the global health security architecture, with a strong emphasis on building fit-for-purpose institutions that are able to deliver on our ambition of a world safe and secure from infectious disease threats.

Sustainable Financing

Sustainable and predictable financing is essential for GHS. All countries must invest in strengthening capacities to prevent, prepare for, detect, and respond to health security threats as crucial aspects of national security, economic stability and prosperity, and the protection of health worldwide. Experts estimate an additional $31.1 billion annually, of which two-thirds would come from domestic financing and one-third from external financing, is needed to strengthen outbreak and pandemic prevention, preparedness, and response capacities.\(^{16}\) To have truly sustainable financing, our collective work will need to be flexible, innovative, and adaptable, as the global health security landscape and available resources continually evolve. The United States is working with countries and multilateral partners to catalyze and sustain the political leadership, commitment, and financing needed to increase investments in health security. All sectors of society, including public and private sector organizations, have a role to play in generating and implementing solutions, and harmonizing and contributing resources that better address gaps in health security.

The National Biodefense Strategy set a goal to “Establish and Maintain Sustainable Global Financing for Health Security and Pandemic Preparedness”. The U.S. Government committed to working with the World Bank, WHO, and other countries and donors, to establish and maintain a Financial Intermediary Fund, later named the Pandemic Fund. The Pandemic Fund was established to invest in building stronger pandemic prevention, preparedness, and response capacities at national, regional, and global levels, with attention to low- and middle-income countries. This landmark accomplishment was the result of years of political leadership; sustained political and financial commitment will be needed to fulfill the promise of the Pandemic Fund.

The United States is also supporting complementary response financing efforts, including initiatives for surge financing at the earliest stage possible for medical countermeasure (MCM).

production and distribution. At the Hiroshima Summit in 2023, G7 Leaders committed to working together to identify concrete and operational steps to improve low- and middle-income countries’ access to development finance for MCMs in health emergencies. Following this commitment, the G7 Development Finance Institutions, joined by the European Investment Bank and International Finance Corporation, issued a Joint Statement and an options paper articulating tangible opportunities for both Development Financing Institutions and other bilateral, regional, and multilateral funders to provide rapid financing for procurement, surge production, and delivery of MCMs in health emergencies. The United States will continue to build upon this effort, as well as other complementary initiatives under the G20 Joint Finance-Health Task Force and other multilateral negotiations to identify and implement financing options that can support more equitable responses globally.

a. Bilateral Engagement

Through targeted bilateral diplomatic engagements and advocacy, the United States Government is committed to fostering greater political will and ensuring health security remains a top national priority by:

- Promoting an enabling environment, including the necessary legal preparedness (including regulatory system preparedness), diplomatic and political engagement, and sustainable national health security financing to strengthen health security capacity;
- Promoting partnerships to conduct clinical trial and other relevant health research and provide research training, infrastructure, and capacity building;
- Supporting domestic mobilization of financial resources between and during health emergencies;
- Aligning U.S. Government GHS investments with other global health investments, including other U.S. bilateral or multilateral global health investments, the Pandemic Fund, and G7 partner investments, among others, to strengthen and sustain country capacity, and foster national collaboration between health and finance; and
- Encouraging bilateral partners to engage in partnerships with other countries to enhance health security capacity.

b. Regional Engagement

Regional organizations play a key role in the GHS architecture by fostering cooperation, catalyzing political will and leadership, promoting coordination, and capacity building within their respective regions, including efforts such as cross-border collaboration, surveillance and early warning, and policy development and harmonization. The United States will continue to encourage political and financial commitments at the regional level, including by:

- Engaging with regional organizations—such as the regional offices of WHO, FAO, United Nations Environment Programme, and WOAH; regional health agencies (e.g.,

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17 Advancing DFI Financing for a More Equitable Response to Health Emergencies - Options and Next Steps
Africa CDC, African Medicines Agency, Caribbean Public Health Agency); and regional
economic, political, or diplomatic communities (e.g., Association of Southeast Asian
Nations (ASEAN), Asia-Pacific Economic Cooperation, Pacific Island Forum) to
collaborate on joint initiatives, share best practices and strengthen coordination
mechanisms;

• Encouraging regional funding mechanisms to mobilize resources, attract investments, and
secure financial commitments from member states to support regional capacity building,
preparedness and response, and implementation of regional health security strategies and
plans;

• Strengthening regional partnerships to coordinate efforts and build greater collective
preparedness including in the areas of regulatory harmonization, biosafety and
biosecurity, and laboratory capacity and surveillance;

• Mobilizing additional commitments and financial resources to support regional health
security efforts, including for strengthening IHR implementation, the Pandemic Fund’s
regional grant support, WHO (including regional offices); and

• Encouraging the development of comprehensive regional risk assessments and response
plans that can address cross border health threats (e.g., North American Preparedness for
Animal and Human Pandemics Initiative (NAPAHI).

c. Multilateral Engagement

Multilateral organizations are key actors in coordinating, guiding, and setting norms for
international efforts that underpin the GHS architecture. Their roles include coordination of
policy and international standards, normative and regulatory functions, global surveillance and
early warning systems, workforce capacity building, emergency response, information sharing,
technical assistance, advocacy, and resource mobilization. The United States Government will
continue to encourage mobilization of political and financial commitments through multilateral
channels to ensure that health security remains a priority for global leaders, including by:

• Providing catalytic leadership to increase international commitments to support at least
50 additional countries, to complement U.S. direct support to 50 countries described
previously;

• Working with development partners, international initiatives, and allies in the G7 and
G20 to develop programs that support national health security action plans in non-U.S.
partner countries and countries where the United States is providing limited support (for
less than five technical areas);

• Developing novel approaches for sustainable financing for GHS, including through
existing mechanisms, such as Gavi, The Global Fund to Fight AIDS, TB, and Malaria
(Global Fund), Coalition for Epidemic Preparedness (CEPI), and the Pandemic Fund;

• Tracking and catalyzing donor commitments in support of GHS including through the
World Bank and other international financial institutions, WHO, and other UN bodies,
the World Trade Organization and the One Health Quadripartite,\textsuperscript{18} to promote greater accountability;

- Enhancing finance-health partnerships to promote greater investment and sustainable financing for preparedness, including through the G7 and G20 Joint Finance-Health Task Force;

- Galvanizing support for multilateral biosafety and biosecurity commitments and the establishment of regional and global mechanisms to raise the global bar for biosafety and biosecurity norms and practices (Annex IV);

- Guiding and leveraging, as appropriate, the frameworks, tools, and capacity-building programs established by international organizations such as the One Health Quadripartite, the World Bank Group, Organisation for Economic Co-operation and Development (OECD), and other international institutions;

- Catalyzing political leadership and attention for biological crisis in order to act more quickly in future emergencies;

- Strengthening international partnerships, including GHSA, to coordinate efforts and build collective capacity for GHS; and ensure all relevant sectors are represented;

- Increasing financial resources to support GHS efforts, including for strengthening IHR country-level implementation;

- Supporting equitable access to and financing for MCMs at the earliest stage of future health emergencies; and

- Supporting biological non-proliferation work with partner countries and collective obligations to the Biological and Toxin Weapon Convention (BWC).

Global Health Security Agenda

Global Health Security Agenda (GHSA) is a growing partnership of more than 70 nations, international organizations, and non-governmental stakeholders that help build countries’ capacity to create a world safe and secure from infectious disease threats and elevate GHS as a national and global priority. GHSA raises technical GHS work to political levels, bridging the gap between expert knowledge and decision-making power to help shape global policy. Since its inception in 2014, GHSA has driven political and financial commitments for GHS. A defining element of GHSA is its ambitious target: by 2024, more than 100 countries will have achieved “demonstrated capacity” in at least five technical areas as defined in the IHR MEF. By the end of 2022, 57 countries reached the GHSA target, with 16 more nearly reaching it. GHSA has been able connect and build large networks of experts across sectors and from around the world, serving as an incubator of innovative approaches to GHS. GHSA has been instrumental in garnering support from countries and partners through technical exchanges in Action Packages,\textsuperscript{19}

\textsuperscript{18} Quadripartite organizations are the World Health Organization (WHO), the Food and Agricultural Organization (FAO), World Organization for Animal Health (WOAH), and United Nations Environment Programme (UNEP).

\textsuperscript{19} GHSA What are Action Packages?
and facilitating multisectoral engagement in capacity building efforts. Noteworthy contributions by GHSA include launching and piloting the JEE tool and promoting use of IHR MEF tools, leading to numerous country commitments to complete a JEE and develop NAPHS.

