



**Statement before the U.S. Senate Committee on Armed Services  
Subcommittee on Emerging Threats and Capabilities**

***“Biological Threats to U.S.  
National Security”***

A Testimony by:

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Chairwoman Ernst, Ranking Member Peters, and other distinguished Members of the Subcommittee – I am truly grateful for the opportunity to appear before you today. The topic of biological threats to U.S. national security remains vitally important and is deserving of far greater consideration. Thank you for your leadership in this critical area.

The timing of today's hearing is especially propitious, since it falls on the very day that we are releasing the full report of the Center for Strategic International Studies (CSIS) Commission on Strengthening America's Health Security, entitled *Ending the Cycle of Crisis and Complacency*.

I co-chair that Commission with former Senator Kelly Ayotte. CSIS launched the Commission in April 2017. It includes among its very active members Senators Patty Murray (D-WA) and Todd Young (R-IN), Representatives Ami Bera (D-CA), Susan Brooks (R-IN), Tom Cole (R-OK), and Anna Eshoo (D-CA), along with 12 other diverse leaders, including from the security world General Carter Ham, Admiral Jonathan Greenert, Christine Wormuth, and Rebecca Hersman.

We will make available the full Commission report for the Subcommittee.

Given the Subcommittee's agenda, please allow me to lay out succinctly the central premises that guide our work, along with a summation of the Commission's recommendations. My hope is that we can identify today several points of common purpose in the Commission's work and the Subcommittee's priorities.

We began the Commission's work with a simple, powerful proposition: health security is national security, in a world that is increasingly dangerous and interdependent.

Biological threats – outbreaks from natural, intentional and accidental causes – are occurring with ever higher velocity, rapidity and costs.<sup>1</sup> At the same time, the world is increasingly insecure, violent and disordered, and it is exactly in danger zones where an increasing number of biological outbreaks occur.<sup>2</sup>

We need to adjust our thinking to account for this fundamental new reality. We need new approaches to operate effectively, on-the-ground, in difficult, insecure places.

Increasing levels of disorder and conflict around the world are resulting in the costly destruction of public health and clinical infrastructure. Population growth, urbanization, and the mass movement of populations are forcing more people into overcrowded and unsanitary living conditions, creating ideal conditions for the emergence and spread of infectious diseases. Globalization and the rise of international trade and travel mean that an outbreak in a disordered setting with a weak health system can quickly become a pandemic, threatening the United States and the rest of the world. Policymakers increasingly appreciate these threats can undermine the social, economic, and political security of nations.

The Commission also arrived at a stark, companion conclusion: U.S. health security policy is caught in a cycle of crisis and complacency, which leaves Americans very vulnerable.

When health crises strike – measles, MERS, Zika, dengue, Ebola, pandemic flu – the American people grow alarmed and U.S. policymakers spring into action, rushing to allocate resources in response. Yet all too often, when the crisis fades and public attention subsides, urgency morphs into complacency. Investments dry up, attention shifts, and a false sense of security takes hold.

That realization led us to our macro-conclusion: first and foremost, the U.S. government needs to break the cycle of crisis and complacency and replace it with a doctrine that can guarantee continuous prevention, protection, and resilience.

We are convinced that we can break this cycle. Health security and biodefense are areas that historically enjoy strong bipartisan support in Congress, healthy and fruitful cooperation between Congress and the Administration, and strong, promising public-private partnerships.

Health security, luckily, is an oasis of sorts. In an era of acute political polarization, it is a policy zone where, across the political divide, we recognize our shared interests and can have informed discussions to chart a common path forward. We recognize that health security challenges are innately complex, and require all of us working together, across jurisdictions, agencies, and sectors, to create a much better line of defense. We should celebrate this good fortune and take full advantage of it.

The Commission also believes that the economic case to invest early in preparedness and biodefense is crystal clear – and powerful. There is much accumulated evidence from recent outbreaks proving the affordability of investing in preparedness, and the huge costs of not investing. The United States faces a choice: it must either pay now and gain protection and security, or wait for the next crisis and pay a much greater price in human and economic costs.

The long-term costs of strategic protection and prevention programs are but a tiny fraction of the astronomic costs of responding to sudden, emergent crises. The 2014-2016 West Africa Ebola outbreak is illustrative. Beyond the devastating loss of human lives, the outbreak had enormous social and economic costs, with global repercussions. The U.S. government spent nearly \$2.4 billion in emergency funding to support the international Ebola response.<sup>3</sup> The outbreak ultimately cost the global economy more than \$53 billion, an average of more than \$1.8 million per Ebola case.<sup>4</sup> The cost of basic preparedness in low income countries is roughly \$1 per person per year.<sup>5</sup>

The Commission commends the recent advances in U.S. health security and biodefense policy, including the release of the National Biodefense Strategy last fall and the Global Health Security Strategy this year.<sup>6,7</sup> These are positive steps forward, which we should build upon.

What is urgently needed, in our opinion, is concrete, concerted action by Congress and the Administration.

