



Ten Years After 9/11 and the Anthrax Attacks: Protecting Against Biological Threats
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Chairman Lieberman, Ranking Member Collins, and members of the Committee: my name is Jeff Levi, and I am Executive Director of Trust for America's Health (TFAH), a nonprofit, nonpartisan organization dedicated to saving lives by protecting the health of every community and working to make disease prevention a national priority. I am grateful for the opportunity to testify before the Committee on the progress and challenges we face on the 10 year anniversary of the anthrax attacks on our nation.

A decade ago, public health was on the frontlines of our battle for national security. From the moment an infectious disease physician first contacted his local health officer in Palm Beach County, Florida about a possible case of inhalational anthrax, public health had to face the unimaginable. Today, we know we need to expect the unexpected. Public health's role is crucial in emergency preparedness and response: health departments perform the surveillance that detects the first few cases of an outbreak or attack, laboratories test the samples, epidemiologists conduct the investigation and pinpoint the source, and public health workers coordinate the medical response, advise and communicate to the population, and distribute vaccines or drugs that help save lives. Over the last decade, we have made dramatic progress in meeting this responsibility. But unfortunately, as I outline in my testimony, that progress is greatly threatened by recent funding cutbacks at the federal, state, and local level and we could face the sad irony that if another anthrax attack were to occur today, we may be better prepared than 10 years ago – but possibly not as well as three years ago.

Public Health: Where We Were in 2001

Last month, TFAH and the Robert Wood Johnson Foundation released a new report, *Remembering 9/11 and Anthrax: Public Health's Vital Role in National Defense*, which features more than 30 firsthand accounts from national, state, and local leaders who were on the ground in response to these dual tragedies. In developing this report, we learned that the public health system mounted an extraordinary response to these events despite limited familiarity with bioterrorism and decades of underfunding that left it with a deficit in technology, workforce, and training. For example, in Connecticut, where the last victim of anthrax died, the Naugatuck Valley health department unearthed municipal response plans that dated back to World War II and the Cold War.

Among the challenges the public health system faced in 2001, as noted by contributors to our report, were:

- There was not a clear public health response system in place for handling unexpected emergencies, so much of the response was developed on the fly;

- There was little to no experience in infectious disease countermeasures research and development;
- Hospitals treating anthrax victims had received limited guidance on how to manage a bioterrorist event before victims started presenting;
- Many health departments lacked internet, blast fax, computers, and the ability to receive and respond to urgent case reports 24/7, so communication among CDC, public health, and healthcare providers often did not happen in real time;
- Biosafety Level 3 laboratory space was not a standard feature in state public health labs, as it is today, so many labs did not have the equipment and procedures to properly secure evidence for storage;
- CDC and state and local health departments faced a crushing demand for information and recommendations, and CDC had not yet adopted the incident command system.

Despite these challenges, as we know, public health rose to the occasion. The Laboratory Response Network, which is now an integral piece of the BioWatch program, tested 350,000 environmental samples and clinical specimens over an extended period. CDC provided national surveillance, laboratory diagnostic support, treatment recommendations and advice on postexposure prophylaxis. And public health helped to calm a nation by putting science first in risk communications, rather than allowing the public to succumb to speculation and hysteria.

A Decade of Gains

There were significant investments in public health preparedness and infrastructure immediately after 9/11 and anthrax. In June 2002, Congress passed the Public Health Security and Bioterrorism Response Act, which established cooperative agreement funding support for state health departments around the country. In 2006, Congress reauthorized the legislation as the Pandemic and All-Hazards Preparedness Act (PAHPA). Congress has also appropriated billions of dollars through Project BioShield and the Biomedical Advanced Research and Development Authority (BARDA) to invest in vaccine research and development.

Since FY 2003, Congress has since invested over \$12 billion in state and local public health preparedness, hospital preparedness, and pandemic capacity at the state and local level.¹ This outlay has led to tremendous progress in our ability to prepare for and respond to an emergency. Our report highlighted some of these accomplishments:

- All 50 states now have pandemic flu plans, compared to 13 states in 2003;
- All 50 states have adequate plans to receive and distribute supplies from the Strategic National Stockpile, up from 2 states in 2003;
- 49 states increased or maintained Laboratory Response Network chemical capacity in 2010; compared to 10 states in 2005;
- 75 percent of hospitals participating in the Hospital Preparedness Program (HPP) met 90 percent of programmatic goals; and

¹ Sources: Trust for America's Health, *Ready or Not? 2010: Protecting the Public's Health from Diseases, Disasters, and Bioterrorism*, p. 36. Dec 2010: <http://healthyamericans.org/reports/bioterror10/>; CDC Fiscal Year 2011 Operating Plan: http://www.hhs.gov/asfr/ob/docbudget/2011operatingplan_cdc.pdf; Public Health and Social Services Emergency Fund Fiscal Year 2011 Operating Plan: http://www.hhs.gov/asfr/ob/docbudget/2011operatingplan_phssef.pdf

- BARDA and Project BioShield have made critical investments in domestic medical countermeasure research and development and procurement, including the first contract for a cell-based flu vaccine, expected in 2014.

