Role of Doctors Critical in Effective Public Health

Workers in the Hart Senate Office Building and the Brentwood Road Postal Facility were among the hardest-hit victims of the anthrax attacks in October, 2001. The attacks focused national attention on the role of public health during a bioterrorism crisis.

Public health recommendations will be a crucial part of our nation’s response if another bioterrorist attack occurs. Containing the disease, making the best use of supplies of vaccine and antibiotics, and protecting at-risk individuals will depend on adherence to public health advice.

But will people comply with public health advice? A new RAND study—the first to examine individual health care decisionmaking in a public health crisis—found that when deciding whether or not to follow public health recommendations, most individuals follow their private doctor’s advice rather than public health guidance.

RAND researchers talked with workers who were at highest risk of exposure in the Hart and Brentwood buildings during the attacks. Public health officials recommended that at-risk individuals complete a course of at least 60 days of antibiotics. At first, nearly everyone in the study took the antibiotics. But adherence became more difficult as workers received conflicting messages from public health officials, friends, family, co-workers, the media, and especially their doctors. The overwhelming majority of study participants followed their doctor’s advice. For example, if the doctor supported the public health recommendation to take antibiotics, they completed the course. If the doctor was vague or nonsupportive, they did not.

Improving public health’s response to a bioterrorist attack will require better planning and involvement with both doctors and the public.

Read more: A Bitter Pill to Swallow

Do Minorities Trust Public Health to Be Fair?

In a bioterrorist crisis, public health will be effective only if it can influence nearly everyone in our diverse population. But if public health is perceived to be unfair, it is likely to be evaded or ignored—and a bioterrorist crisis could rapidly spin out of control.

A collaborative RAND and Los Angeles County Department of Health analysis of a survey of Los Angeles County residents focused on an important question: Do you think public health’s response to terrorism will be fair? Overall, about 73% of the population said yes. But two key groups reported lower levels of perceived fairness: African-Americans and Asians. Previous studies of African-Americans consistently show a greater distrust of the health care system generally, which may be based on a history of nonconsensual medical experimentation, including the Tuskegee study of untreated syphilis. Asians, particularly recent arrivals, may fear that accepting public health services will lead to deportation.

If public health is to be effective in a crisis, it must reach out to minorities now. Solutions include partnering with trusted community organizations and integrating minorities into public health bioterrorism planning.

Read more: Will Public Health’s Response to Terrorism Be Fair?

Emotions Will Affect Behavior in a Bioterrorist Attack

Congress has allocated more than $4 billion to improve the public health system’s ability to respond to bioterrorism. But little attention has been given to the emotional and behavioral effects of such an attack.

To understand potential responses to a bioterrorism event, RAND researchers examined reports on a wide variety of natural and man-made disasters, including the spread of SARS, the sarin gas attack in Tokyo, the 9-11 attacks, and the anthrax attack. The study shows that effects may be long-lasting: Many victims of the sarin gas attack, for instance, continued to suffer both physical symptoms and emotional reactions five years later. The study also highlights the importance of understanding the effects on responders. One survey of doctors, for instance, indicates that more than half would refuse to treat a patient if they felt that doing so would put them at risk of contracting a deadly illness. The study’s recommendations include reducing uncertainty by providing rapid and accurate information, bolstering the capacity of natural support systems (such as schools, churches, and the health care system) to meet the public’s needs, and ensuring that planning processes and communication strategies incorporate natural support systems and address social and cultural differences.

Read more: Emotional and Behavioral Consequences of Bioterrorism

FORTHCOMING PROJECT

- How Urban Sprawl Affects Physical and Mental Health

RAND Health conducts objective research on health, health behavior, and health policy. Access to all RAND Health research is available at www.rand.org/health/.