# National Leadership in Confronting Bioterrorism: 2

Senator Edward M. Kennedy[a]

First, I thank the Johns Hopkins Center for Civilian Biodefense Studies for all the support and wise advice that they've imparted to Congress in our work on the important issue of bioterrorism.

It has been said that biological weapons are the poor person's atomic bomb. Like the lethal mushroom cloud of a nuclear weapon, a haze of anthrax spores released by a terrorist over one of our major cities could bring death and disease to millions of Americans, and we must defend our country against biological weapons as vigorously as we defend it against other threats to our national security.

Almost two years ago, Senator Frist and I began a process of consulting with experts in medicine, counterterrorism, national security, and public health to determine what measures were needed to improve the nation's response to the threat of bioterrorism. Time and again, we were told that the best way to defend the nation against biological weapons is to strengthen public health agencies at the local, state, and national levels. The result of this extensive public outreach was the Public Health Threats and Emergency Act, which Senator Frist and I introduced in the Senate in June 2000. Congress approved this important legislation as part of a package of public health bills, and President Clinton signed it into law in November 2000. I'm very hopeful that this act will begin to give the nation's dedicated medical and public health professionals the additional support they need for effective defenses against bioterrorism.

A biological weapon is the ultimate in stealth technology. In a bioterrorist attack, there may be no sudden explosion or flash of light to announce that a terrorist attack has taken place. Instead, a bioterrorist attack could announce itself slowly and quietly when patients begin to arrive at hospitals and clinics with symptoms as seemingly innocuous as mild fever, headaches, or muscle pains. In the wake of a bioterrorist attack, medical professionals will have to act quickly to recognize the signs and symptoms of exposure to a biological weapon, and hospitals and public health laboratories will need to identify the pathogens used in the attack. Public health agencies must monitor the disease outbreak and mobilize the medical resources to contain it, while the special skills of federal health agencies must be ready to supplement the state and local efforts.

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Instead of the seamless web that is needed to combat bioterrorism, Senator Frist and I—with your help—found that the nation's public health network has gaping holes. Many public health agencies are underfunded, ill equipped, and poorly prepared to respond to bioterrorist attacks or other modern disease threats. In this electronic era when we can send an e-mail message from Cape Town to Cape Cod in the blink of an eye, the nation's public health agencies often lack equipment as basic as a fax machine. At a time when scientists have deciphered the entire DNA sequence of the human genetic code, many of the nation's public health laboratories cannot conduct simple genetic tests to identify the deadly microbes rapidly and accurately. Yet in a disease emergency, swift action can keep a local outbreak from becoming a national epidemic. A few lost hours can mean thousands more lost lives.

The recently enacted legislation takes important steps to correct these grave deficiencies. It authorizes grants for the public health agencies to improve their capacity to combat infectious disease outbreaks. These grants can be used to improve communications equipment, upgrade laboratory facilities, and train public health professionals in recognizing the characteristics of a disease outbreak.

Advance planning will be of the utmost importance in coping with the unique burdens that a bioterrorist attack could place on the health care system, yet hospitals and public health agencies are already stretched to the breaking point by cutbacks in their budgets and increases in their workload. The grants authorized by the act will provide the resources they need to plan for disease emergencies.

Today, few doctors and nurses have the training to recognize the symptoms of the infectious microbes likely to be used in a bioterrorist attack, and few hospitals have the supplies necessary to counteract them. Studies showed that 87% of the hospitals had an inadequate supply of the medications needed in the event of a bioterrorist attack or other infectious disease emergency. More than 90% of the doctors in some hospitals have received no training in recognizing the symptoms of exposure to a biological weapon, and more than 60% did not even know where to report such symptoms if they were detected. Under our legislation, grants to hospitals and clinics will help train health professionals in recognizing the symptoms of an attack and to help hospitals upgrade their capacity to treat the patients who have contagious diseases.

Because a bioterrorist attack will have national consequences, we must also make certain that national resources can be mobilized rapidly and efficiently to combat it. Current responsibility for bioterrorism preparedness is spread over a multitude of different federal agencies with different skills and responsibilities. The act will improve the coordination of federal efforts by bringing together the agencies with critical responsibilities for preparedness. In particular, the act will ensure that the voice of the medical and public health professional is heard whenever bioterrorism preparedness is discussed, so that planning for any attack will be guided by a thorough understanding of the characteristics of infectious disease outbreak.

The Centers for Disease Control and Prevention (CDC) have a vital role in the effort. The CDC's laboratories and other facilities are in an alarming state of disrepair. The ceilings leak and walls are crumbling, and some of the world's most dangerous microbes are kept in buildings with less security than a county courthouse. We can't expect CDC to provide first-class results if we continue to provide only third-class facilities. The Act authorizes the extensive modernization and security upgrade for the CDC laboratories, so that scientists can work in secure facilities with state-of-the-art equipment.

We also must use the nation's expertise in biomedical research to develop new medications and vaccines against the biological weapons. Massachusetts is a leader in this effort. The nation's stockpiles of smallpox vaccines are old and may be ineffective, so a company in Cambridge is developing a new and safer vaccine. Another Massachusetts company is designing new forms of protective clothing for those who work in areas contaminated by contagious microbes. Projects such as these will be supported by the research initiatives that are part of the new act, and this research will give health care professionals the tools they need to fight the disease threats of today and the future.

The legislation will also pay dividends apart from defending against bioterrorism by improving the nation's response to infectious disease outbreaks of all types. Few experts doubt that the nation will eventually face an outbreak of a deadly infectious disease. AIDS, malaria, and tuberculosis kill millions of people around the world, and these diseases spread further every day. Other deadly diseases, such as Ebola and Rift Valley fever, are only an airplane ride away from our shores.

Diseases need not carry exotic names to endanger the nation's health. Simple food-borne infections are rapidly becoming resistant to the drugs doctors have used for decades to treat them. Medical professionals in the United States have already seen patients infected with the so-called superbugs that resist every drug in the doctor's arsenal. The new Act will increase

the support for the federal, state, and local initiatives to contain the spread of microbes resistant to antibiotics. The Food and Drug Administration's decision to withdraw approval for certain antibiotics in agriculture will do a great deal to reduce the excessive use of these indispensable drugs in food production. I commend the administration for this timely action to protect the public health.

Even as we celebrate the passage of the Act, we realize that we have won only part of the battle. The challenge ahead is to make sure the programs authorized in the act receive full funding. With your support I'm sure we can meet this challenge and make certain that Congress sustains its commitment to public health. With your continued skill and dedication, we can make sure that the programs initiated by the act result in a safer and more secure nation for us all now and for many years to come.