United States Senate

Committee on Health, Education, Labor and Pensions

Testimony of Donald A. Henderson, MD, MPH Director, Johns Hopkins Center for Civilian Biodefense Studies October 9, 2001

Mr. Chairman, distinguished members of the Committee, tragically, we find ourselves contemplating the possibility of a bioterrorist attack on US civilians. As we consider these grave matters, it is important that we recognize that such an attack is by no means a foregone conclusion although the risk is not zero. However, there is much that can be done – if we take prudent actions beforehand – to mitigate the consequences of an epidemic deliberately initiated by terrorists.

A bioterrorist attack on the US would be completely different from the events of 11 September. It would in all likelihood be a covert attack. There would be no discrete "event"; no explosion, no immediately obvious disaster to which firefighters and police and ambulances would rush. We would know we had been attacked only when people began appearing in emergency rooms and doctors' offices with inexplicable illnesses or with seemingly common illnesses of unusual severity.

The "first responders" to bioterrorism would be health care workers and public health officials. Our ability to effectively deal with such an event depends directly on the capacity of our medical care institutions and our public health system to quickly recognize that an attack has occurred; to promptly identify those who might be a risk; to deliver effective medical care – possibly on a massive scale; and, should the bioweapon prove to be transmitted from person to person, to rapidly track and contain the spread of disease. A number of steps have been taken to fully prepare the nation to respond and,

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combine these diverse and disconnected efforts into a unified program of action. We need a single, centralized medical and public health strategy for preparing the nation to detect and respond to bioterrorist attacks. It is an effort that appropriately should be managed by HHS, integrated across the Department, coordinated with state and local authorities, and able to interface efficiently with other federal agencies.

The difficulty of understanding and managing the complex interactions among the different agencies, levels of government and private sector organizations that have roles to play in bioterrorism response is profound. New partnerships must be forged. Policy makers must be educated to understand the operational realities faced by hospitals and public health agencies. They must recognize that protecting national security will demand investments in sectors not typically considered integral to defense strategy.

State and local public health departments across the country are the backbone for detection and response to a biological weapons attack. They need resources and they need them urgently if they are to effectively carry out even the rudimentary actions that are absolutely essential for dealing with a major infectious disease outbreak. It is difficult to exaggerate the deficiencies of our present public health capacities. Indeed, it is inaccurate to even call the varied public health structures at state, city and county level a public health "system", since many of these units are not connected or coordinated in any meaningful way. In the near term, it is important that we identify and support the essential steps needed to make this motley arrangement functional.

Assuming that federal funds can expeditiously be made available, there will be a need for an expedited process to get these funds to state and local level. The leisurely and tortuous administrative channels will need to be foreshortened so that funds become available in weeks, not months. Moreover, such funds should not be overly constrained by restrictive definitions of how they are to be spent. The variety of needs in the 50 state and 3000 local public health departments around the country are such that, for a program of this urgency and complexity, it would not be sensible for the federal government to

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the NPS consists of caches of such supplies, located in strategic locations around the country. CDC has reported that these supplies can be delivered within 12 hours to any point in the nation. Because of recent events, the nature and quantities of materials available will be reviewed by an expert advisory group later this month.

In addition, Secretary Thompson has initiated a number of steps to ensure that the supplies of smallpox vaccine held by the federal Centers for Disease Control and Prevention (CDC) are immediately ready for distribution if needed. The Secretary has recently directed that the amount of smallpox vaccine produced under the HHS contract with Acambis be significantly increased, and has taken steps to move up the date of delivery.

Perhaps the most uncertain part of the equation in getting drugs and vaccine to the population relates to the question of distribution. Health departments have had little experience in the large scale, rapid distribution of either drugs or vaccines. Should such be needed, there predictably would be staggering logistical problems. Here again is where resources are needed for state and local health departments to undertake contingency planning for distribution.

Improved Training of Public Health Officials, Emergency Room Health Personnel and Infectious Disease Physicians

These three groups of professionals along with the laboratory personnel represent the foundation for early detection, diagnosis, definition of the epidemic and application of preventive and therapeutic measures. Educational materials are urgently in need. Resources are required for training programs, drills, tabletop exercises, etc. In the longer term there is a need for rigorous curricula and training programs to prepare public health professionals to manage deliberate epidemics, and to incorporate public health practicerelated curricula into academic training programs.

Medical Care Functions In Need of Improvement

Obviously, it does little good to have a public health system that can detect disease outbreaks and manage epidemics if we cannot effectively take care of sick But beyond this, one could envisage an array of solutions that might prevent the use of biological weapons or at least mitigate the likelihood of their use and so make bioterrorism and its consequences less likely or less severe – new vaccines and treatments for currently untreatable viral and toxin diseases; rapid diagnostic tests; sensor systems; and immune enhancement mechanisms. Years, not months, will be required for their development but, regrettably, biological weapons and biological terrorism will be with us for the foreseeable future.