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Witness:
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Testimony:
Good afternoon, Mr. Chairman and members of the Committee. I am Dr. Julie Gerberding, Director of the Centers for Disease Control and Prevention (CDC) and Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR). Thank you for the opportunity to testify today about terrorism preparedness and emergency response at CDC. The United States is experiencing threats to its national security that require preparedness for potential biological, chemical, radiological, and mass trauma attacks and other public health emergencies. Helping lead this effort is the Centers for Disease Control and Prevention.

HHS has set a strategic course to ready our nation for any potential public health threat including terrorism and CDC has played an important part in this strategy. CDC's public health emergency preparedness vision, "People Protected – Public Health Prepared," and the mission statement, "Prevent death, disability, disease and injury associated with urgent health threats by improving preparedness of the public health system and the public through excellence in science and services," are wide reaching concepts that convey our sense of purpose and commitment. CDC's preparedness strategies include: timely, effective and integrated detection and investigation; sustained prevention and consequence management programs; coordinated public health emergency preparedness and response; qualified, equipped and integrated laboratories; competent and sustainable workforce; protected workers and workplaces; innovative, relevant and applied research and evaluation; and timely, accurate and coordinated communications. These strategic imperatives target our agency's core competencies to prepare the public health system for all types of emergencies. CDC is committed to protecting people by preparing for and responding to acts of terrorism and other public health emergencies.

In today's testimony, I will speak to three specific issues: the public health workforce; the current status of CDC terrorism preparedness and emergency response activities; and smallpox preparedness.

Public Health Workforce

The recently released report of the Partnership for Public Service entitled "Homeland Insecurity: Building the Expertise to Defend America from Bioterrorism" pointed to the critical need of addressing the Biodefense Workforce. CDC recognizes that a significant challenge exists in developing and retaining a qualified and competent workforce to address the needs both at CDC and within Local and State Health Departments. In fact, nearly half of CDC's physicians and biologists will be eligible, although only 10% will actually take early retirement, for retirement in the next five years and it has been estimated that one-quarter of all government employees will be eligible within that same time period. In order to prepare for these retirements and to increase the overall number of qualified and competent workers in public health preparedness and research, we are looking to new strategies for recruitment and retention of scientists, physicians, emergency planners/responders, and managers. Successful programs like the Epidemic

Intelligence Service, the Preventive Medicine Residency and the Public Health Prevention Service can assist in addressing this issue and we are looking into new strategies to reach out to fill laboratory diagnostic and critical research positions.

Prior to September 11, 2001, CDC had a total of 174 FTEs designated to support bioterrorism activities. Internally at CDC in FY03, 444 staff are now employed in various skills sets to support terrorism preparedness and response. In FY04, this will increase to 529. CDC has increased to 64 the number of field staff (epidemiologists and public health advisors) assigned to State and Local Health Departments. CDC is planning to move additional staff into the field and has been given authority to assign CDC staff to State and Local Health Departments as FTE exempt. Through the state and local grant program, at least 3,850 people have been funded (in part or whole) within the past 18 months to support (scientific, programmatic, administrative) public health preparedness activities.

A competent and sustainable workforce is one of the strategic imperatives within CDC's National Strategy for Terrorism Preparedness and Emergency Response. CDC's support to address this imperative will focus on:

• Increasing the number and type of professionals that comprise a preparedness and response workforce.
• Delivery of certification and competency based training.
• Recruitment and retention of the highest quality workforce.
• Evaluation of the impact of training on workforce competency.
• Support for Schools of Public Health, Medicine and other Academic partners to increase the number of individuals entering the field and trained throughout their career.

Currently, CDC funds Academic Centers for Public Health Preparedness at Schools of Public Health to address workforce training and "workforce pipeline" issues.

Through the CDC State and Local Preparedness Program, CDC made funds available to each grantee, and charged them with training and educating their public health workforce regarding preparedness and response activities. CDC is also the home of the Public Health Training Network (PHTN) and National Laboratory Training Network (NLTN) using distance learning mechanisms as the framework for delivery of training to the widest possible audience across the public health system. CDC also provides funds through the National Association of City and County Health Officials (NACCHO) to support "Public Health Ready," a pilot program to develop and test competencies of the local public health workforce, in 11 local health agencies.

Status of CDC Terrorism Preparedness and Emergency Response Activities; Upgrading State and Local Capacity

In FY 2003, CDC is providing $ 1.03 billion to continue upgrading state and local capacity to prepare for bioterrorism and other public health emergencies. This funding includes a $100 million supplemental funding for smallpox preparedness activities. To support the state and local programs, CDC has developed the following goals, including: 1) to rapidly detect public health emergencies involving biological, chemical, radiological and nuclear agents; 2) to rapidly investigate and respond to public health emergencies involving biological, chemical, radiological and nuclear agents; and 3) to rapidly control, contain, and recover from public health emergencies involving biological, chemical, radiological and nuclear agents. Each goal is paired with long-term performance measures that will provide a framework to increase the nation's preparedness. Examples

of long-term performance measures are: 100% of LRN laboratories will pass proficiency testing for bacillus anthracis, yersina pestis, Francisella tularensis, Clostridium botulinum toxin, Variola major, vaccina, and varicella; 100% of states will have level 1 chemical laboratory capacity, and have agreements with and access to (specimens arriving within 8 hours) a level-three chemical laboratory equipped to detect exposure to nerve agents, mycotoxins and select industrial toxins; and 100% of state and local public health agencies will be in compliance with CDC recommendations for using standards-based, electronic disease surveillance systems for appropriate routine public health information collection, analysis, and reporting to appropriate public health authorities.