The United States remains steadfast in its commitment to shaping the next phase of the GHSA initiative (2024–2028), which builds on the current GHSA Framework, including achieving the shared goal for 100 countries to have improved capacities in at least five health security technical areas. We will continue to work through GHSA’s diverse membership to ensure emerging GHS initiatives are informed by country experiences and locally led solutions. Building on the lessons learned from the global experience of COVID-19, we have an opportunity to reevaluate our approach and inspire further political action to address future pandemic threats. By leveraging commitments made under IHR (2005), through ongoing efforts to negotiate amendments to the IHR and develop a Pandemic Agreement, and also with initiatives like the Pandemic Fund and other multilateral investments, we will continue to work with international partners to advance political ambition, mobilize additional resources, and address critical preparedness gaps.

d. Society, Private Sector, and Donor Partner Engagement

Civil society plays a major role in advancing GHS across sectors, complementing the roles of governments and multilateral organizations by advocating for community needs, promoting accountability, connecting individuals to health services and information, and empowering communities to have agency over their health and security. Academia, researchers, foundations, think tanks, industry, and private sector companies and manufacturers also play a significant role in bolstering global health security by contributing resources, expertise, coordination, and accountability. The United States Government will continue to partner with civil society, the private sector, and other non-governmental organizations to ensure GHS investments and programs apply a comprehensive whole-of-society and multisectoral approach at the local, national and global levels, including by:

- Expanding existing and developing new partnerships with civil society, global health actors, and private sector partners (e.g., GHSA Consortium, GHS Private Sector Roundtable, CEPI, Gavi, GFATM, World Economic Forum, among many others) to achieve goals laid out in this strategy;
- Encouraging and facilitating concrete relationships and partnerships between other countries and civil society, global health actors, and private sector partners to address health security gaps and mitigate vulnerabilities;
- Engaging civil society, media, and other stakeholders to advocate for increased national, regional, and global political and financial commitments from partners;
- Ensuring a voice for civil society in multilateral institutions, including on the Governing Board of the Pandemic Fund, and robust engagement of relevant stakeholders to inform the U.S. Government’s approach to sustainable financing; and
- Increasing partnerships with local actors to inform, implement and promote community-led and sustainable solutions for improved health security capacities.
VI. Goal 3. Increase Linkages Between Health Security and Complementary Programs to Maximize Impact

Successful and sustainable GHS is dependent on the existence of strong health systems, but also a viable economy, good governance, food security, and stewardship of the environment. The United States Government is proud to be the largest funder of global health, and a leader in development, food security, environmental protection, and research efforts globally. Additionally, the United States Government has law enforcement and civilian-military partnerships around the world. Many U.S. Government programs and efforts designed to advance national interests across various sectors and specific disease initiatives also complement broader GHS goals. These complementary programs primarily pertain to global human, animal, and environmental health, including those focused on specific diseases; climate change; agriculture; food security and nutrition; defense and law enforcement; biosafety and biosecurity; biosurveillance; laboratory capacities; workforce development; research and development in biotechnologies; and weapons of mass destruction nonproliferation and counterproliferation (Annex V). Just as investments in these complementary programs form a stronger foundation for GHS investments, so do GHS programs help deliver on broader health, development, and security goals. For example, United States support for National Public Health Institutes (NPHIs) advances GHS goals by strengthening country capacity to prevent, detect, and respond to biological threats while also building a stronger global network of NPHIs that could be leveraged in an emergency response.

Global disaster preparedness should also be considered within the larger global health security context. Major natural disasters, whether natural or manmade, disrupt the medical infrastructure, sanitation, water and food supply, etc. making a biological incident much more likely in the post-disaster timeframe. Strengthening a nation’s disaster capabilities is a natural complement to achieving improved global health security.

The United States is committed to better maximizing synergies between GHS programs and complementary health, development, and security programs. Building stronger relationships between these programs will lead to more sustainability, make better use of existing resources, and drive better outcomes across all areas of investments. The sections below identify examples of U.S. Government programs that complement GHS-specific investments, including in global health, development, One Health, security/defense, and research.

Several important challenges arise when seeking to better align GHS and complementary programs. First, many complementary programs have specific funding streams and legislative mandates. Complementary programs may operate in different geographies, apply different metrics for success, and may even use different language to describe problems, approaches, and goals. To address these challenges, the United States Government will continue to work to identify opportunities for alignment based on program mandates and appropriations, and to identify areas and geographic regions for collaboration. Funding streams are allocated separately and often imbalanced across sectors, which may make it difficult to align and support
multisectoral efforts, such as One Heath efforts. Multisectoral health systems must be at least minimally funded and not compromised by unsustainable sovereign debt burdens.

**GHS and Global Health Programs**

Strong health systems, including a well-trained health workforce, form an essential foundation for increased GHS capacities. Technical capacities to prevent, detect, and respond to infectious disease threats are built and sustained not only through GHS programming, but also through historic and ongoing U.S. investments in global health programs. U.S. Government efforts to combat infectious diseases, such as the President’s Emergency Plan for AIDS Relief (PEPFAR) and the President’s Malaria Initiative (PMI), contribute to GHS through their investments in laboratory capacity, health workforce, data and surveillance capacity, infection prevention and control, health systems strengthening, community engagement, and country ownership. USAID’s Global Tuberculosis (TB) Strategy (2023-2030) also supports GHS through bilateral investments in technical capacity building and development of national TB programs. During the COVID-19 pandemic, PEPFAR, influenza, and TB networks and diagnostic, treatment, and prevention platforms were vital to the pandemic response. Public health infrastructure supported by PEPFAR, including laboratory networks, electronic surveillance systems, supply chain systems, and clinical staff were leveraged for COVID-19 diagnostic, treatment, and vaccination efforts. Influenza and TB systems were particularly well-suited to the COVID-19 response effort because of the similar transmission dynamics of the pathogens and the type of respiratory infection prevention and control measures and patient support systems required for both diseases. Ensuring the maintenance of robust and resilient TB and influenza networks, including continued support for the Global Influenza Surveillance and Response System, is imperative considering the likelihood of a future pandemic being caused by an airborne pathogen.

As the world continues to focus on building GHS capacity, we should ensure we are leveraging the work of ongoing global health programming to build stronger health systems and capacities. This will require closer collaboration among programs, including joint planning activities.

To maximize synergies across global health and GHS investments the U.S. government will:

- **Integrate and Coordinate:** Identify opportunities to integrate and coordinate global health programming, emphasizing reporting processes that bridge the gap between health and health security. Integrate efforts to rejuvenate primary health systems in the wake of the pandemic with the extension of GHS programs to communities and marginalized populations.

- **Embed GHS into Disease-Specific Approaches:** Identify areas where GHS considerations can be seamlessly embedded into disease-specific strategies. Such integration will enhance preparedness activities, surge capacities, and the development of crucial GHS infrastructure such as laboratory networks, health worker training, IPC initiatives and immunization programs.

- **Leverage Synergies:** Explore how long-term strategies can capitalize on synergies not only within GHS investments but also in conjunction with programs like PEPFAR, PMI, and other relevant initiatives, including the sharing of pathogen genetic sequence data.
• **Leverage health commodity procurement to advance regional manufacturing:** Utilize the large-scale procurements of U.S. Government bilateral programs including PEPFAR, PMI, combined with the United States’ governance role in key multi-donor institutions including Global Fund and Gavi to incentivize quality-assured production of vaccines, therapeutics and diagnostics in markets with limited existing pharmaceutical manufacturing in order to establish a sustainable base of production that can be repurposed during outbreaks.

• **Strengthen national and regional regulatory systems:** Build the capacity of national and regional regulatory bodies to more effectively introduce health commodities required for advanced progress on major global health priorities (e.g., Malaria, TB, HIV, maternal, newborn and child health), and also create a more conducive regulatory environment during responses to health emergencies.

**GHS and Development**

Investments in strengthening GHS capacities are intrinsically linked with efforts in other areas of development, such as improving food security and nutrition, education, economic development, water security and sustainable sanitation, responding to humanitarian emergencies, and strengthening democratization and governance. Decades of investment in development have driven tremendous progress towards advancing U.S. national security priorities and improving well-being globally. At present, the U.S. Government is working on multiple initiatives aimed at integrating GHS and development. These include the President’s Emergency Plan for Adaptation and Resilience (PREPARE) which supports partner countries’ ability to plan for and respond to impacts of climate change on public health systems, including enhancing the resilience of key health services during emergencies. The Feed the Future (FTF) initiative supports research to identify innovative approaches to improve animal health, including the development of novel vaccines and diagnostics, as well as strengthens local capacity by equipping animal health laboratories, training the next generation of animal health scientists, and improving farm biosecurity. Water for development and water, sanitation and hygiene (WASH) programs strengthen overall infection prevention and control in health facilities, on farms, and in communities. Democracy and governance programs strengthen community engagement in health, strengthen the role of civil society, and help to counter the spread of mis-information.

The United States Government will:

- **Access key tools:** Adapt tools or approaches used in humanitarian assistance and disaster relief for GHS and vice versa.

- **Leverage synergies with development programs:**
  - Partner with climate change efforts to address the underlying and evolving causes of climate-associated health security threats such as increased vector borne and other diseases, like cholera and malaria, that thrive in hotter climates and after extreme weather events.
  - Work with economic growth activities so that basic health services can reach underserved populations.
- Link with governance efforts to promote, establish and maintain community trust in local leaders during health emergencies, and to sustain health systems capacities in the face of climate induced events and emergencies.

- Link to food security programs to improve health of populations, and to ensure basic needs are met during health emergencies.

- **Improve sanitation**: Improve sanitation for public and animal health, such as improving hygiene at animal production value chains to prevent transmission of zoonotic diseases. Strengthen linkages between WASH and GHS programs to prevent the spread of infectious diseases.

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**One Health Approaches in Global Health Security, including Climate Change**

The U.S. Government promotes a One Health and transdisciplinary approach, not only for human animal, plant, and environmental health, and health security, but also to meet national and global goals for climate, resilience, food security and nutrition, economic development, biodiversity, and conservation. Through these initiatives, the U.S. Government implements a range of activities to reduce the risk for zoonotic disease spillover through improved biosurveillance and biosecurity measures for those working with animals; information sharing across sectors to prevent human cases from growing to become outbreaks or health emergencies; as well as efforts to prevent and mitigate unsafe trade and trafficking in wildlife and wildlife products (primarily high-risk mammals and birds supplying demand for meat, pets, and traditional medicines). Biodiversity conservation and support and expansion of critical ecosystem services helps reduce the burden of chronic diseases, provides crucial nature-based climate solutions with significant economic and collateral health benefits, and prevents disease spillover and emergence at a key source. Additionally, ongoing efforts to reduce the impacts of climate change on health systems, and of health systems on climate change, can help the development of sustainable and resilient capabilities and reduce the risk posed by climate sensitive diseases. Prevention activities are focused on understanding risks at the human-animal-environmental interface and reducing the zoonotic disease spillover risk, including those risks associated with capturing, processing, transport, sale, and consumption of wild animals.

