

**Statement of
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on behalf of the
NATIONAL ASSOCIATION OF COUNTY AND CITY HEALTH OFFICIALS
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Committee on Governmental Affairs
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Hearing on “The Local Role in Homeland Security”

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Good morning, Mr. Chairman and Members of the Committee. I am Michael C. Caldwell, MD, MPH. I am Commissioner of the Dutchess County Department of Health in New York. I am honored to appear before you representing the National Association of County and City Health Officials (NACCHO) on whose Board I serve. NACCHO is the organization representing the almost 3,000 local public health departments in the country. I have been intimately involved in bioterrorism and emergency preparedness planning in Dutchess County and I am very familiar with national work to develop guidance and performance standards in bioterrorism preparedness for local public health systems. I am here today to share with you some of the lessons we have learned in our work and how much farther we need to go.

Are we prepared for bioterrorism as a nation? Not nearly enough. Local public health departments have long experience in responding to infectious disease outbreaks and other local emergencies with public health implications. We have made progress and learned important lessons about the challenges of bioterrorism preparedness in the last few years. But we have a long way to go to achieve nationally the capacities necessary to detect and respond to an act of bioterrorism quickly and efficiently in order to contain it, prevent the spread of disease and save as many lives as possible.

The challenge, and potentially the great strength, of bioterrorism preparedness is that it requires a combination of the resources and skills of public health with those of other public safety and emergency preparedness disciplines. Each of these disciplines must have a robust system in place. As our recent experience with anthrax has demonstrated, public health leadership, expertise and resources are essential when an act of bioterrorism is suspected or threatened.

Our nation’s bioterrorism preparedness activities prior to September 11th were limited, but we are not starting from scratch. We have some experience and some

results from funding that Congress has appropriated thus far that I will share with you. In addition, we have a legislative framework in place for expanding our general public health preparedness. The “Public Health Threats and Emergencies Act of 2000,” which has not yet been funded, establishes a process for systematically defining what our federal, state and local public health systems need to do, for assessing what they already can do, and for filling in the gaps by building capacities.

Every component of the public health system plays a vital role. Federal agencies rely on the public health infrastructure at the local and state level to support the system. State and local public health agencies must collaborate closely together and with their federal partners, sharing information and resources. Properly equipped laboratories and data management and communication systems are essential, as is leadership and technical support from the Centers for Disease Control and Prevention (CDC) and other agencies of the Department of Health and Human Services (HHS).

Federal Guidance to Local and State Public Health Agencies

NACCHO has been working with CDC and other public health partners on a national level to define just what state and local public health agencies need to prepare for and respond to a bioterrorist act and to provide them solid guidance. We have developed a set of core capacities and some measurement tools to gauge the extent to which an agency has achieved them. Defining measurable objectives is an essential part of achieving preparedness. Establishing standards will enable us not only to assess where we stand, but also to assure that funds are spent prudently and that the ultimate outcome will be an effective system serving the country’s overall needs.

These core capacities consist of four major areas, within which are many more specific elements. The four major areas are:

Surveillance and epidemiologic investigation, which requires monitoring community health status to *detect* the presence of bioterrorism agents and to characterize the public health threat or emergency;

Laboratory capacity to identify, rule out, confirm and characterize biological threat agents;

Communication, which includes collection, analysis and communication of information among the response community, decision-makers and the general public during a public health emergency. This capacity also includes the local public health agency’s core responsibilities of education and assurance as well as the development of local Health Alert Networks nationwide; and

Public health intervention, which includes advance planning, coordination of emergency response and implementation of emergency measures to control and contain

an outbreak. This involves the integration of public health expertise and activities with that of other emergency response agencies.

