VIEWPOINT

The President's National Security Agenda Curtailing Ebola, Safeguarding the Future

Lawrence O. Gostin, JD

O'Neill Institute for National and Global Health Law, Georgetown University, Washington, DC.

Henry A. Waxman, JD US House of Representatives, Washington, DC.

William Foege, MD, MPH

Emory University School of Public Health, Atlanta, Georgia. The Ebola epidemic is projected to affect tens of thousands in Sierra Leone, Liberia, and Guinea, with immense economic and social costs. Even in the United States, where only 1 patient with Ebola virus disease has died, the disease has spurred public fear, tested the readiness of the public health system, and led to measures such as enhanced border screening and state quarantines. The lesson of Ebola is clear: strong, resilient health systems are needed in Africa to curtail the outbreak at its source and in the United States to ameliorate risks and reassure the public.

The United States has led the global response to Ebola, devoting significant financial and human resources, deploying military troops, and sponsoring a groundbreaking United Nations Security Council resolution. Although there is some evidence that the spread of the disease is slowing in Liberia, the response of the United States is still not complete. Health systems in West Africa have been overwhelmed, and the US domestic public health system was not initially prepared, with inadequate training of and protection for health workers and inconsistent exercise of public health powers. This should not be a surprise given the severe bud-

Enlightened self-interest requires building health systems in countries where novel infections are most likely to emerge while shoring up domestic preparedness to prevent, detect, and respond to all hazards.

get cuts of recent years, including a 10% reduction in the Centers for Disease Control and Prevention's 2013 budget¹ and the loss of more than 50 000 state public health professionals.²

President Obama is trying to address these challenges. On November 5, 2014, he submitted a \$6.2 billion emergency supplemental funding request to Congress to improve domestic and global health capacities in 3 critical areas: a surge of resources for containment and treatment in West Africa; enhanced prevention and detection of, and response to, Ebola entering the United States; and, perhaps most important, buttressing health systems to respond rapidly and flexibly to all hazards in the future. ³ Epidemics will occur in the future. It is urgent that Congress support his request.

An Emergency Surge Response

The Ebola epidemic should become an inflection point for a multipronged strategy to ensure vigilance and ca-

pacity to respond to all health threats. The US health system should not respond by creating a disease silo that focuses solely on Ebola. Instead, sustained and flexible enhancement of the nation's public health infrastructure is needed.

The president's emergency request has key components that advance this integrated approach. First, recognizing that national interests depend on reducing novel infections at their source, the request would support Ebola treatment facilities, personal protective gear, safe burial teams, social mobilization, and food security in West Africa. Second, the request would strengthen the US public health infrastructure by funding 50 Ebola treatment centers and adding new resources to the Public Health and Social Services Emergency Fund. The Ebola treatment centers would offer an advanced level of care, isolation facilities, health worker protection, and point-of-care laboratory testing-all of which will be essential to detect and respond to novel infections such as a rapidly moving pandemic influenza or a bioterror event. These facilities could be activated in the future for other epidemics.

Third, the supplemental request invests in research and development of vaccines and therapeutics for both Ebola and other novel infections. Fourth, the president's request establishes a contingency fund to ensure a surge response at home and abroad if needed to respond to a significant increase in Ebola infections, enabling agencies to access and use resources without delay.

The Global Health Security Agenda

In addition, the supplemental request would dedicate \$340 million toward implementation of the Global Health Security (GHS) Agenda that the president proposed on February 13, 2014.4 The GHS Agenda is a partnership with 30 countries and international organizations to "accelerate progress toward a world safe and secure from infectious disease threats."4 This funding in the president's supplemental request is vital to US national security because it would boost preparedness for a full spectrum of health hazards, from zoonotic diseases (eg, Ebola, novel influenzas, and Middle East respiratory syndrome) to antimicrobial drug-resistant pathogens and biosafety or biosecurity breaches. Without this support, the critical GHS Agenda would remain stalled for lack of adequate resources. Responding to Ebola is critically important, but so is preparing for future epidemics.

The path of the West African Ebola outbreak may have been different had the GHS Agenda been fully

Corresponding Author: Lawrence O. Gostin, JD,

Georgetown University Law Center, 600 New Jersey Ave NW, McDonough 568, Washington, DC 20001 (gostin@law .georgetown.edu).

jama.com

implemented. Enhanced surveillance and laboratory capacity could have detected Ebola earlier while tracking how the disease spread, allowing the rapid mobilization of national and global responses before the outbreak began to grow exponentially in West Africa. Training domestic health workers and providing adequate supplies of personal protective gear and other equipment could have improved diagnosis and treatment while safeguarding health workers.