The U.S. Government continues to support work to reduce pandemic risks in countries, including efforts to monitor and reduce the number of high-risk markets and wildlife supply chains; develop materials and campaigns to change consumer behavior; promote health safety practices at critical control points in food supply chains; and partner with key industries to reduce the availability of high health-risk wildlife products. These practical measures help integrate pandemic prevention and zoonotic disease spillover risk reduction into regulations and laws; strengthen collaboration among wildlife, agriculture, environmental, public health, and law enforcement agencies for effective implementation of a One Health approach. The U.S. Government also makes investments to protect watersheds for improved water quality and availability, thereby improving farm productivity and human health, as well as investments to implement systems for prevention of primary drivers of zoonotic disease, early detection, and rapid response when park rangers or rural communities observe sick wildlife, livestock or people; and land use changes and deforestation. These efforts create replicable models and tools for other governments and industries working to reduce zoonotic disease risks.
The United States Government will:

- **Enhance situational awareness**: Foster situational awareness across key sectors and among various stakeholders to mitigate shared risks.
- **Build networks**: Strengthen networks among researchers, practitioners, and policymakers, particularly in regions with shared ecologies and common health security challenges, to assess and address risks.
- **Support cross-sectoral financing**: Reduce barriers to cross-sectoral financing for GHS and related One Health research and practice.
- **Access key tools**: Ensure access to essential tools and techniques developed in the United States, with global applicability.
- **Support biosurveillance and data sharing**: Promote effective cross-sectoral biosurveillance and facilitate rapid, transparent information and data sharing across sectors and international boundaries.

**GHS and Security/Defense**

The United States Government implements many security and defense programs and activities that, though they have different mission sets, support GHS in a complementary nature and are strategically aligned with U.S. Government GHS and NBS goals. Examples of these programs include: capacity building and strengthening efforts in biosurveillance; biosafety; biosecurity; biological weapons nonproliferation; supporting partner-nation defense/security ministries and other relevant entities’ engagement in the GHS architecture; advancing appropriate and effective military-military, military-civilian, and multisectoral collaboration in support of domestic, regional and global health security efforts; and building the capacity of law enforcement, emergency response, and policy officials to prevent, detect, investigate, disrupt, and respond to deliberate biological incidents.

In line with appropriate authorities and funding mechanisms, including cooperative threat reduction programs and military-military, military-civilian, and multisectoral capacity-building initiatives, we will integrate security and defense components into broader U.S. Government GHS planning and execution. The way forward to maximize positive synergies includes:

- **Reach back support**: DOD headquarters’ staff will provide reach back, informational (e.g., medical intelligence, surveillance data) and consultative support to Defense Attaches, Senior Defense Officials, and Defense Threat Reduction Offices, enabling active DOD involvement in interagency health planning processes with the U.S. Embassies’ interagency health teams.

- **International engagement**: Internationally, we will continue and expand efforts to identify, promote, and facilitate opportunities for engagement of the defense and security sectors within the multilateral GHS architecture. This engagement will be carried out while ensuring it aligns with defense and national security core mission sets, including biosecurity and counterproliferation, without compromising these critical objectives.
**GHS and Research Programs**

The United States Government has an extensive scientific and technical research enterprise and emergency response research experience that can be leveraged to advance GHS. Research is critical for understanding pathogen behavior, supporting regulatory decisions, and addressing knowledge gaps revealed during health emergencies. Research is essential for developing and assessing the safety and effectiveness of vaccines, therapeutics, and diagnostics during emergency response, and expediting their regulatory authorization and/or approval. We collaborate with international partners to integrate epidemiological, diagnostic, clinical, and social science research into outbreak response.

As in other global health security-complementary efforts, the U.S. Government research enterprise is multisectoral and comprises a whole-of-government approach. The United States Government has been strongly committed to enhancing safe and secure global research capacity for over 50 years through training initiatives, research grants, and partnerships. We engage in collaborations on policy and governance at national and international levels to help uphold rigorous clinical trials standards. We have bolstered research programs in low-and-middle-income countries by partnering with local scientists, providing training, improving laboratory and clinical infrastructure, and enhancing information technology capabilities. Recognizing the importance of versatile global clinical trials enables a rapid outbreak response. We collaborate with and contribute to international efforts to harmonize international drug regulation guidelines and medical device guidance, ensuring the adoption of best practices globally.

The United States Government will:

- **Enhance situational awareness:** Foster situational awareness across key sectors and among various stakeholders.
- **Build networks:** Strengthen networks among researchers and practitioners, particularly in regions with shared ecologies and common health security challenges.
- **Leverage synergies:** Explore how long-term strategies can capitalize on synergies not only within GHS investments but also in conjunction with the contributions of the various research programs.
- **Develop global clinical research networks:** Develop global clinical research networks that can rapidly and efficiently generate definitive and actionable information on safety, efficacy, and public health interventions that would be considered acceptable by regulators and expert groups.

**Conclusion**

By pursuing these integrated approaches, the United States will enhance GHS and contribute to the well-being of both the nation and the international community. The United States Government values international partnerships and, through this Strategy, commits to working together on decisive actions required to build on the investments made for, and the lessons learned from, the COVID-19 pandemic and other outbreaks. Collectively, these actions and partnerships will help to build a safer future where all people are protected from health security threats, regardless of origin.
Annex I: Whole-of-Government Approach

The United States recognizes the importance and value of employing a multisectoral and whole-of-government approach to prevent, detect, and respond to infectious disease threats. For the United States, actions towards strengthening GHS are coordinated both domestically and internationally, leveraging the expertise of numerous departments and agencies. Executive Order (E.O.) 13747\textsuperscript{20} codified the interagency process and roles and responsibilities, which are updated below to reflect institutional changes.

a. Interagency Coordination

**GHS Interagency Review Council:** In November 2016, E.O. 13747 established a GHSA Interagency Review Council (now referred to as GHS Interagency Review Council) consisting of representatives serving at the Assistant Secretary level or higher from all relevant departments and agencies to carry out the responsibilities described in the Executive Order. The responsibilities of the Council include, but are not limited to: issuing guidance on GHS goals, objectives, and implementation; facilitating interagency, multisectoral engagement; providing a forum for raising and resolving interagency disagreements on GHS policy or implementation; reviewing progress in achieving GHS commitments; and developing annual GHS progress reports. The Council does not perform any activities or functions that interfere with the foreign affairs responsibilities of the Secretary of State, including the responsibility to oversee the implementation of programs and policies that advance GHS within foreign countries. In the Executive Order, the heads of departments and agencies are tasked with making GHS and its implementation a high priority, including GHS-related activities within their respective department and agencies’ strategic planning and budget processes, and keeping the Council apprised of their GHS-related activities. Departments and agencies maintain responsibility for agency-related programmatic functions in coordination with host governments, U.S. GHS in-country teams, and in conjunction with other relevant agencies. The United States Coordinator for Global Health Security, part of the National Security Council staff, serves as the Chair of the Council and regularly convenes departments and agencies to coordinate policy and programs and progress toward implementation of this Strategy.

**U.S. Embassy Teams for Partner Country Capacity Building:** At the country level, the Ambassador or their Department of State designee convenes an interagency GHS team to promote GHS with international partners and to facilitate country-level implementation of U.S. programmatic activities, including coordinating efforts to develop and execute annual U.S. Government GHS workplans. This interagency in-country team reports progress based on specific metrics, as defined in the JEE and SPAR, on a semi-annual basis back to the Interagency Review Council and NSC staff. The progress reported informs the development of an interagency GHS annual report that highlights U.S. efforts. The Department of State convenes

\textsuperscript{20} Executive Order 13747 on Advancing the GHS Agenda to Achieve a World Safe and Secure from Infectious Disease Threats
the GHS country teams, including the Ambassadors or their State designee, at least one time per year to discuss GHS work-plans, priorities, challenges, and successes.

b. Agency Roles and Responsibilities

Executive Office of the President

National Security Council Staff (NSC)

- The President will designate a United States GHS Coordinator at the NSC Directorate for Global Health Security and Biodefense who will lead the GHS Interagency Review Council. The Coordinator will lead the departments and agencies, through a whole-of-government approach, to implement the Strategy and associated policies and activities.
- NSC will coordinate and review GHS policy on an ongoing basis, including during global outbreak response, through the process described in NSM-2, to provide strategic input and facilitate policy decision-making.

Office of Management and Budget (OMB)

- OMB will oversee budget development, execution, and implementation of budget policy and resource allocation for GHS activities across the Executive Branch.

Office of Science and Technology Policy (OSTP)

- OSTP will lead interagency science and technology policy coordination efforts and serve as a source of scientific and technological analysis and judgment for the President with respect to major policies, plans, and programs of the Federal Government.

Office of Pandemic Preparedness and Response Policy (OPPR)

- OPPR leads, coordinates, and implements actions related to domestic preparedness for, and response to, known and unknown biological threats or pathogens that could lead to a pandemic or to significant public health-related disruptions in the United States.

Department of State

- Maintains an Ambassador-at-Large for Global Health Security and Diplomacy who coordinates with Chief of Mission and other relevant Department leadership and stakeholders to strengthen global health security.
- Leads diplomatic efforts, working with relevant departments and agencies and coordinated by NSC, to identify and address current and emerging threats to GHS and promote GHS with countries, regional and international organizations, development banks, multilateral bodies, non-governmental stakeholders, and other GHS actors.
- Leverages and helps coordinate U.S. foreign assistance and promotes cooperation with international partners to protect the United States and the world from health security threats.
• In international outbreaks or other emergencies, leads diplomatic engagement, working with the relevant departments and agencies, and facilitates coordination between domestic and international U.S. Government responses.

• Establishes legal and regulatory frameworks to facilitate development and distribution of medical countermeasures, in collaboration with other U.S. Government partners.

• Supports, in collaboration with relevant departments and agencies, effective representation of the United States in the Pandemic Fund, and promotes bilateral and multilateral financing commitments.

• Promotes greater donor and national investment in partner countries to build health systems for global health security.

• Develops unified programmatic policy guidance to consistently monitor and evaluate U.S. GHS efforts, in collaboration with other departments and agencies, with a focus on avoiding duplication of efforts and enhancing coordination with partner governments and other key stakeholders, including the private sector.

