Public Health Preparedness 101

Defining "Preparedness"

Over a decade ago, the nation faced tremendous threats during the September 11th and anthrax tragedies. Medical and public health professionals were immediately called on to respond to the crisis, and responded heroically—despite limited resources. It quickly became clear that public health system needed to be updated in order to respond to emergent health threats, giving rise to the notion of public health preparedness: the ability of our public health system to quickly, effectively, and actively respond to any health disaster that may strike. Prevention, identification, and containment of disease outbreaks, bioterrorism, and natural disasters remain pivotal components of a public health system which is prepared to address the needs of the country.

State and local health departments work in cooperation with the Centers for Disease Control and Prevention, the Assistant Secretary for Preparedness and Response based at the Department of Health and Human Services (HHS), health care providers, and homeland security and emergency management officials to coordinate planning for the public health response to potential disasters. When disaster strikes, health departments must be ready to communicate with the public, disseminate medical countermeasures, deal with a surge of medical patients or fatalities, and activate the public health laboratories, epidemiology and surveillance necessary to detect and track outbreaks or events. All of these capabilities are necessary to ensure that communities are prepared to respond to and recover from a disaster.

Current State of Preparedness

Though much progress has been made in the past decade, major problems still remain in our ability to respond to large-scale emergencies and natural disasters. The country is still insufficiently prepared to protect people from disease outbreaks, natural disasters, or acts of bioterrorism, leaving Americans unnecessarily vulnerable to these threats. Significant progress has been made over the last decade in upgrading preparedness planning and coordination, public health laboratories, surveillance, vaccine manufacturing, the Strategic National Stockpile, and training public health personnel. However, due to major public health budget cuts, we may be less prepared than we were even a few years ago. There remain several ongoing gaps that leave the U.S. vulnerable in the emergency health preparedness arena.

The gaps to be addressed include:

- *Workforce Gap*: There has been a major reduction of trained public health workers and funded positions. The U.S. has lost an estimated 52,000 state and local public health workers since 2008.[1] Staffing shortages mean responses to emergencies will be slower, less-coordinated, and less comprehensive.
- *Surge Capacity Gap:* The health care system is currently unable to stretch its surge capacity to handle a large-scale national disaster. Equipment and appropriate space requirements, as well as staff and treatment standards and policies, are limiting the health care system's ability to respond to and recover from emergencies.
- *Surveillance Gap*: The United States lacks an integrated, national surveillance system. There is no up-to-date technology or standardized reporting system that would contribute to an improved emergency response system for incidents ranging from bioterrorism to disease outbreaks.
- *Gap in Community Resiliency Support*: At-risk populations, such as people with disabilities, limited-English proficient, or people with healthcare needs, are especially vulnerable during a disaster. Health departments need to build communication, health, and resilience in their communities, especially vulnerable populations, to help speed disaster recovery.
- *Gaps in Pharmaceutical Research and Development*: As a result of the lack of a natural marketplace, the U.S. government must continue to invest in the research, development, and stockpiling of emergency medical countermeasures and building domestic manufacturing capacity for an influenza outbreak, chemical, biological, radiological, and nuclear (CBRN) attacks or accidents, or emerging infectious disease outbreaks.

Conclusion

The United States often takes a "band-aid approach" to public health preparedness. As new concerns emerge and attention shifts, it often causes resources to be diverted from one priority to another, leaving significant gaps in the nation's ability to respond effectively to public health emergencies. Preparedness cannot be developed overnight in the event of catastrophe. Rather, consistent investment and vigilance are necessary to ensure sufficient infrastructure, technology and response. Until public health emergency preparedness receives sufficient and sustained funding, Americans will continue to be needlessly at risk for a range of public health and biological threats.

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[1] ASTHO, "Budget Cuts Continue to Affect the Health of Americans: Update March 2012." http://www.astho.org/Display/AssetDisplay.aspx?id=6907