The CSIS Commission on Strengthening America's Health Security advocates for a package of strategic, affordable actions to advance U.S. health security. In combination, these actions constitute a doctrine that can guarantee continuous prevention, protection, and resilience.

First and foremost, we recommend that health security leadership at the White House National Security Council (NSC) be restored.

Today, it remains unclear who would be in charge at the White House in the event of a grave pandemic or cross-border biological crisis, whether natural, accidental, or deliberate. The lack of clarity is dangerous and should be rectified. Furthermore, strong, coherent leadership at the NSC is essential to guarantee effective oversight of global health security and biodefense policy and spending. With that leadership in place, it becomes possible to achieve higher efficiencies in the use of scarce resources, overcome fragmentation and redundancy of programs, and ensure greater rigor and accountability.

We advocate for the right mix of quality investments of resources.

We need to invest directly and consistently over the next decade in the capacities of low-income countries. Such a long-term, predictable approach is essential, if basic preparedness is to be created.

The best approach to protect the American people is to stop outbreaks at the source. The Global Health Security Agenda, or GHSA, established in 2014, is designed to do just that.<sup>8</sup> GHSA has a proven track record in building health systems and health security preparedness in low- and middle-income countries, financed through a \$1 billion Ebola emergency supplemental funding.<sup>9</sup> We should sustain that record of success, not disrupt or curtail it.

The DOD contributes to this and other U.S. health security efforts through a number of programs that are aimed at countering biological threats from all sources.<sup>10</sup> The DOD operates a worldwide public health, infectious disease research, and disease surveillance network to protect U.S. and allied forces against infectious diseases and other biological hazards. Critical programs include the DOD Defense Threat Reduction Agency's (DTRA) Cooperative Threat Reduction (CTR) Biological Threat Reduction Program (BTRP) and the DOD Global Emerging Infections Surveillance and Response (GEIS) Program.<sup>11,12</sup> These programs benefit both the military and the general public. They should be protected and strengthened.

Specifically, we recommend that the U.S. government expand DTRA's geographic authorities to operate in all continents where health security threats exist, including South America. Furthermore, support for military overseas infectious research laboratories should be sustained. DOD biological research and development programs often focus on diseases not studied in other venues and result in medical countermeasures that would otherwise be delayed or not developed at all.

We need to exercise multilateral leadership to persuade partner countries to invest more of their own resources in preparedness.

The financing gap in preparedness is, arguably, the most glaring problem we face in global health security. In the poorest and most fragile countries, where many needs are pressing and resources are constrained, leaders often face difficult trade-offs between investing in preparedness versus more tangible efforts like building roads or schools. Congress should press

for U.S. leadership to launch a five-year challenge initiative at the World Bank that would incentivize long-term investment by fragile and conflict-affected countries in their own basic health security capacities. The United States would, under this plan, shoulder 20% of the donor costs over the five-year period, using its influence to leverage other donors to cover the remaining 80%. The goal is that low-income countries eventually assume higher and higher responsibility for their preparedness. Such ownership is the only sustainable solution to the finance gap.

We need far better confidence that we can access adequate, quick-disbursing resources when a health or biosecurity crisis strikes.

We simply cannot afford costly delays while scrambling to assemble resources. During moments of crisis, swift and early action is most essential. The Commission recommends that Congress increase contingency funding levels for the CDC and USAID, and that the U.S. government make annual contributions to the WHO's Contingency Fund for Emergencies.

The Commission argues that we need to launch initiatives that will allow us to operate far more effectively in insecure settings.

The disordered world spans chronic and emerging conflicts, humanitarian crises, fragile states, and mal-governed and stateless spaces. The world is becoming more dangerous and insecure, and it is those very places where dangerous outbreaks are often occurring: witnessing what is unfolding in the Democratic Republic of the Congo, Syria, Yemen, Afghanistan, Pakistan, and Venezuela.

In the meantime, however, access by U.S. civilian outbreak response experts into these insecure settings has become highly problematic. Across several cases, we see seasoned U.S. experts – the “cerebral cortex” to lead the international response – confined to the sidelines.

The Commission advocates for the establishment of a U.S. Global Health Crises Response Corps, which will build upon and integrate existing CDC and USAID capabilities, to work with local partners to respond early to outbreaks and biosecurity incidents in disordered and insecure settings. This is a civilian capacity, which would have a DOD advisor. It would receive specialized training and exercises in building teams and would be provided with special support in terms of communications, intelligence, entry and exit protocols, and language and local mediation skills. It would also be equipped to strengthen local capacities to deliver services.

The Commission also advocates that the U.S. government strengthen and adapt programs and capacities to deliver health services in fragile settings that meet the special needs of acutely vulnerable populations, especially women and children. This means ensuring the continuity of immunization programs, the protection against and response to, gender-based violence (GBV), and strengthening the delivery of maternal and reproductive health and family planning assistance.<sup>13</sup>

The last area of priority concern to the Commission is the revolution underway in the life sciences, driven by technological transformations that pose both opportunities and risks.