• Working with Chiefs of Mission, country teams, and department and interagency staff, promotes GHS with international, regional, and bilateral partners, and facilitates GHS country-level implementation of U.S. programmatic activities, including planning and reporting.

• Supports and advises Chiefs of Mission in exercising their authority in accordance with the President’s Letter of Instruction and other laws and regulations.

• Strengthens multisectoral efforts and coordination between health community stakeholders and stakeholders focused on other topics including finance, security, governance, human rights, and climate and environment.

• Provides information to U.S. citizens overseas on health threats in foreign countries and territories, in collaboration with HHS and CDC, and addresses requests for assistance related to these health threats.

• Implements biosafety and biosecurity capacity-building programs that align with GHSA and other GHS goals.

**U.S. Agency for International Development (USAID)**

• Implements and coordinates USAID programs to build capacity relevant to GHS.

• Plays a leading role, in conjunction with other relevant departments and agencies, in animal health, community preparedness, response, anti-microbial stewardship and infection prevention and control, emergency supply chain management, risk communication, community-based surveillance, and multi-sectoral training (especially pre-service), including programming, technical assistance, and capacity building.

• Plays a leading role, in conjunction with other relevant departments and agencies, in addressing infectious disease outbreaks through USAID programming (e.g., Emergency
Reserve Fund, risk communication, supply chain management, targeted commodity support, and other relevant programming).

- In the event a large-scale public health emergency becomes a humanitarian emergency, USAID, through the Bureau for Humanitarian Assistance, leads and coordinates the U.S. Government’s response efforts, including providing response support (including but not limited to: case management, coordination, logistics, and social mobilization). In crises of sufficient scale, USAID deploys a DART, supported by a response management team at headquarters, to lead and coordinate U.S. Government’s international response.

**Department of Health and Human Services (HHS)**

HHS, Office of the Secretary, Office of Global Affairs (OGA)

- Takes a leading role, with other relevant departments and agencies, in international engagement with GHS partners, Ministries of Health, and international organizations and advises on bilateral and multilateral partnerships. Facilitates, in conjunction with other relevant departments and agencies, policy and diplomatic engagement with the World Health Organization (WHO).

- In conjunction with other relevant departments and agencies, supports U.S. leadership and participation in the GHSA, including leading or participating in Action Packages and promoting country commitments to advance and share best practices towards specific GHSA targets, providing guidance and support for U.S. Government partners leading Action Packages, and tracking overall progress on Action Packages and targets.

- Maintains the U.S. IHR NFP Program and working closely with the Secretary’s Operations Center, the Administration for Strategic Preparedness and Response (ASPR), and other departments and agencies to ensure timely notification to the WHO of potential PHEIC, events of international interest, as well as other emergency communications and information sharing.

- Engages domestically and internationally with other governments, industry, academia, professional organizations, and other non-governmental entities to strengthen health security and lead response to health emergencies of all types.

- Accelerates advanced development, procurement, and distribution of medical and non-medical countermeasures, through the HHS Secretary’s Operations Center, the Administration for Strategic Preparedness and Response (ASPR), and with other U.S. Government partners.

- Promotes a global culture of biosafety, biosecurity, ethical, and responsible conduct in the life sciences.

HHS, Administration for Strategic Preparedness and Response (ASPR)

- Accelerates advanced development, procurement, and distribution of medical and non-medical countermeasures, in collaboration with other U.S. Government partners.
• Through the HHS Secretary’s Operations Center and working closely with the U.S. IHR National Focal Point (NFP) at OGA, maintains the U.S. IHR NFP’s 24/7/365 operations for the timely notification to the WHO of a public health emergencies of international concern (PHEIC), events of international interest, as well as other emergency communications and information sharing.

HHS, Centers for Disease Control and Prevention (CDC)

• Plays a leading role, in conjunction with other relevant departments and agencies, in addressing infectious disease outbreaks.

• Implements and coordinates CDC programs to build capacity relevant to health security domestically and globally using a One Health approach.

• Provides technical and scientific expertise in public health to partner countries, bilateral and multilateral institutions, and United States’ policymakers and leaders to achieve GHS goals.

• Provides technical and scientific expertise in public health to partner countries, bilateral and multilateral institutions, and U.S. policymakers and leaders to assess and develop health security capacity and respond to health threats.

• Uses data, modeling, and analytics to prevent, detect, and respond to outbreaks in real-time to drive effective decision-making.

• Maintains staff internationally who advance collaboration with multisectoral partners and serve as a first line of defense against infectious diseases originating overseas.

HHS, National Institutes of Health (NIH)

• Leads, with other relevant departments and agencies, efforts to prepare, develop, and implement the U.S. Government’s research agenda, including the research and development of medical countermeasures (MCMs).

• Supports and facilitates, through the Fogarty International Center and other NIH Institutes and Centers, international, regional, and national research capacity development through training fellowships, research grants, and bilateral research partnerships to conduct needed research and build capacity.

• Ensures current and future health of industry workers, and supports them to receive training in disaster preparedness and emergency response, including epidemic infection control, use of personal protective equipment for high-risk diseases, and ability to respond to multiple hazards simultaneously.

• Advances, in conjunction with other departments and agencies, global response research initiatives, to respond to infectious disease outbreaks and emergencies and develop candidate MCMs in advance of outbreaks.

• Promotes research capacity building that upholds International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) standards for clinical trials.
• During an outbreak, defines and implements a research agenda, in conjunction with
global clinical trials networks, other relevant departments and agencies, international
organizations, non-government organizations, foundations, the private sector, academia,
etc.

HHS, Food and Drug Administration
• Provides scientific and regulatory technical support to stakeholders, including U.S.
Government partners, regulated industry, the WHO, and assists continental, regional
and/or national regulatory authorities of affected countries to facilitate development and
availability of MCMs (i.e., biologics including vaccines, drugs, and devices including
diagnostic tests and personal protective equipment), including through emergency use
mechanisms of investigational medical countermeasures, such as under an Investigational
New Drug and Emergency Use Authorization.
• Provides assistance as necessary, with other relevant departments and agencies, and
working closely with manufacturers, to facilitate the availability of MCMs.
• Participates in International Coalition of Medicines Regulatory Authorities (ICMRA),
where regulatory agencies generate reports and recommendations, leveraging regulatory
authorities’ collective resources, sharing knowledge, work product, expertise and best
practices and coordination for multilateral response to emerging global issues. In
addition, FDA provides leadership on: (1) the ICH in developing and revising
harmonized international drug regulation guidelines specifying best practices and
evolving scientific approaches; and (2) the International Medical Device Regulators
Forum (IMDRF) to provide internationally harmonized technical documents that include
best practices and approaches to regulating medical devices.
• Supports regulatory systems strengthening on three interrelated areas including
catalyzing a global dialogue on the importance of regulatory systems to public health;
collaborating with others to identify effective approaches to strengthen systems; and
leveraging global health and development resources.
• Conducts research and analyses, and provides expertise on food safety, including
evaluating safety of new food ingredients and additives, investigates cause of foodborne
illness outbreaks, antimicrobial use, and fosters good nutrition.

Department of the Treasury
• Provides technical input on issues of health financing and sustainable financing for GHS.
• Engages in bilateral policy dialogue with ministries of finance on sustainable financing
for health, which includes health security.
• Leverages equities with the multilateral development banks (e.g., the World Bank) and
international financial institutions to advance policies that promote health security and
investments in health security by beneficiary countries.
Department of Defense (DOD)

- Facilitates implementation and coordination of relevant DOD programs and activities that align with U.S. GHS and other GHS goals, particularly biosurveillance, biosafety and biosecurity, military-to-military or military-to-civilian capacity building efforts, and relevant public health research and development including those coordinated through the U.S. Government Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) priorities.

- Coordinates and communicates, in conjunction with other relevant agencies, with defense ministries on GHSA and GHS needs and priorities, and works with partner nation defense ministries and others to increase defense sector representation in the GHSA Multilateral Initiative and advances global norms surrounding the role of militaries and military-civilian collaboration in GHS.

- For an emergency response, provides assistance and support in coordination with the lead Federal agency and in consultation with the Department of State. In general, this involves providing unique response capabilities, such as logistics, transport, and other available capabilities when critical international capacity gaps exist that cannot otherwise be easily filled by other departments and agencies, or NGOs and other international responders.

Department of Interior (DOI)

- Implements and coordinates DOI programs to build capacity relevant to GHS, with a focus on the human-wildlife interface.

- Provides technical expertise on antimicrobial resistant pathogens, and vector-borne and zoonotic diseases including plague, rabies, West Nile virus, Lyme disease, and avian influenza.

- Provides technical expertise on field and laboratory techniques for investigations of wildlife morbidity and mortality events as well as surveillance of wildlife diseases on public lands.

- U. S. Fish and Wildlife Service/Office of Law Enforcement/Wildlife Inspection Program (WIP) has authority, and oversight of wildlife trade and trafficking. The Wildlife Inspector Program is responsible for overseeing compliance with U. S. Fish and Wildlife Service regulations at Ports of Entry.

Department of Agriculture

- Implements and coordinates programs to build capacity relevant to GHS in the animal and wildlife sectors.

- Provides technical expertise on antimicrobial resistant pathogens, and vector-borne and zoonotic diseases including plague, rabies, West Nile virus, Lyme disease, and avian influenza.

- Provides technical expertise on field and laboratory techniques for investigations of wildlife morbidity and mortality events as well as surveillance of wildlife diseases.
• Leads, with other relevant departments and agencies, international engagement with Ministries of Agriculture and other government officials.
• Leads, with other relevant departments and agencies, engagement with the World Organisation for Animal Health (WOAH) and the Food and Agriculture Organization (FAO) on GHSA targets and GHS issues.
• Conducts research and analyses, and provides expertise on food safety and animal health, veterinary infrastructure, global animal disease tracking, and risk management.
• Leads, in conjunction with other relevant departments and agencies, the U.S. Government research response to zoonotic diseases where the source of infection includes livestock and poultry, and works collaboratively with State, DOD, DHS, USAID, CDC, and NIH, to lead development and implementation of a U.S. Government agricultural research agenda, such as development of veterinary MCM and vector control.
• Engages with international research institutions and global alliances to establish strategic research collaborations, particularly to help low- and middle-income countries control and prevent diseases at their source.