And public health preparedness has made leaps and bounds in less tangible ways.

- Now, we recognize that bioterrorism and emergency preparedness are as integral to the role of public health as disease prevention and health promotion. We have fully developed the rapid response capabilities so that health impacts are considered and mitigated from day one of an emergency. During the Gulf Oil Spill, for example, the Louisiana Department of Health and Hospitals immediately began conducting testing and surveillance to monitor the possible effects from oil and dispersants on human health, water quality, and seafood safety; providing mental health services; and providing risk communications to the public.²
- Public health also has a much stronger relationship with the emergency response, public safety, and health delivery systems. This coordination has been spurred along by federal grant programs and by planning processes such as development of pandemic flu response plans.
- Health departments and the CDC now have substantial experience with crisis risk communications and are employing multiple technologies to get crisis messages to the public and media. These skills are critical when competing with misinformation and paranoia that can accompany a public health crisis.
- We have also made tremendous strides in situational awareness, or the ability to gather relevant information during an event, analyze it, and take appropriate action. Public health is more accustomed to the incident command system structure. For example, during the H1N1 flu outbreak, CDC, in partnership with state and local health agencies, provided real-time daily data for flu surveillance ahead of the second wave.

Challenges and Opportunities

This progress is a result of a significant investment by the federal government. Unfortunately, these improvements cannot be maintained with one-time investments. Training of our public health workforce must be ongoing; vaccines and antivirals in the Strategic National Stockpile are expiring or have been used, as during the H1N1 pandemic, and not necessarily replenished; technology is quickly becoming outdated; and health departments need predictable funding to operate laboratories, respond to emergencies, and investigate outbreaks. And yet, federal support for public health preparedness has been cut by 37 percent, adjusting for inflation, since FY2005. These cuts are a particular concern because most local health departments, as well as many state health departments, depend on federal funding for most, if not all, of their public health preparedness funding. As a result, I worry deeply – as do my colleagues on the front lines of public health agencies – that our capacity to respond to a new emergency will be severely diminished in the near future.

Moreover, the cuts at the federal level have been matched or exceeded at the state and local level as state and local spending has been slashed in response to the recession and its aftermath. In

² Louisiana Department of Health and Hospitals, “Oil Spill Response Efforts,” Presentation to Louisiana House of Representatives, June 9 2010: http://www.dhh.state.la.us/offices/publications/pubs-378/Oil%20spill%20presentation_06092010.pdf

fact, 33 states cut funding for public health from fiscal year 2008-2009 to 2009-2010, and 18 of these states cut funding for a second year in a row. We fully expect that the data for 2011 will be far more grim. While, as I noted, most preparedness funding comes from the federal level – the federal investment assumes and builds on a core capacity at the state and local level. That is fast eroding, undermining the foundation needed for the federal preparedness investment.

These budget cuts are not just about money to purchase supplies and equipment. They are about the people who are essential to an effective public health response. Today, we also face a workforce crisis. Were a major public health emergency to occur today – even compared to the demands of the pandemic H1N1 just two years ago – there might not be enough workers to effectively respond and certainly fewer than just a few years ago. According to the Association of State and Territorial Health Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO), 44,000 state and local public health positions were lost between 2008-2010 as a result of budget cuts.³ While we may be able to quickly order supplies in reaction to an event, we simply cannot quickly hire and train a 21st century public health emergency workforce *after* an attack occurs. The investments made through CDC’s Public Health Emergency Preparedness (PHEP) grants have provided our health departments and laboratories with the staff, training, planning, and exercises needed to rapidly respond to a disaster. Several contributors to our report note that the anthrax and 9/11 attacks marked the beginnings of relationship building between the public health, health care delivery, and traditional homeland security and first responder communities. As we lose these positions by the thousands, so too do we lose the trust and communication occurring on the ground in every community.