For any locality to achieve fully these core capacities, it must have a fundamental infrastructure of trained people, equipment, facilities and systems. Building this infrastructure is absolutely essential; without it, we will not obtain the necessary capacities for bioterrorism preparedness. However, as we invest in public health infrastructure, we are not just preparing for bioterrorism but also strengthening our ability to respond to other health emergencies. The systems for disease surveillance, for communication, for data management, for interagency planning, for mobilizing the community to respond, are the same for bioterrorism as they are for any other disease outbreaks or emerging infections such as West Nile Virus, E. coli, Hepatitis C, Lyme Disease and Ehrlichiosis. These systems have multiple uses, extending even to improving our abilities to address other public health problems more effectively. ***Every dollar we spend on bioterrorism preparedness will pay off in countless other ways.*** The next step is to enable states, counties, cities and towns to transform this framework of core capacities into their own practical action plans for bioterrorism preparedness and response. One of our highest priorities now must be to give states and localities the resources to take this next step and to develop more tools to help them.

All Public Health Preparedness is Local

The federal government can and must provide technical assistance, funds and specialized expertise. In the end, though, all public health preparedness is local. Bioterrorism preparedness planning, just as all local emergency planning, is not adequately addressed by taking a plan or set of guidelines off the shelf. The act of planning itself brings together people from public health, emergency response, law enforcement, local hospitals and physicians, to develop a plan that suits their own community's circumstances and needs. The act of planning itself establishes the lines of communication that we have seen are so critical following September 11th and it identifies what capacities and resources remain to be developed and put into place. Across the nation, local public health departments and their communities are learning that partnerships between public health agencies, health care providers and the traditional first responder entities, such as fire, police and emergency services, can be built and are essential for further progress. In order for the diverse public and private agencies in a city or county to work effectively together to respond to an emergency, they must know each other and have planned together well in advance. They should not be exchanging business cards of introduction during a real crisis! Local surveillance and response systems will not work unless we have thoroughly trained people to use them and the people who use them knowing exactly what to do and have sufficient practice doing it in advance.

Planning preparedness for a smallpox event affords an excellent, if frightening, example. The federal government can and should be responsible for the development and stockpiling of smallpox vaccine. However, an adequate vaccine supply is useless unless deployment plans to distribute it efficiently are established and understood at all levels. There may be a role for states in planning for regional vaccine distribution. Ultimately, however, it will be local public health authorities that will take the lead in arranging to get vaccine into people's arms. Planning for stockpile distribution therefore requires that the federal government plan with the states, that states plan with localities, and that local governments plan with their emergency response personnel, hospitals and health care providers and law enforcement how to vaccinate people safely and maintain public order. NACCHO was pleased that the President's budget request for bioterrorism preparedness included vaccine purchase, but dismayed that it almost wholly ignored the complex and critical issue of distribution at the local level.

We have also learned some unexpected, but important, lessons. For instance, Internet-based information and communication systems became widely **un**available on September 11th and many health departments could not access email for hours to receive health alerts from CDC or their states. The lesson is that wireless, handheld communication capacity is one important emergency tool that public health agencies should not be without. Another lesson learned during the current anthrax outbreak is that an important first step for many jurisdictions involves setting up a 24-hour hotline to receive reports and dispense accurate information. Unlike fire and police agencies, few local health departments have staff available 24/7, nor do they have pre-arranged means to access a new telephone line to create an immediate emergency hotline. Responding to a new and unexpected public health threat consumes all available resources and places severe stress on the existing infrastructure of any agency. A third lesson, therefore, is that unless emergency capacities and cross-training of staff are integrated into the staffing structure of a department, the more routine, non-emergent work of public health quickly becomes neglected when an emergent threat occurs. It is undeniable that meeting these newly recognized challenges requires additional funding from the federal government to provide more resources at the state and local level.

Public Health Emergency Planning in Dutchess County, NY – a case example

Dutchess County, with a population of 280,000, is located about seventy-five miles north of New York City and seventy miles south of Albany. About 4,600 people commute each weekday between Poughkeepsie and New York City by MetroNorth railroad service. Should any commuter become infected with smallpox, it would be days before the disease manifests itself and by that time many people in Dutchess County could have been exposed to and infected with the virus. We know that we need a strong reporting mechanism from hospitals, private physicians and laboratories so that we will learn quickly of any suspicious disease outbreak. We also know that crisis and

consequence management locally will involve many local authorities. From detection, to surveillance and response, several county agencies will share responsibilities at a variety of levels, including the Departments of Health, Emergency Response, Mental Hygiene, Planning, the County Sheriff and the County Executive's Office.