Department of Transportation
• Facilitates the safe and efficient movement of people and goods in transportation. Provides air navigation services and safety oversight to ensure the safety and efficiency of the national airspace system.
• Facilitates and coordinates the safe transport of hazardous materials, including pathogens capable of causing disease that qualify as hazmat under the PHMSA Hazardous Materials Regulations.
• Coordinates and communicates, in conjunction with other relevant agencies, with foreign civil aviation authorities and International Civil Aviation Organization (ICAO) on aviation-related matters pertaining GHSA and GHS needs and priorities within the Federal Aviation Administration (FAA)’s areas of authority.

Department of Homeland Security
• Elevates and promotes GHS as a national security concern.
• Implements and coordinates DHS programs to contribute to domestic and global health security, with a focus on border health, ports of entry, real-time biosurveillance, emergency response, travel measures, and risk communications.
• Leads, with other relevant departments and agencies, U.S. Government measures to protect against global health threats at United States borders and points of entry.
• Provides regular biosurveillance updates and spot reports to Federal, state, and local decision-makers to enhance awareness and early warning of emerging infectious diseases and acute biological events.
• Provides assessments of the impacts of global health threats on homeland security operations.

**Environmental Protection Agency**

• Leads, with other relevant departments and agencies, international engagement with Ministries of Environment and other government officials.

• Engages foreign governments and international organizations on improving drinking water and wastewater treatment; pesticides, pesticide policy, and integrated pest management practices for vector control; reducing air pollution; reducing plastic pollution, reducing exposures to toxic chemicals, including through the Minamata Convention on Mercury and the Global Alliance to Eliminate Lead in Paint; and promoting environmental standards and safeguards, including those that protect indigenous and tribal communities.

**Federal Bureau of Investigation**

• Facilitates, with other relevant departments and agencies, efforts to identify and investigate potential biological threats or incidents.

• Establishes protocols for joint investigations and information sharing among public health and law enforcement, including relevant threat information, domestic disease reporting, and health surveillance information.

• Engages international partners in developing protocols in respective countries to better identify when an infectious disease outbreak may be the result of a deliberate or malicious act.

**Development Finance Corporation (DFC)**

• Partners with the private sector to finance solutions to strengthen health systems, food security, critical infrastructure, and connectivity.

• Invests in healthcare services, health commodity manufacturing and supply chain, and health technology to strengthen pandemic preparedness and health system resilience in low- and middle-income countries.

• Works closely with development finance institutions and regional and global health stakeholders to develop options for surge financing to respond to future health emergencies more rapidly and equitably.
### c. Resources for Global Health Security

<table>
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<tr>
<th></th>
<th>USAID/State and CDC GHS Funding (in millions of U.S. dollars)</th>
<th>FY 2021 Enacted</th>
<th>FY 2022 Enacted</th>
<th>FY 2023 Enacted</th>
<th>FY 2024 Enacted***</th>
<th>FY 2025 President’s Budget</th>
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<td>253.2</td>
<td>293.2</td>
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</table>

*This includes funds for the Coalition for Epidemic Preparedness (CEPI), and other organizations supporting GHS research, development, and innovation. The United States additionally contributed $50 million to CEPI during this time period, using funds provided through the American Rescue Plan Act (FY 2021).

**The United States additionally contributed $250 million to the Pandemic Fund during this time period, using funds provided through the American Rescue Plan Act (FY 2021).

***FY 24 Appropriations direct a total of $700 million for Global Health Security. At the time of the GHSS publication, programmatic subtotals are to be determined.

**NOTE:**
- The Department of State’s Bureau of GHS and Diplomacy was launched in Quarter 4 of FY 2023, and thus had no relevant budget entries until the FY 2024 President’s Budget.
- Agency funding totals do not include sums for complementary activities, even when those activities are represented in the interagency policy planning process.
GHS funding is broader than the funding reflected in the table above. There are department and agency programs—beyond USAID, State, and CDC—that are not funded through GHS accounts but support GHS objectives. For example, the Defense Threat Reduction Agency works with international partners to reduce the weapons of mass destruction threat abroad, and the National Institutes of Health funds relevant research that benefits the international academic ecosystem and improvements in tools and technologies that strengthen GHS. Additionally, USAID, State, and CDC have programming and activities that are complementary, address other agency equities (e.g., regional cooperation), or support multilateral action on GHS, and are not reflected in the table above. Departments and agencies will annually review budget gaps in achieving GHS goals in accordance with the process laid out in Sec 3(c) of the NSM-15, as GHS is a pillar of Goal 2 of the NBS and its associated objectives and implementation actions.
Annex II: Overview of Lessons Learned

While considerable progress has been made in building and sustaining GHS capacities in partner countries, COVID-19 demonstrated that the world remained largely unprepared for a novel respiratory virus. Based on COVID-19, Ebola outbreaks, mpox and other recent experiences, the following lessons have been documented to guide future implementation:

**Country political leadership:**
- Country political leadership and commitment is essential to effectively deploy health security systems and maintain adequate capacities;
- Activity implementation should be country-led and involve multi-stakeholder partner country commitment to GHS capacity-building efforts at national, sub-national, and local levels, including through domestic resource mobilization;
- Country planning should account for challenges in operational feasibility, including safety, security, and mobility of United States personnel and partners; and
- Timely after-active reviews are important to learn and improve our preparation and response and to ensure equity.

**Diplomatic Engagement:**
- Diplomacy is a critical complement to the technical and financial aspects of global health security policy, as a global and equitable response requires working with a wide array of countries, including both those with strong and not as strong relationships with the United States;
- Diplomacy serves as a tool to forge cooperation and innovative solutions in difficult or unconventional situations, as well as to drive forward science-based policy changes;
- Strong diplomatic engagement should continue with bilateral and regional partners and other donors and partners, as well as with civil society, international organizations, and other global health actors, as we all work towards shared global health security;
- Diplomatic partnerships are crucial for repatriation and helping to get citizen’s safely home during a health crisis; and
- Leverage existing international agreements (for instance, the Northern Emergency Management Assistance Compact and Pacific Northwest Emergency Management Compact) as models for international mutual aid and resource sharing which bordering countries.

**Health System Strengthening:**
- Effective prevention and response to a new infectious disease threat requires a strong health system with adequate capacity from primary to tertiary patient care, medical education, and medical research, including in-country clinical research capacity;
• Laboratory networks capable of pathogen isolation and sequencing are a cornerstone of detection and research response;
• Expanding GHS capacities from central to sub-national and community levels is needed to address the increasing number of threats;
• Global partners need to better utilize other major health and development initiatives to help strengthen the systems that underpin GHS, including lab networks, surveillance, human resource training and development, infection prevention and control, clinical research networks, risk communication and community engagement, and emergency response;
• Sustained country support for health security is critical to prevent the backsliding in capacity that many countries experienced as a result of the COVID-19 pandemic; and
• In conjunction with sub-national and national efforts to strengthen health systems, regional institutions should be included as an integral components of health system strengthening efforts, and a strategic opportunity to leverage collective resources, infrastructure, and lessons learned.

**Multisectoral Approaches:**

• A One Health approach to GHS—leveraging partnerships and activities across sectors with partner countries, international organizations, and other donor countries—is important to prevent and respond to emerging infectious disease threats;
• Achieving interoperability across surveillance and labs, as well as between animal and human health, is critical to address zoonotic diseases and antimicrobial resistance;
• Health security incidents can exacerbate systemic inequities, and disproportionately impact vulnerable groups. Activity planning should consider working across the relevant sectors to strengthen support where needed to lessen disparities in the impact of health security incidents; and
• A multilayer risk management strategy for transportation which is adaptable, proportionate, non-discriminatory, and guided by scientific evidence must be place, such as for international civil aviation, and one, Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation.

**Robust Risk Communications and Community Engagement:**

• Effective, accurate communication and countering of mis- and dis-information is essential to effectively respond to GHS threats;
• Community engagement and partnership is essential to building trust, strengthening communication and health messaging, and countering mis- and dis-information;
• Effective, science-based public health travel measures can be an essential tool for responding to GHS threats;
• Efforts are needed to restore trust in the public health and science sectors; and
• Global, national, sub-national, and local planning should account for communication challenges, and include activities to support agile communications systems and engage with communities and other partners.

**Strengthening Global Medical Countermeasure End to End Ecosystem:**

• Advance legal preparedness, including through strengthening regulatory systems and approaches to liability risk management to improve rapid and equitable global access to safe and effective vaccines, diagnostics, treatments, and personal protective equipment (PPE) during health emergencies;

• Accelerate research response to develop and assess MCMs as an essential planning element to combat a novel pathogen, or a new genetic variant that resists existing MCMs;

• Address barriers to provide emergency authorization and distribute MCMs;

• Develop globally coordinated clinical research infrastructure, which is indispensable to comprehensive response;

• Prepare supply chains to surge when needed for emergencies; and

• Response financing is needed for rapid and equitable responses including to procure and distribute MCMs.
Annex III: GHS Alignment to National Biodefense Strategy (NBS) Implementation Priority Targets

- Goal 1.1.1-I: Work domestically and with international partner countries to support and implement the development and integration of international systems and operating procedures to rapidly, safely, and securely share technical and analytical information, data, and samples supporting surveillance and mitigation to prevent or limit nationally or internationally significant biological incidents including a Public Health Emergency of International Concern.

- Goal 1.1.1-II: Demonstrate the sustained domestic and international capacity of surveillance and monitoring systems, including syndromic, pathogen, and events-based systems, needed to detect and regularly report known and new infectious diseases threats in humans, plants, and animals (including wildlife and domestic).