We’re also facing barriers in our health care system’s capacity to care for a massive influx of patients. Although we’ve made progress in hospitals’ planning and preparedness for a disaster, there is still a lack in preparation for a catastrophic health event. We believe, rather than individual hospital preparedness, we should be thinking more broadly about health system preparedness. Since initiatives such as the HPP do not have the funding to bring every hospital up to a basic level of preparedness, we are encouraged that HHS is starting to think strategically about Healthcare Coalitions, which promote regional collaboration and networking among hospitals and public health. We hope that this initiative expands nationwide and broadens to include the entire the healthcare delivery system. Yet, uncertainty remains about how the health system would respond to a catastrophic health event today: how we would allocate limited life-saving resources, the liability, legalities and ethics of providing care, and delivering medical countermeasures to large numbers of people.

We have been pleased to see progress in the research and development of medical countermeasures in the past five years, but the nation is still falling behind. For example, our significant investments in vaccine development allowed production of an H1N1 vaccine in record time, but manufacturers were only able to produce limited quantities by the beginning of the second wave of the H1N1 pandemic because of limited capacity and reliance on an outdated egg-based production method. The Administration and Congress need to prioritize investment in development of medicines used during a public health emergency, as the limited commercial

³ Association of State and Territorial Health Officials, “Budget Cuts Continue to Affect the Health of Americans: Update May 2011.” <http://www.astho.org/Display/AssetDisplay.aspx?id=6024>

viability of such products demands government intervention. The Pandemic and All-Hazards Preparedness reauthorization bill, currently being developed by the Senate HELP Committee, should include reauthorization of Project BioShield, significant investment in the Biomedical Advanced Research and Development Authority (BARDA), and authorization of a Medical Countermeasure Strategic Investor firm to leverage private and public capital and provide management support to biotech companies. These kinds of investments have dual benefits of building America's readiness for outbreaks as well as developing the biotech workforce. We would also like to see Congress support FDA's nascent regulatory science program, which seeks to build the science base at the agency necessary to oversee development and approval of drugs for new and reemerging threats. We applaud the goals of the review of the federal medical countermeasure enterprise and BARDA's five year strategic plan, the latter of which includes goals to build US manufacturing infrastructure, flexible manufacturing, and the capability to rapidly develop medical countermeasures during a public health emergency. We hope Congress provides the resources and legislative authorities to realize these goals.

Finally, there are challenges and opportunities in the way our nation approaches biosurveillance. Remaining constantly aware of surrounding threats and our capacity to respond are critical to dealing with emergencies. Our disease surveillance system has been built one disease or crisis at a time, resulting in archaic and static silos of information rather than as an interoperable system with a focus on prevention. We need to fundamentally rethink how we do biosurveillance – for both emergencies and routine public health issues. The particular challenge in the field of preparedness is that we don't necessarily know in advance what we will need to know, and thus the most comprehensive approach to data collection is needed. Our fragmented system of data reporting drastically weakens our nation's defense against emergency outbreaks.

We must harness the opportunities afforded by the nation's transition to an integrated health information technology (HIT) system with electronic health records at the core. This could create economies of scale and provide more useful information to public health and national security officials. We understand that the White House is currently examining our national biosurveillance system. We believe there needs to be a new national strategy that examines means to achieve interoperability, efficiency, and transparency among various surveillance systems in order to create an integrated biosurveillance operation. In particular, we must strengthen HIT meaningful use requirements, which currently contain weak public health reporting requirements. We have begun building the capacity of health departments to receive this data through grants from the Recovery Act and Prevention and Public Health Fund, but these investments need to continue and grow. We also urge ongoing, enhanced communication between Congress, CDC and the Office of the National Coordinator for Health IT (ONC) to ensure that ONC considers the preparedness implications of EHRs.

Conclusion

Our report finds that the United States often takes a band-aid approach to public health preparedness, i.e., as new emergencies and concerns emerge and attention shifts, resources are diverted from one pressing priority to another, leaving other ongoing areas unaddressed. In our report, NIAID Director Anthony Fauci writes:

“The biggest threat to bioterrorism preparedness today is complacency. If a health threat does not happen, be it naturally occurring or deliberate, we tend to make it a lower priority. The worst thing we can do is to make something a priority after it happens. After it happens is too late; you are playing catch-up. Preparedness for a threat must be a priority before it happens.”

Numerous contributors to our report echoed this sentiment. I am encouraged to see this Committee is taking these threats seriously. Thank you again for the opportunity to be here today, and I look forward to your questions.