West Nile Virus: Lessons Learned

The outbreak of West Nile Virus encephalitis in the New York City metropolitan area in the summer of 1999 was an unprecedented event. By the end of the fall of 2000, all but one county in New York State had documented West Nile Virus activity. The New York State Department of Health relied heavily on municipalities and county health departments to provide needed field surveillance and scientific data on which to base cost effective actions. But few counties had an active mosquito surveillance/control program in place and, when faced with the outbreak, were forced to take costly emergency measures.

I distinctly remember, early on, receiving a message from a concerned citizen in the southern part of our County concerned about a dead crow that she found in her backyard. As a local Commissioner of Health, we receive a number of unusual calls, but while this one seemed strange, there was nothing that I could do but tell her it was probably an old crow and thank her for calling. One week later, the CDC made the link between the crow deaths and the human cases of encephalitis. This points out how important it is for local, state and federal public health authorities to develop routine and comprehensive communications with our veterinary colleagues. Four years ago, I remember that a local veterinarian had informed me of his concern about seeing three cases of tick paralysis in dogs one summer. Shortly thereafter, a two-year-old girl in the County came down with the disease and nearly died.

The Dutchess County Department of Health initiated a vector control and surveillance system that would better prepare the County to deal with outbreaks of vector borne diseases, such as Eastern Equine Encephalitis (EEE) and West Nile Virus (WNV.) The program consists of a permanent ongoing arthropod surveillance as well as the enhancement of public health education initiatives to raise the level of awareness and knowledge of personal protection individuals can take to reduce the potential exposure to mosquitoes and ticks. This approach required that we work with every single municipality within the County. The program allowed Dutchess County to enhance its infrastructure, enabling cost effective control measures that lessen and often prevent outbreaks of vector borne diseases.

Dutchess County Executive William R. Steinhaus committed over \$1 million in funding, in the first year, to deal with this newly emerging public health threat. While the majority of the funding was used to contract for a comprehensive mosquito surveillance and control program and a research scientist, we were able to create a biostatistician position and a Geographic Information System (GIS) coordinator. We received about

40% funding from New York State and also received \$80,000 in reimbursement from FEMA.

Lessons learned:

Lack of preparedness in the local public health infrastructure and lack of scientific data on which to base cost effective actions resulted in some local municipalities taking costly emergency actions against a perceived wide scale public health threat.

A local early warning system against the spread of arthropod borne diseases to humans is critical to the planning of any cost effective activities locally and regionally.

Lab support is critical for supporting the surveillance system.

Leadership and rapid communication of developing information from the CDC to the local and state health departments was critical to providing a standard and cohesive surveillance and response plan across multiple jurisdictions.

Sept. 11th – more lessons learned

On Tuesday, September 11, 2001, the Centers for Disease Control and Prevention requested monitoring for unusual disease patterns that could indicate bioterrorism. The same day, the New York State Department of Health transmitted a CDC health alert to hospitals and local health departments throughout the state advising them to enhance surveillance for unusual disease events.

In Dutchess County, working with our local 911 center and hospitals, we were able to quickly establish a heightened sense of awareness for likely bioterrorism symptoms in addition to creating a daily monitoring system of hospital emergency room visits. We also worked with our local Medical Society to enhance communication with the area physicians and provided for regular information and communication on the latest recommendations from the Centers for Disease Control and Prevention concerning the recognition and treatment of diseases related to exposure to biological agents.

We responded to requests of assistance to the September 11th attack with the deployment of nine of our public health sanitarians to ground zero, to provide additional support and resources to the New York City Health Department. We are expecting some financial assistance from FEMA as well as our usual 36% reimbursement from New York State.

Lessons Learned:

To prepare for and respond to any terrorist incidents will involve the collaboration and coordination of services among local, state and federal authorities.

Federal agencies rely on the public health infrastructure at the local and state level to support the system.

Bioterrorism preparedness planning: Developing the necessary resources

County health departments in New York State responded to a survey conducted in early November 2001 on their workforce and training needs related to emergency preparedness. Preliminary survey results indicate that there is an urgent need to assist counties in developing adequate coordinated plans and training.