Ebola is currently capturing the world's attention, and it is essential that the key lessons from the outbreak are understood so the United States can be prepared for future hazards. The GHS Agenda's all-hazards strategy recognizes the multiple threats from infectious disease. Population growth, habitat destruction, and agricultural expansion intensify human-animal interchange. Climate change will facilitate the geographical spread of disease vectors (eg, malarial mosquitoes), while increasing the probability of natural disasters. The intensive use of antimicrobials in agriculture and medical practice fuels resistance, which threatens to render pharmaceuticals ineffective. Dual-use research and expanded terrorist networks pose major biosafety and biosecurity concerns.

If an outbreak does occur, rapid human and animal movement in a modern globalized world facilitates transmission. As a leading international destination, the United States is particularly vulnerable, rendering the GHS Agenda a major national security imperative. Enlightened self-interest requires building health systems in countries where novel infections are most likely to emerge while shoring up domestic preparedness to prevent, detect, and respond to all hazards.

The supplemental request would provide vital resources for domestic and global preparedness. Beyond resources, however, there is a vital need for a sustainable, well-trained workforce in the most affected countries in West Africa. In addition to funding the president's request, Congress should establish a Global Health Workforce Reserve to encourage and train health workers to serve

in times of a declared global health emergency such as Ebola. The Global Health Workforce Reserve would train health workers in disaster response and outbreak management, offering badly needed human resources wherever a disease outbreak occurs and serving as a force multiplier for the GHS Agenda.⁷

Biosecurity: A Vital National Interest

The emergency supplemental request deserves bipartisan support because it strengthens national defenses against biological hazards, an objective that should transcend traditional political divisions. Building public health systems domestically and globally is the nation's best defense against emerging health hazards. Rapidly emerging infections and natural disasters will continually challenge the nation's health system. Advancements in genomic and other technologies will empower scientists to replicate dangerous pathogens, advancing socially beneficial purposes but also creating opportunities for ill-intentioned actors. Weaknesses in health infrastructure domestically and abroad hinder prevention and detection of, and response to, both unexpected hazards and endemic diseases that perennially cause disease and early death, such as AIDS, tuberculosis, and malaria. The looming threat of antimicrobial resistance threatens to undermine therapies even in the most advanced health systems and will require the development of new drugs, as well as new agricultural and physician practices. The supplemental request helps the United States prepare for all of these threats.

The United States has a rich tradition of global health leadership—from the President's Emergency Plan for AIDS Relief (PEPFAR) created by President George W. Bush and humanitarian missions responding to the Haitian earthquake and Japanese tsunami to the United Nations Security Council resolution on Ebola. President Obama's supplemental request would amplify that leadership, fulfilling the nation's humanitarian responsibility, saving money, and, more importantly, saving lives.

ARTICLE INFORMATION

Published Online: November 20, 2014. doi:10.1001/jama.2014.16572.

Conflict of Interest Disclosures: All authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

Additional Contributions: We thank Eric A. Friedman, JD, O'Neill Institute for National and Global Health Law, and Timothy Westmorland, JD, Georgetown University Law Center, for their important contributions to this Viewpoint.

REFERENCES

1. Fact sheet: impact of sequestration and other budget changes on the Centers for Disease Control

and Prevention. http://www.cdc.gov/fmo/topic/Budget%20Information/appropriations_budget_form_pdf/Sequester_Impacts.pdf. Accessed November 9, 2014.

- 2. Budget cuts continue to affect the health of Americans. Association of State and Territorial Health Officials. http://www.astho.org/budget-cuts-dec-2012/. Accessed October 9. 2014.
- 3. Letter to the Speaker of the House on emergency appropriations request (and enclosures). President Barack Obama. http://www.whitehouse.gov/sites/default/files/omb/assets/budget_amendments/supplemental_11_O5_14.pdf. Accessed November 6, 2014.
- **4.** Global health security agenda: toward a world safe and secure from infectious disease threats. http://www.globalhealth.gov/global-health-topics

/global-health-security/GHS%20Agenda.pdf. Accessed November 6, 2014.

- 5. Patz JA, Frumkin H, Holloway T, Vimont DJ, Haines A. Climate change: challenges and opportunities for global health. *JAMA*. 2014;312(15): 1565-1580.
- **6.** Gostin LO. Ebola: towards an International Health Systems Fund. *Lancet*. 2014;384(9951):e49-e51
- 7. Barry M, Gostin LO. To fight Ebola, create a Health Workforce Reserve force. *Los Angeles Times*. September 19, 2014. http://www.latimes.com/opinion/op-ed/la-oe-barry-ebola-medical-reserves-20140919-story.html. Accessed November 11, 2014.