- Goal 1.1.1-III: Accelerate domestic and international basic and applied research and innovation across disciplines to implement advanced biosurveillance and biodetection capabilities for clinical and environmental early warning and enable large-scale, affordable, and routine biological hazard agnostic and/or specific biosurveillance and biodetection, for animal, human (including clinical and wastewater), plant, and environmental surveillance.

- Goal 2.1.1-I: Reviewed and revised recommendations for the annual expansion of GHS partner countries, considering factors listed in the GHS Strategy, status of country progress towards the GHSA 2024 targets, foreign policy priorities, existing footprints of departments and agencies, and building on U.S. Government COVID 19 response activities.

- Goal 2.1.1-II: In addition to direct support to partners, encourage countries to prioritize their domestic health security capabilities and invest in building and sustaining these capacities, including through domestic resource mobilization, and work with donor countries, international financial institutions, and regional organizations to coordinate plans and generate new commitments.

- Goal 2.1.1-IV: Catalyze political leadership and attention for biological crisis in order to act more quickly in future emergencies, including at the leader’s level.

- Goal 2.1.2-I: Worked with international partners, including the members of the Group of 7 (G7 and the Group of 20 (G20), to develop and establish a Financial Intermediary Fund at the World Bank for GHS and pandemic preparedness.
• Goal 2.2.II: Support the development of a domestic and international cohort of biosafety and biosecurity experts to champion responsible research and cultivate measurably improved biosafety and biosecurity practices globally.

• Goal 2.2.IV. Strengthen partner countries’ ability to have in place a whole-of-government national biosafety and biosecurity system, including at sub-national levels, helping to ensure that especially dangerous biological materials are identified, held, secured, cultured, processed, transferred, and monitored in a minimal number of facilities according to best practices and regulations to prevent proliferation risks.

• Goal 2.2.1.V. Galvanize support for multilateral biosafety and biosecurity commitments and the establishment of regional and global mechanisms to raise the global bar for biosafety and biosecurity norms and practices, including through effective partnerships with the private sector and existing international organizations and other international forums.

• Goal 2.2.5. III. Support partner countries to develop, implement, and scale-up evidence-informed interventions at the community level to reduce zoonotic pathogen spillover informed by risk assessment and other critical information (i.e., understanding of viral and ecological factors), engagement of traditional and non-traditional partners, and targeted research to prioritize, implement, and validate interventions.

• Goal 4.1.3. I. Develop an approved plan and clear processes that allow for developing and implementing a coordinated, transparent, U.S. Government research response agenda for nationally or internationally significant biological incidents within fourteen days, subject to revision as new evidence becomes available.

• Goal 4.1.4. Maintain and build upon the clinical-trials infrastructure, inclusive of U.S. rural hospitals, and international sites as appropriate, ready to administer candidate countermeasures to participants within 14 days after the identification of a viable countermeasure to expedite the evaluation of safe and effective vaccines, therapeutics, and diagnostics for all segments of the population during a nationally or internationally significant biological incident.

Additional goals for antibiotic resistance as outlined in the National Action Plan for Combatting Antibiotic Resistant Bacteria (CARB).21


Legal Preparedness:

- Map current legal instruments to identify gaps and revisions needed for more efficient and effective health security, multisectoral, regional, or international approaches, and full implementation of the IHR; PVS, other relevant frameworks; and
- Share best practices, provide or contribute to the development of guidance tools and methods, and offer technical recommendations as countries work to develop, update, and/or amend laws, regulations, policies, and administrative measures to improve compliance with the IHR; and
- Increase capacity development through providing training and webinars based on curriculum for enhancing greater legal preparedness.

Financing:

- Conduct resource mapping and expenditure tracking to identify funding sources, levels, and spending to inform policy dialogue, strategy development, and budget planning and development across relevant ministries and relevant departments to strengthen capacities in priority technical areas;
- Prioritize domestic resource mobilization through national and sub-national budgets and/or other mechanisms to implement IHR MEF and PVS; and
- Coordinate with other donors and private sector partners as appropriate to optimize the total resources available in country.

IHR Coordination:

- Elevate GHS through IHR implementation, as improving IHR compliance helps build capacities and allows countries to engage positively in the broader global health system;
- Establish and strengthen multisectoral coordination mechanisms for the purpose of coordination and integration of relevant sectors in the implementation of GHS capacities, including core IHR capacities, and to respond to and mitigate the impacts of public health events; and

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22 Joint External Evaluations (who.int)
• Develop and update costed NAPHS that include multisectoral whole-of-society multi-hazard emergency preparedness measures.

**Antimicrobial Resistance (AMR):**

• Develop and implement costed multisectoral National Action Plan to address AMR that have mentoring in place and are updated regularly.

• Strengthen laboratory capacity to identify priority AMR pathogens and perform susceptibility testing, quality assessments to better inform treatment and strengthen AMR surveillance through improved data collection, analysis, and reporting;

• Strengthen capacity to ensure appropriate use of antimicrobials, including assuring quality of available medicines; and

• Develop and update guidelines and strategies for the prevention of multidrug resistant organisms.

**Zoonotic Disease:**

• Conduct zoonotic disease prioritization workshops and assessments by a One Health approach;

• Establish and strengthen multisectoral platforms and integrated surveillance systems for priority zoonotic diseases with formal coordination mechanisms between the human health, animal health (wild and domestic), international trade, and environment sectors; and

• Develop, promote and implement good practices in animal production of animal products, including livestock and dairy production.

**Food Safety:**

• Strengthen capacity in indicator-based and events-based surveillance and information systems;

• Support laboratory capacity to detect and determine the etiology and source of foodborne diseases; and

• Investigate hazards in foods linked to cases and outbreaks.

**Biosafety and Biosecurity:**

• Design or strengthen national frameworks for biosafety and biosecurity;

• Monitor and maintain an inventory of pathogens within facilities that store or process dangerous pathogens and complete the consolidation of high consequence pathogen agents into a minimum number of facilities; and

• Regulate the possession and use of high consequence pathogens, including risk control measures, failure reporting systems, and incident response programs;
• Advance oversight for life sciences dual use research and reduce risks associated with advances and investments in biotechnology.

• Conduct biosafety and biosecurity trainings to promote adoption of best practices in human, animal, and agricultural sectors.

**Infection Prevention and Control:**

• Establish, capacitate, implement, and sustain national IPC programs at national and health facility levels in alignment with WHO’s IPC Core Components;

• Implement surveillance systems for healthcare-associated infections (HCAIs) and other infectious disease threats in healthcare settings;

• Implement national standards for, and ensure the availability of, safe built environment in health care facilities, according to WHO minimum requirements, at national and health facility levels by improving infrastructure and water, sanitation, and hygiene systems;

• Prevent the spread of infectious diseases in healthcare facilities by implementing effective IPC interventions;

• Enhance capacity for designing, implementing, and evaluating robust WASH preparedness and response.

**Immunization:**

• Achieve 90% coverage of the country’s 12-month population with at least one dose of measles containing vaccine, serving as a proxy indicator for overall immunization against VPDs;

• Achieve vaccine delivery and sustainable cold chain capability for at-risk populations;

• Develop and operationalize a national plan for mass vaccination response to epidemics and other outbreaks of VPDs, including guidelines for legal and appropriate regulatory approval or authorization and acquisition of new and investigational vaccines for adults and children;

• Operationalize a system for identifying and addressing adverse effects following immunization; and

• Develop evidence-based interventions and tools to promote community acceptance of vaccinations and to counter mis and dis-information.

**National Laboratory System:**

• Conduct high level laboratory testing at national labs or have testing capacity for antimicrobial susceptibility for priority pathogens in human health and animal food production;

• Conduct diagnostic tests, screening or surveillance, and reporting on priority epidemic prone diseases;
• Transport specimens safely and quickly from intermediate levels to national labs for advanced diagnostic and confirmatory tests;
• Introduce advanced molecular diagnostics to strengthen surveillance and pathogen identification of known or emerging pathogens; and
• Optimize laboratory systems and support diagnostic capacity; and
• Agreements with regional networks to ensure testing is available.

Surveillance:
• Implement national guidelines and SOPs for early warning surveillance at national and intermediate levels, including both indicator and events-based and border surveillance;
• Develop processes for investigating, verifying, and assessing risk for detected events; and
• Regularly analyze and report surveillance data and link these with lab results across human, animal, and environmental health systems.

Human Resources:
• Strengthen programs to train personnel needed for disease prevention, detection, and response at national, regional, and community levels;
• Work with higher education entities to create and implement curricula to promote a multisectoral approach to infectious diseases;
• Expand in-service and pre-service training programs that address zoonotic diseases and the multisectoral approach at both national and sub-national levels, including community health workers; and extend pre- and in-service training to under-represented-field staff, such as medical entomologists; and
• Protect and support health workers; expand the global health workforce; advance equity and inclusion; and drive and invest in technological advancements and innovations.

Health Emergency Management:
• Develop of all hazards risk profiles and readiness plans;
• Establishment and operation of networks of emergency operations centers;
• Improve of incident management structures;
• Strengthen systems to activate and coordinate health personnel teams during an emergency;
• Develop logistics and supply chain management systems;
• Supporting research and development relevant to health emergencies response; and
• Provide technical support to develop strategic national stockpile.
Linking Public Health and Security Authorities:

- Establish protocols or agreements between human and animal health and security authorities that include roles, responsibilities, standard operating procedures, and information to be shared during emergencies;
- Conduct public health emergency responses or exercises that include participation of security and law enforcement authorities; and
- Develop training opportunities and programs for security and law enforcement personnel on topics related to prevention, detection, and response to infectious disease threats.

Health Services Provision:

- Develop and implement national case management guidelines;
- Support high levels of utilization of health services in health care facilities; and
- Establish and implement plans to support continuity of essential services during emergencies.

Risk Communication and Community Engagement:

- Ensure that risk communications and community engagement systems are operational, staffed appropriately, and regularly tested;
- Improve risk communications mechanisms including online and offline media;
- Engage communities in emergency response initiatives.