CDC conducted numerous activities with resources provided in FY 2002. Within 90 days of the FY 2002 appropriation, CDC provided all of the appropriated $918 million to states and selected cities. Because of this quick action, states were able to fund urgent needs. Up to 20% of the FY 2003 funds were made available on an expedited basis to the states and other eligible entities, should they opt to seek it, for smallpox activities and other ongoing initiatives that could benefit from enhanced funding. In FY 2002, CDC provided training for more than 1.5 million health professionals in terrorism preparedness and response; and, trained approximately 8,800 clinical laboratorians in terrorism preparedness and response. CDC also provided reference materials to approximately 4,600 clinical laboratories following September 11, 2001. CDC is helping public health laboratories in all 50 states identify bioterrorist threat agents and efficiently communicate laboratory findings. In addition, CDC is providing 117 public health laboratories with the capacity to detect and respond to critical agents and is increasing national response capacity to include food, veterinary, environmental and chemical laboratories in the Laboratory Response Network. This work continues during the FY2003 awards process. With support from CDC, some states conducted mock exercises to prepare for terrorism events involving numerous state, county and local agencies; undertook initiatives to develop near real-time syndromic surveillance systems; trained large numbers of staff from public health agencies, health care facilities, emergency management organizations, police and fire departments and other key institutions; created and tested communication systems linking local public health staff and first responders with senior staff from state public health departments, emergency management agencies and other critical state agencies; and enhanced critical capacity at their public health laboratories.

Upgrading CDC Capacity

Emergency Preparedness and Response

CDC has strengthened its internal Emergency Preparedness and Response by establishing the new CDC Director’s Operations Center and in support of further infrastructure to provide enhanced technical and programmatic assistance to states. Some examples include: improved rapid identification and characterization of potential biologic agents; expanded the Epidemic Intelligence Service to assure that well-trained, first-line responders are available to respond to public health emergencies; and developed a secure information infrastructure to provide enhanced Geographic Information System (GIS) capability at the federal, state and local levels.

Emergency Communication System

CDC moved quickly to assure that its Emergency Communication System can comprehensively, efficiently, and rapidly respond to communication needs associated with terrorism. This system, currently used to respond to SARS and adverse events

related to smallpox vaccinations, can: develop critical information; arrange for immediate direct communication with key collaborators and stakeholders around the world; provide real-time updates to the media; make sure essential information is available to the public through the CDC Web site; maintain a public health response hotline; develop training for clinicians; and develop public service announcements. A central component of this system is the state-of-the art Marcus Emergency Operations Center. This facility is a unique example of a public/private partnership, and was completed in only six months. In addition, CDC has made great strides to help enhance communications with state and local health departments through a variety of platforms including the Health Alert Network (HAN), Epi-X, the National Electronic Disease Surveillance System (NEDSS) and the Public Health Information Network (PHIN). All of these systems are meant to increase the ability of CDC to communicate quickly and directly with health officers providing them with emergency messages 24/7 within 30 minutes (HAN) and via a secure, interactive web portal that allows for exchange of important epidemiological information (Epi-X). Both of these systems fall under the rubric of PHIN. NEDSS is currently being implemented at the state level to provide a common standard to all states and localities for disease reporting to help maximize the ability of CDC and states/locals to stay up to date on emerging infectious diseases.

Strategic National Stockpile

CDC continues to be responsible for managing the Strategic National Stockpile (SNS, now supported by the Department of Homeland Security resources, but operationally managed through the CDC). The mission of SNS is to ensure the availability of life-saving pharmaceuticals, antidotes and other medical supplies and equipment necessary to counter the effects of nerve agents, biological pathogens and chemical agents. The SNS Program stands ready for immediate deployment to any U.S. location in the event of a terrorist attack using a biological, toxin or chemical agent directed against a civilian population. It is comprised of pharmaceuticals, vaccines, medical supplies, and medical equipment that exist to augment state and local resources for responding to terrorist attacks and other emergencies. These packages are stored in strategic locations around the U.S. to ensure rapid delivery anywhere in the country. Recently, the SNS has prepared specific guidance, and provided technical, planning assistance to states as well as providing funding to them to help them effectively manage the deployment of the SNS at the state level. CDC will now be working closely with DHS on stockpile issues.