There is a race underway to develop new vaccines, therapeutics, and diagnostics in light of the mounting risks of emerging infectious diseases and growing resistance. It is essential to plan strategically, with strong private-sector partners, to support targeted investments that will accelerate the development of new technologies for epidemic preparedness and response. We argue that the U.S. government should directly invest in the Coalition for Epidemic Preparedness Innovations, or CEPI, an international alliance that finances and coordinates the development of new vaccines to prevent and contain epidemics. The U.S. government should also redouble its efforts to develop a universal flu vaccine and new antibiotics.

We are also facing an unforeseen communications crisis in public health, fueled in part by the rapid spread of misinformation and disinformation online through weaponized social media. When misinformation crowds out facts, confidence in public health and medicine can erode precipitously, causing outbreaks of preventable diseases such as measles and polio. Congress should press for the U.S. government to expand its efforts to better understand and address this complex phenomenon, effectively communicate accurate science to the American people, restore trust and confidence, and reclaim social media as a force for good in public and global health.

Again, thank you for the opportunity to address you today, and I look forward to hearing your perspective. It is my sincere hope that we can work closely together to advance the U.S. health security agenda.

1 Katherine F. Smith et al., “Global rise in human infectious disease outbreaks,” *Journal of the Royal Society Interface* 11 (December 2014), <https://royalsocietypublishing.org/doi/full/10.1098/rsif.2014.0950>.

2 Rebecca K. C. Hersman, *Meeting Security Challenges in a Disordered World* (Washington, DC: CSIS, May 2017), [https://csis-prod.s3.amazonaws.com/s3fs-public/publication/170522\\_Hersman\\_MeetingSecurityChallenges\\_Web.pdf?UKD0LRcihyrV02wgy9AQIQHGzhMI dAcb](https://csis-prod.s3.amazonaws.com/s3fs-public/publication/170522_Hersman_MeetingSecurityChallenges_Web.pdf?UKD0LRcihyrV02wgy9AQIQHGzhMI dAcb).

3 “West Africa – Ebola Outbreak, Fact Sheet #6, FY 2016,” USAID, January 21, 2016, [https://www.usaid.gov/sites/default/files/documents/1866/west\\_africa\\_fs07\\_01-21-2016.pdf](https://www.usaid.gov/sites/default/files/documents/1866/west_africa_fs07_01-21-2016.pdf).

4 Caroline Huber, Lyn Finelli, and Warren Stevens, “The Economic and Social Burden of the 2014 Ebola Outbreak in West Africa,” *The Journal of Infectious Diseases* 218, suppl. no. 5 (December 15, 2018): S698-S704, <https://doi.org/10.1093/infdis/jiy213>.

5 The International Working Group on Financing Preparedness (IWG) estimates \$0.50-\$1 per person per year would be needed, although there is variation in cost estimates by country. The range of \$0.50-\$1.50 captures most reasonable estimates. See: International Working Group on Financing Preparedness, *From Panic and Neglect to Investing in Health Security*.

6 White House, *National Biodefense Strategy* (Washington, DC: September 2018), <https://www.whitehouse.gov/wp-content/uploads/2018/09/National-Biodefense-Strategy.pdf>.

7 White House, *United States Government Global Health Security Strategy* (Washington, DC: 2019), <https://www.whitehouse.gov/wp-content/uploads/2019/05/GHSS.pdf>.

8 The GHSA is coordinated by a multilateral steering group comprised of 10 countries, including the United States, and is advised by several international organizations including the WHO, Food and Agriculture Organization (FAO), the World Organization for Animal Health (OIE), the World Bank, and Interpol. See: “Membership,” Global Health Security Agenda, updated March 26, 2019, <https://www.ghsagenda.org/members>.

9 “Implementing the Global Health Security Agenda: 2017 Progress and Impact from U.S. Investment,” GHSA, February 2018, <https://www.ghsagenda.org/docs/default-source/default-document-library/global-health-security-agenda-2017-progress-and-impact-from-u-s-investments.pdf?sfvrsn=4>.

10 For more detail on how the DOD supports U.S. global health security efforts, refer to Thomas R. Cullison and J. Stephen Morrison, *United States Department of Defense Role in Health Security* (Washington, DC: CSIS, June 27, 2019), <https://healthsecurity.csis.org/articles/the-u-s-department-of-defense-s-role-in-health-security-current-capabilities-and-recommendations-for-the-future/>.

11 “Cooperative Biological Engagement Program,” Defense Threat Reduction Agency, <http://www.dtra.mil/Missions/Partnering/CTR-Biological-Threat-Reduction/>.

12 See James B. Peake et al., *The Defense Department’s Enduring Contributions to Global Health—The Future of the U.S. Army and Navy Overseas Medical Research Laboratories* (Washington, DC: CSIS, 2011), <https://www.csis.org/analysis/defense-department’s-enduring-contributions-global-health>.

13 Fleischman, Janet, *How Can We Better Reach Women and Girls in Crises?* (Washington, DC: CSIS, October 2019) <https://healthsecurity.csis.org/articles/how-can-we-better-reach-women-and-girls-in-crises/>.