The ongoing U.S. Government programs described below make investments and support activities that strengthen GHS. Controlling COVID-19, malaria, HIV/AIDS, and tuberculosis, influenza, and eradicating polio are critical to reducing the burden of infectious diseases worldwide. Moreover, these efforts strengthen laboratory, surveillance, clinical research, infection prevention and control, human resource, and other systems that are fundamental to achieving the objectives of this strategy. GHS is also reinforced by U.S. Government initiatives to strengthen health systems in partner countries.

**Pandemic Influenza:** An influenza pandemic could place extraordinary demands on public health and health care systems globally, causing millions to be affected by illness, hospitalizations, or death. Preparing for such a threat is an important priority for the U.S. Government, the World Health Organization (WHO), and countries around the world. In order to prepare for the threat of an influenza pandemic, the U.S. Government works with partner countries to establish, expand, and maintain multi-sectoral influenza surveillance, laboratory capacity, and vaccine formulation and production; helps develop global and local pandemic plans and influenza prevention policies; supports targeted research projects to address critical needs; builds the evidence base for decisions on influenza vaccine program expansion ensuring timely detection and reporting of viruses that have pandemic potential. These efforts contribute to improved influenza vaccine strain selection and diagnostic tests and strengthens laboratory capabilities for influenza and ultimately for other respiratory viral pathogens as well.

**Vaccine-preventable Diseases:** The U.S. Government provides technical and programmatic assistance to global immunization programs to save lives, reduce disability, and prevent the spread of contagious diseases. Strong immunization programs with national vaccine delivery systems, effective cold chains, and quality control are the cornerstone of GHS, helping to protect populations, including marginalized groups, against emerging disease threats. Vaccination is critical to prevent and respond to epidemic prone diseases such as yellow fever, measles, Ebola, and polio. Vaccination programs also strengthen GHS by reducing the incidence of infectious disease; by protecting health workers from infectious disease, especially during health outbreaks and emergencies; and by reducing the emergence and spread of antimicrobial resistant pathogens. In addition, the polio eradication effort through its polio laboratory systems, community-based surveillance approaches, vaccine delivery strategies, data systems, use of NGO networks and community volunteers continue to benefit broader health security aims. Finally, the United States provides critical support to the development of new vaccines for emerging infectious diseases.

**Malaria:** The U.S. Government programs that help protect, diagnose, and treat people who have malaria also support broader GHS objectives. The U.S. President’s Malaria Initiative (PMI) works with partner countries and organizations to reduce malaria deaths, substantially reduce malaria morbidity, and accelerate progress towards elimination. Under PMI, the U.S.
Government supports the scale up of proven tools for malaria prevention, diagnosis, and treatment while also providing partner countries with the skills and infrastructure needed to better detect and respond to future disease outbreaks. Specifically, PMI’s investments in community and frontline health worker systems to test, treat, and report on malaria strengthen countries’ capabilities to track and respond to febrile illness as a whole. PMI also assists countries with successful implementation of the two malaria vaccines currently recommended by the World Health Organization for children in sub-Saharan Africa, in collaboration with Gavi, UNICEF, and national malaria and immunization programs. Work continues to develop more effective malaria vaccines. PMI support for laboratory systems and field surveillance to characterize antimalarial drug and insecticide resistance is leveraged and complemented by other efforts to provide rapid local detection of novel pathogens. Finally, investments made under PMI in routine surveillance strengthen the same data systems that are relied upon for epidemic detection and response, particularly in malaria elimination settings where malaria is considered a notifiable illness.

Tuberculosis: Tuberculosis (TB) is the leading cause of death from an infectious disease, and drug-resistant (DR) TB is a leading cause of death among deaths due to antimicrobial-resistant pathogens. As drug resistance continues to evolve and spread, global gains in combating TB are at risk. Efforts to strengthen the diagnosis, treatment, and prevention of TB and DR-TB also support broader GHS goals. The U.S. Government helps countries develop comprehensive networks capable of diagnosing and monitoring all forms of TB. With U.S. Government support, these networks introduce and scale up innovative, approved diagnostic tools and drug regimens; strengthen functional specimen transport and referral networks; implement high-quality laboratory management systems; support logistics and supply chains; and strengthen monitoring and evaluation systems. U.S. Government programs aim to ensure that all individuals at risk for TB and DR-TB are screened, diagnosed, and cured through approaches based on risk prioritization, expanded access to rapid diagnostic technologies able to drug-sensitive as well detect DR-TB, and patient-centered care with effective, safer and shorter treatment regimens. In addition, the U.S. Government builds the capacity of countries to collect, manage, and use high-quality data that link laboratory and TB/DR-TB surveillance systems and promote rapid diagnosis and initiation of treatment. To prevent TB and DR-TB transmission and infection, the U.S. Government supports facility-based infection prevention and control (IPC) interventions that reduce the risk of infection for health care and laboratory workers, patients, and visitors, as well as community-based approaches designed to limit transmission within and across households and other settings.

Climate-environment-health: The U.S. Government is working on multiple projects designed to increase climate-environment-health nexus awareness raising and action-taking. Among them:

- Developing a first-of-its kind climate-based dengue early warning system in the Pacific Islands;
- Launching and advancing a South America Network for One Health to improve networks among South American countries and with the U.S. Government;
- Advancing climate-environment-health engagement with African scientists and research institutions, to increase uptake of relevant mechanisms for support;
• Designing and implementing an Arctic One Health network, in one of the world’s fastest changing regions;

• Leveraging U.S.-ASEAN and U.S.-Mekong diplomatic cooperation to increase identification and uptake of novel approaches to One Health;

• Supporting mosquito and disease forecasting information sharing and modeling workshops in Central America and South Asia;

• Facilitating engagement between the United States and foreign cities on shared challenges such as heat and extreme weather events; and

• Supporting research on predictors of zoonotic disease outbreaks, both through identifying places where the human-animal-environmental interface is under stress from climate change and land use changes; and through work to understand how pathogens change to become more easily transmissible among humans—the single biggest source on novel human infectious disease.

These activities are aligned with the objectives of President’s Emergency Plan for Adaptation and Resilience (PREPARE), which is supporting partner countries’ ability to plan for and respond to impacts of climate change on public health systems and the health and wellbeing of the populations they serve and increasing the resilience of key health services, including environmental and public health and health care delivery to climate impacts to ensure continuity of essential functions.

**U.S. President’s Emergency Plan for AIDS Relief (PEPFAR):** Through the PEPFAR, the U.S. Government has invested more than $110 billion to improve health outcomes in more than 55 partner countries in the global HIV/AIDS response and saved more than 25 million lives, prevented millions of new HIV infections, transformed the global HIV/AIDS response, and created the roadmap to controlling the HIV pandemic while countries continue to contribute more and more to their response. By focusing resources where the HIV burden is the heaviest and the potential impact is the greatest, the U.S. Government through PEPFAR has accelerated progress toward HIV epidemic control and delivered remarkable results. PEPFAR’s two decades of investment in partner nations’ health systems played a critical role in countries’ ability to respond to other health crises such as Tuberculosis, Malaria, COVID-19, Mpox, and Ebola. PEPFAR has helped train nearly 340,000 health care workers to deliver and improve HIV care and other health services, creating a lasting infrastructure including 70,000 clinics and 3,000 laboratories that enables partner countries to confront current and future health challenges. PEPFAR ensures that partner countries are committing billions of dollars from their domestic budgets to care for their HIV-impacted populations. These efforts have strengthened the ability of countries with sizable HIV/AIDS burdens to swiftly address other outbreaks, such as Ebola, avian influenza, and cholera, ultimately enhancing GHS and protecting America’s borders.

**Research:** The United States Government is a global leader in science, technology, research, development, and innovation from basic science to piloting innovative financing mechanisms to real-time research during health emergencies, are transforming the tools and approaches we use to detect, contain and respond to health threats. Efforts encompass promoting research capacity, conducting clinical trials, and collaborating internationally to address and mitigate public health threats and infectious disease outbreaks. We invest in biomedical and health-related research,
development, testing, and evaluation activities that protect the health of our troops, support our national security objectives, and simultaneously advance global health security, specifically in the areas of infectious diseases and medical countermeasures. Through collaborative research partnerships with international military and civilian colleagues, we help our partners build capabilities and capacity in a multisectoral way. Our regulatory science programs support MCM safety and efficacy through research in infectious processes, vaccine evaluation, and coronavirus variants. Additionally, we operate clinical trial networks in multiple countries, rapidly responding to health crises like the H1N1 influenza pandemic, Ebola outbreaks in West Africa and the Democratic Republic of the Congo, and the COVID-19 pandemic.

Health Systems Strengthening (HSS): Well-performing health systems are responsive, resilient, and adaptive to a wide range of challenges, including natural and man-made disasters. The U.S. Government supports cross-cutting work in strengthening health systems through a range of global health programs including GHS. These cross-cutting efforts strengthen sustainable health systems which is essential to achieve GHS goals. For example, HSS efforts help develop the information systems required for effective surveillance and reporting, including the organizational and behavioral responsibilities that promote timely use of data and information. HSS supports health workforce systems that hire and manage all cadres of health workers, including those (such as epidemiologists) that may be needed to improve health security. HSS builds the pharmaceutical regulatory and management systems required for combating antimicrobial resistance, including practices that promote stewardship and rational use of medicines, and that ensure product quality such as secure supply chains and drug-quality surveillance. HSS supports clinical research partnerships that perform regulatory-level research on MCMs and strengthen clinical research infrastructure that could pivot to urgent development of new MCMs in an infectious disease emergency. In addition, the U.S. Government’s HSS work strengthens health financing systems to optimize resources, including those required to address infectious disease threats. U.S. Government HSS efforts develop quality improvement processes that ensure that health staff are competent and that facilities have the resources (equipment, supplies, personnel, and funds) to deliver quality services and prevent infections. Quality improvement programs also enable teams to identify and solve issues in order to prevent and respond more effectively to emergencies. Finally, building strong community health systems has proven critical for health security as communities are on the frontlines to prevent, detect, and respond to the public health threats affecting their members.