Key Findings

Local Health Departments lack arrangements with a wide range of health professionals and organizations essential for emergency preparedness.

There is an urgent need for training in biological, chemical and radiological emergency preparedness for a wide range of health professionals.

There are a number of public health personnel shortages related to emergency preparedness that may impact on counties' ability to effectively respond to these situations.

Under the leadership of County Executive Steinhaus, Dutchess County will be creating our first epidemiologist position on January 1, 2002, as well as continuing our work to develop enhancements to the County's Comprehensive Emergency Management Plan. We were fortunate that the biostatistician hired for our West Nile Virus program could be temporarily reassigned to this new position immediately and be designated as the County's full-time bioterrorism preparedness coordinator. Additionally, our Medical Examiner program is currently being studied and we expect to upgrade it in 2002 to include a full-time forensic pathologist who will be able to provide greater scrutiny of the causes of death of Dutchess County residents.

While Dutchess County needs to continue to develop its program, we are much more fortunate than most local health departments and even some state health departments. Many are not "full service" departments and do not maintain or operate environmental health programs. Many do not have professional public health information resources. Some are still not linked to the federal Health Alert Network.

Since the first case of human anthrax, we have been quite busy fielding calls from physicians and other healthcare professionals, businesses, elected officials, law enforcement, emergency response and the general public. Whether it was a worker who was at NBC studios or the Eagle Scout who received a congratulatory letter from Senator Daschle with a postmark of Monday, October 15, 2001, it was the local Dutchess County Health Department that was called and expected to provide the right advice. **We are the first responders in a case of suspected bioterrorism.** The local public health department is on the front lines and should have the professionally dedicated staff, equipment, tools and resources necessary to fulfill our mission as an integral member of

America's homeland defense. The local public health system has finally emerged as a necessary component of our national security. We're not too late to improve our readiness for a large-scale attack, but we must act swiftly and without delay.

Lesson learned:

Local public health agencies need full-time professional and dedicated staff who are able to coordinate bioterrorism and other emergency preparedness efforts within the local political framework.

Conclusion

Franklin Delano Roosevelt, a Dutchess County native said, "Never before have we had so little time to do so much." His words ring true for us now as we strive to improve our readiness for a large-scale bioterrorist assault. It is important to note that even if we were never to have another bioterrorist event, any resources provided will be put to good use and will improve each community's readiness for any naturally occurring health emergency. Enhancing bioterrorism preparedness and emergency response capacity creates a dual use response infrastructure that will enable us to respond to other public health emergencies and threats as well.

Finally, we need to recognize that everyone can't do everything. Each agency must develop its own set of responsibilities and expertise; however, we must leave no community behind. Every local public health department should be professionally assessed and brought up to its potential as soon as possible.

Regionalization will be a necessary part of improving our local public health infrastructure in New York. While Dutchess County is just one of fifty-eight local health districts in the state, we are one of ten within the designated Metropolitan Area Region of the state health department and one of seven in a loosely organized Hudson Valley Regional Health Officials Network (HVRHON) that has been meeting for the last five years. Each one of us has different political boundaries and strengths and weaknesses, but we all know that we must work together on many issues in order to make progress. That is why we are working with the state to form a regional Health Data Institute (HDI), which will provide us with health data from the Hudson Valley region that will be more insightful and comprehensive than any other existing database. This is just one example of many cooperative efforts that are ongoing throughout the country that will complement all of our bioterrorism preparedness efforts.

Local public health agencies need flexible federal support now, and we need direct federal resources to the local level guaranteed in the language of any assistance bill under consideration. Coordination with state and federal partners should be required but there is no question that little to no money has reached down to the local level for bioterrorism preparedness. We cannot wait to create the necessary positions in our public health workforce; to enhance our laboratory capacity; to improve our rapid epidemiologic

surveillance; to develop the necessary local health information and communication systems; to provide assurance and a comprehensive and immediate response to any public health crisis. Our local public health system requires the same dramatic overhaul as the airport security industry. I used to take care of patients who needed a dose of epinephrine right in their heart to save their lives. The 3,000 local health departments look to you to take the necessary steps to provide that shot of adrenalin and to ensure that your constituents have the best chance to survive the next biological attack.