



Will America's Fragmented Public Health System Meet the Ebola Challenge?

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The recent first diagnosis of Ebola illness on U.S. soil brought into sharp focus the weaknesses as well as strengths of the U.S. public health system. Even as national authorities touted America's capacities to deal with Ebola, the Texas Health Presbyterian Hospital in Dallas, Texas, failed to properly handle a man, avowedly recently arrived from Liberia, who arrived at the emergency room complaining of Ebola symptoms. Thomas Eric Duncan was refused admission for two days, putting dozens of contacts needlessly at risk; and even after he was admitted, family members were left penned up in an infected apartment for nearly a week. When Mr. Duncan later died his relatives were left to wonder whether the delay in treatment contributed to his death.

Excellence and Fragmentation

The United States certainly has the advanced health care facilities, equipment, and personnel to handle Ebola infections and stop them from spreading. Nevertheless, the decentralized and fragmented nature of the U.S. public health system requires challenging coordination by many separate agencies and officials. Unlike many other industrialized countries, the United States has no central public health agency with comprehensive authority.

To be sure, the U.S. Centers for Disease Control and Prevention is responsible for controlling the international and interstate spread of disease, and it also supplies expertise, guidance, laboratory services, data collection, and other technical assistance to the states. But federal authority is limited on the front lines, where state and local governments must see to crucial tasks such as isolating infectious patients, quarantining exposed individuals, issuing public health orders, administering vaccines and medications, overseeing emergency services and health care providers, and directing law enforcement.

In addition, officials at all levels must navigate divisions of responsibility. At the federal level, to give just a few examples, the Centers for Disease Control and Prevention must coordinate with the Food and Drug Administration on issues of experimental medications, with the Department of Homeland Security on issues of screening international passengers, and with the Department of Transportation on identifying potentially exposed passengers on commercial airlines. Similarly, at the state level officials must orchestrate the activities of state, county, and municipal public health departments, law enforcement agencies, emergency management offices, and offices overseeing transportation, utilities, and public services. Government officials also need to coordinate with the armed forces and nongovernmental groups such as the Red Cross.

Phases and Parts of a Coordinated U.S. Effort

The U.S. response to the arrival of Ebola shows the range of efforts that have to unfold in a coordinated manner.

- **America's initial prevention strategy is to keep infected individuals from entering the country.** West African countries are using temperature screening and health questionnaires to prevent infected people from traveling abroad. But even though nearly 100 individuals have already been pulled out of airport lines in Africa, Ebola has a 21-day incubation period when travelers may not know they are infected; and of course some who suspect they are ill may try to reach countries where their chances of advanced treatment are better. U.S. authorities are now instituting more detailed screenings before passengers are admitted to the United States.
- **The next line of defense involves first responders – health care workers, and hospitals responsible for diagnosing, transporting, and treated men or women with suspected and confirmed Ebola infections.** Preparation and flawless communication are essential. When the man

with a fever who reported arriving recently from Liberia came to that Dallas hospital emergency room, nurses and doctors needed to suspect Ebola and take immediate precautions. And after he was finally admitted for treatment in quarantine, local authorities should have been better prepared to help his contacts and remove infectious materials from his family apartment.

- **Once an Ebola case is confirmed, public health officials immediately begin "contact tracing" – identifying and interviewing all individuals who may have been exposed. Contacts need to be monitored and those with a likelihood of exposure placed in quarantine.** But the requirements are more complicated than simply telling people to stay home. The health of quarantined individuals must be monitored and those who show symptoms must be transported to a hospital at once. Quarantined individuals need food, medicines, or housing, and some may have special needs, such as people with disabilities, pregnant women, and people with mental illness. And of course front-line workers need to know how to protect their own health as they enforce rules and provide logistical support.

Ebola calls for even more preparation by local and state authorities. Officials need to know what to do about people who violate quarantine, and they need to decide in advance whether to ignore the law-breaking status of people such as undocumented aliens or criminal fugitives, in order to encourage them to enter quarantine rather than possibly spread disease. And new state laws may be desirable. During the epidemic spread of Severe Acute Respiratory Syndrome in 2003, governments in Asia and Canada enacted laws to replace wages and prevent discrimination in employment for people in quarantine. Without such protections many low-income and self-employed persons not yet showing symptoms may break quarantine to go to work. Unfortunately, few states have any such protections. Given the lengthy 21-day quarantines needed for Ebola contacts, states should act now.

Thus far, the United States has been fortunate to escape the ravages of the Ebola outbreak devastating West Africa. But even though we have the facilities, equipment, and personnel to stymie Ebola, our public health system remains vulnerable because it is so decentralized and fragmented. Advance planning, communication, coordination, and vigilance are essential until the Ebola epidemic is brought under control in all countries of our highly connected world.

Read more in Mark A. Rothstein, "From SARS to Ebola: Legal and Ethical Considerations for Modern Quarantine." *Indiana Health Law Review* 12, no. 1 (forthcoming).