Food and Nutrition Security: Nutritional causes underlie 45% of all child deaths and plays a critical role in both morbidity to and mortality from infectious diseases. Thus, promoting consistent access, availability, and affordability of foods that promote well-being and prevent disease must be critical to a global health security strategy. Nutrition security also includes providing access to a safe food supply that is free from pathogens that threaten the health and nutrition status of a people and livestock.

Food and nutrition security must also be addressed in the context of a changing climate. Extreme weather events, hotter and drier growing seasons, and shifting weather patterns threaten to disrupt and reduce the food supply, all while global demands for food increase. Access to nutritious foods is also hampered by ongoing conflicts and migration, as well as global economic challenges that threaten purchasing power. Policies that support diverse, nutritious, climate-resilient crops and promote soil health can help to foster a more stable food supply. By
protecting global food systems, the U.S. Government can also help to promote peace and stability while preventing one of the causes of global migration.

There are a number of initiatives across the U.S. Government that are designed to improve both physical and economic access to nutritious foods. USAID supports numerous nutrition-specific interventions for maternal and child nutrition, for example through its Advancing Nutrition project. Another example is USDA’s McGovern-Dole Food for Education program, which provides school meals around the world to improve literacy and reduce hunger. In terms of nutrition-sensitive programming, Feed the Future (FTF) is the U.S. Government’s flagship global hunger and food security initiative, working across the interagency to support livelihoods, food security, and nutrition through agriculture-led growth. FTF has 20 official partner countries in Africa, Central America, and Southeast Asia, and is active in many more countries.

The U.S. Government works to strengthen animal health systems in multiple countries around the world. The FTF initiative supports research to identify and validate innovative approaches to improve animal health including the development of novel vaccines, diagnostics, and inherent resistance of livestock to disease through genomics. FTF also strengthens local capacity by equipping animal health laboratories, training the next generation of animal health scientists, improving farm biosecurity, and helping countries to strengthen their food safety systems including the sanitary and phytosanitary standards that enable entry into new export markets. In addition to local capacity strengthening, FTF participates in efforts to bolster animal disease surveillance systems and animal disease outbreak responses—as in the cases of African Swine Fever in Haiti and the Dominican Republic. FTF also recognizes that the health of livestock is intrinsically tied to the health of people, including access to healthy diets, and the health of ecosystems, and thus collaborates with others across the U.S. interagency to support One Health approaches that improve human health, address zoonotic diseases, promote natural resource management, and build efficient, climate-resilient food systems, in line with PREPARE.

Global Health Worker Initiative (GHWI): The White House launched GHWI on May 11, 2022, in recognition that a health workforce that is supported, equipped and protected to provide essential public health functions is integral to reclaiming lost ground from the COVID-19 pandemic and preparing for future health threats. This initiative aims to meet an urgent need: the World Health Organization expects a global shortfall of 16 million health workers by 2030, mostly in low- and middle-income countries. Through the GHWI we are better aligning investments in health workers across the U.S. Government, building stronger partnerships on health workforce with bilateral partners, multilateral institutions, including the World Health Organization, and other philanthropic partners, and reorienting our global health programs toward cohesive efforts that build stronger and more resilient health systems. The GHWI has four pillars focused on: (1) protecting and supporting health workers; (2) expanding the global health workforce and accelerating economic development; (3) advancing equity and inclusion; and (4) driving and investing in technological advancements and innovation. One key program for the GHWI is the Americas Health Corps23, an initiative between the U.S. Government and PAHO, who have committed to training 500,000 public health professionals over five years.

**U.S. Global Water Strategy:** The U.S. Global Water Strategy envisions a water-secure world that advances health, prosperity, stability, and resilience through sustainable and equitable water resources management and access to safe drinking water, sanitation services, and hygiene. The 2022-2027 Global Water Strategy is the primary vehicle to operationalize the White House Global Water Security Action Plan launched by Vice President Kamala Harris on June 1, 2022, building on and expanding the scope and ambition of the 2017-2022 Strategy. The U.S. Government will work through four interconnected and mutually reinforcing strategic objectives: Strengthen sector governance, financing, institutions, and markets; Increase equitable access to safe, sustainable, and climate-resilient water and sanitation services, and the adoption of key hygiene behaviors; Improve climate-resilient conservation and management of freshwater resources and associated ecosystems; and Anticipate and reduce conflict and fragility related to water.
VI: Glossary of Terms

**Biological and Toxin Weapons Convention (BWC):** The first multilateral disarmament treaty banning the development, production and stockpiling of an entire category of weapons of mass destruction, which entered into force on March 26, 1975.

**Global Health Security:** Global health security is the existence of strong and resilient health systems that can prevent, detect, and respond to infectious disease threats, wherever they occur in the world.

**Global Health Security Agenda (GHSA):** A growing partnership of more than 70 nations, international organizations, and non-governmental stakeholders that help build countries’ capacity to create a world safe and secure from infectious disease threats and elevate GHS as a national and global priority.

**Global Health Security Agenda Action Packages:** A concept developed to facilitate regional and global collaboration toward specific GHSA objectives and targets. The purpose of Action Packages and the underlying Prevent-Detect-Respond framework is to (1) focus international discussion toward specific, coordinated actions in support of the GHSA; (2) highlight measurable approaches countries can adopt to accelerate, monitor, and report GHSA progress; and (3) provide a mechanism by which countries can make specific commitments and take leadership roles in the GHSA.

**Global Health Security Agenda Consortium:** A voluntary and open collective of nongovernmental entities who are dedicated to promoting values of collaboration, excellence, innovation, and commitment in implementing the GHS Agenda and promoting the adherence of the International Health Regulations (IHR) and the World Organization for Animal Health (WOAH) Performance of Veterinary Services (PVS) Pathway, the Alliance for Country Assessments for GHS and IHR Implementation, and the Biological Weapons Convention and United Nations Security Council Resolution 1540.

**Global Health Security Architecture:** The framework of institutions, organizations, policies, and measures to address and respond to GHS threats. Key components of the GHS architecture include the multilateral organizations responsible for monitoring and responding to global health threats, coordinating international health efforts, providing technical assistance, and setting global health standards and regulations; the International Health Regulations (IHR); global health initiatives and partnerships; national and regional health systems; surveillance and early warning systems; research and development for vaccines, therapeutics, and diagnostics; international coordination and collaboration; capacity building; financing, etc.

**Global Health Security Partner Countries:** Countries directly supported by U.S. Government to achieve “Demonstrated Capacity” or comparable level (depending on country context) in prioritized technical areas critical to the country as measured by relevant health security assessments, such as those conducted within the WHO IHR Monitoring and Evaluation Framework, such as the JEE, SPAR, and/or other relevant health security assessments. The U.S.
Government will have at least fifty partner countries where we are working on five or more technical areas; and some partner countries where we are working on fewer technical areas.

**International Health Regulations (2005) (IHR):** A legally binding instrument of international law, with 196 countries, that has its origin in the International Sanitary Conventions of 1851, concluded in response to increasing concern about the links between international trade and the spread of disease (cross-border health risks). As part of the IHR, countries report annually on these capacities to detect, notify, and respond to infectious diseases and other health threats using tools from the IHR MEF, such as the required State Party Self-Assessment Annual Reporting (SPAR), as well as other, voluntary tools and assessments, such as the JEE.

**Joint External Evaluation (JEE):** A voluntary, collaborative, multisectoral process, part of the IHR MEF, to assess country capacity to prevent, detect, and rapidly respond to public health risks occurring naturally or due to deliberate or accidental events.

**National Action Plan for Health Security (NAPHS):** A country owned, multi-year, planning process that can accelerate the implementation of IHR core capacities, and which captures national priorities for health security, brings sectors together, identifies partners and allocates resources for health security capacity development.

**One Health Approach:** A collaborative, multisectoral, and transdisciplinary approach working at the local, regional, national, and global levels, with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and the environment.

**Pandemic Agreement:** WHO Member States agreed in November 2021 to a global process to draft and negotiate a convention, agreement or other international instrument under the Constitution of the WHO to strengthen pandemic prevention, preparedness and response and complement the IHR, based on lessons learned from the global response to COVID-19.

**Pandemic Prevention, Preparedness, and Response (Pandemic PPR):** A component of the broader GHS concept, Pandemic PPR is the capacity to prevent, prepare for, and respond to pandemics events where there are significant and substantial acute public health impacts that threaten to overwhelm regional and global resources and that require extraordinary measures to address the global health impacts.

**Performance of Veterinary Services (PVS) Pathway:** A tool created by the World Organisation for Animal Health (WOAH) that is designed to assist veterinary services to establish their current level of performance, to identify gaps and weaknesses in their ability to comply with WOAH international standards, to form a shared vision with stakeholders (including the private sector), and to establish priorities and carry out strategic initiatives.

**Private Sector Roundtable (PSRT):** The mission of the PSRT on GHS is to mobilize industry to help countries prevent, detect, and respond to health-related crises and strengthen systems for health security. The PSRT serves as the focal point for companies seeking to address these challenges.

**Public Health Emergency of International Concern:** An extraordinary event that is determined, as provided in the IHR (i) to constitute a public health risk to other nations through the international spread of disease and (ii) potentially to require a coordinated international response.
Quadripartite: Four UN Agencies including the WHO, the Food and Agricultural Organization (FAO), the World Organization for Animal Health (WOAH), and the United Nations Environment Programme (UNEP).

United Nations Security Council Resolution 1540: In Resolution 1540 (2004), the UN Security Council decided that all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes. States are also required to implement and enforce appropriate controls over nuclear, chemical or biological weapons-related materials in order to: account for and secure items in production, use, storage or transport; physically protect such materials; detect, deter, prevent and combat their illicit trafficking and brokering through effective border controls and law enforcement efforts; control the export, transit, trans-shipment and re-export and the provision of funds and services related to such export and trans-shipment that would contribute to proliferation; and penalize violations.