Smallpox Preparedness

In order to better prepare the country for a possible smallpox attack, the President, in December of 2002, announced the establishment of the National Smallpox Vaccination Program, outlining the government’s intent to offer voluntary precautionary smallpox vaccination with licensed vaccine to selected health care and public health workers, traditional first responders, and, in time, to individuals in the general population interested in receiving the vaccine under appropriate protocols. CDC moved swiftly to do its part to assure the availability of smallpox vaccine for every person in the United States.

To improve national smallpox preparedness, CDC has increased its focus on elements needed to assure acceptable levels of preparedness. Based on knowledge of the disease and public health response strategies needed to control and contain an outbreak of smallpox, the following preparedness elements are being addressed:

1. Preparing key responders before an event occurs,
2. Rapid detection, identification, investigation and response to suspect or confirmed cases of smallpox, and
3. Protection of the public including provision of mass vaccination clinics.

As of July 18, 2003 nearly 38,000 civilian public health and healthcare professionals have received the vaccine. Participation in the vaccination program has varied widely across the country, with 10 states (TX, FL, TN, OH, CA, MN, NE, NC, MO, LA) having vaccinated over 1,000 volunteers.

The fact that the participation rate is lower than some projected has been generally attributed to: 1) the low perceived threat of a smallpox attack, and 2) continuing concerns about the risk of adverse reactions to vaccination. CDC has conducted at least 74 training and education sessions, reaching 1,847,112 health care professionals. Thirty-nine different training products are available for public health and healthcare professionals. At least 14,036 individuals who have been comprehensively trained have the capacity to administer smallpox vaccine, if necessary.

Last spring, Congress enacted legislation that addressed vaccination-related compensation and liability concerns. This legislation, the Smallpox Emergency Personnel Protection Act of 2003, established a no-fault program ("the Program") to provide benefits and/or compensation to certain individuals, including health-care workers and emergency responders, who are injured as the result of the administration of smallpox countermeasures, including the smallpox (vaccinia) vaccine. The Program will also provide benefits and/or compensation to certain individuals who are injured as a result of accidental vaccinia inoculation through contact.

To date, the incidence of adverse reactions in both civilian and military populations has been lower than anticipated. The military smallpox vaccination program provided an unprecedented opportunity to better characterize the safety profile of smallpox vaccine when 450,000 military personnel were vaccinated. The low adverse reaction rate appears to be directly attributable to the efficacy of pre-vaccination screening that has ensured those at risk for complications do not receive the vaccine. The occurrence of possible vaccine related heart problems, however, did surface as a possible adverse event that required further restricting the possible use of the smallpox vaccine in those at risk for heart disease. As a result, CDC issued further guidance to modify the screening criteria to keep the volunteers safe. CDC, working with our medical/scientific partners, continues to investigate whether these particular adverse events are causally related to the vaccine.

Precautionary vaccination is only one element of overall smallpox preparedness and we continue to make progress in other crucial areas that contribute to preparedness.

- All states and four designated cities have developed detailed pre-event and post-event smallpox response plans.
- Public health teams are now organized nationwide to respond to a suspected smallpox outbreak within 6 hours.
- A national information system has been implemented that can support smallpox and other emergency vaccination administration needs. It advances our preparedness to know who needs to be vaccinated, to monitor vaccine "take" results, and track adverse vaccination events. The system produces information that decision makers and response

teams need to support the protection of the population from communicable diseases in an emergency setting.

• Clinical and public health laboratories have improved their ability to detect and diagnose rash illness within 24 hours of presentation. Twenty-three laboratories nationwide have the training and reagents to screen for smallpox and differentiate it from other pox related diseases (e.g. chickenpox and monkey pox).

• Current vaccine supplies and projected production continue to meet the goal of having sufficient smallpox vaccine for every American in the event of an emergency.

• Over 290,000 doses of vaccine are currently deployed, with vaccine available in every state and four major cities (New York, Chicago, Los Angeles, and Washington, D.C.).

CDC, along with State and Local Health Departments, will continue to enhance smallpox preparedness in the coming year. We are creating performance standards to guide and assess state and local smallpox preparedness. Performance-based evaluation will target activities in the areas of:

o public health and health care response teams formed and trained,

o members vaccinated and trained as vaccinators,

o increases in the number of Laboratory Response Network (LRN) labs that can perform confirmatory testing for vaccina and Variola major,

o progress on developing real-time electronic disease reporting,

o demonstrated proficiency in receiving large quantities of smallpox vaccine, and

o identification and training of volunteers needed to run mass vaccination clinics capable of vaccinating the entire population in 10 days.

Performance standards are being developed to incorporate tiered levels of achievement based on performance standards associated with the activities I just described. Actual performance will be monitored through a dual evaluation process: self-evaluation by grantee, and formal and informal CDC program evaluation.

In closing, CDC has refocused it priorities to be sure the nation is prepared for all types of public health emergencies including biological, chemical, radiological, and conventional terrorist threats. CDC will continue to implement the successful strategies begun in previous years, while remaining flexible in its capability to respond to known and emerging threats. As we continue these efforts, I want to thank the Committee again for its support and for enabling us to do this essential work.