

Testimony By
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Chairman Towns, Congressman Issa, and distinguished Committee members: thank you for the opportunity to testify today. I am Dr. Guthrie Birkhead, Deputy Commissioner for Public Health at the New York State Department of Health.

The events of the last month with the dramatic emergence and rapid recognition of the H1N1 swine influenza, and the equally rapid public health system response, has proven the value of the investment we as a nation have made in recent years for emergency preparedness planning. This novel influenza virus is one to which the population does not appear to have immunity and which causes a range of symptoms from mild to severe, so far similar to seasonal influenza. The concern is that it could portend a much more severe influenza pandemic with high rates of severe disease and death, as happened in the pandemic of 1918-1919. In the past few days, it might appear from the press that we are in a lull and things are getting back to normal, but we know the virus continues to circulate in the community; a number of schools have been closed in New York City in just the last week due to high rates of absenteeism in students and faculty from H1N1 influenza. This is not a time for complacency, but continued vigilance. There is still a lot to learn about this new virus and a lot of preparation for events we hope will not occur. New York's recent and ongoing experience with responding to the H1N1 flu outbreak informs this testimony today. As many have noted over the past several weeks the possibility of a future severe, widespread and potentially lethal epidemic in the fall is a serious situation that we all must aggressively prepare for. My testimony today will provide background on New York's response to the H1N1 outbreak and then address the Committee's questions.

Background/New York's Response to H1N1:

By way of background on the response in New York, under the direction of Governor David A. Paterson, the State Department of Health works in close collaboration with other agencies such as the State Office of Homeland Security and the State Emergency Management Office, as well as local health departments, including the New York City Department of Health and Mental Hygiene, health care providers, including hospitals, and clinics and physicians, to monitor, detect, report and treat cases of influenza and to organize the State's response. The State also works closely with the Centers for Disease Control and Prevention (CDC) to share and evaluate information and to develop guidance appropriate for the health care system and the public. Fortuitously, it is with these same partners that we have been planning for an influenza pandemic for at least the past 5 years.

We had a chance to operationalize those plans when, on April 25th, the Governor directed the state health department to activate its health emergency preparedness plan in response to cases of H1N1 swine influenza in NYS. The state's plan requires the collaboration of programs across the department, other state governmental agencies, and local public health departments. The primary response activities that were activated include:

- Activation of the health department command center and assembling of staff from all parts of the health department.

- Institution of the department's incident management system.
- Provision of epidemiologic and clinical guidance to the field to rapidly identify and get samples for laboratory testing from suspect cases.
- Implementation of the surge plan for laboratory testing for H1N1 in our state's Wadsworth public health laboratory. The laboratory was up and running almost immediately and was among the first labs in the nation to be certified by the CDC to do its own confirmatory H1N1 testing.
- Use of rapid internet epidemiologic reporting systems to detect suspect illness and provide complete, real time understanding as the situation unfolded. The data systems utilized captured data on all emergency department visits in the state for influenza-like illnesses and all Medicaid prescriptions for antiviral medications.
- Maintenance of continuous, ongoing communication with preparedness partners across the state via the internet based Health Commerce System. Each health alert distributed was received by over 22,000 individuals in county health departments, hospitals, clinics, other health care providers, schools and other parties across the state to assure ongoing provision of the most up-to-date information available. A total of over 125,000 informational items, including guidance for practitioners, hospitals and school administrators, were downloaded off of the Department's website in just two weeks.
- Activation of frequent statewide conference calls with county health departments, hospitals, nursing homes, other state agencies and CDC.
- Activation within 4 hours of request of a 24-hour toll-free hotline for New York State residents to address their questions and concerns about H1N1. The call center handled over 1000 calls in the initial days of operation and received over 9,000 calls to date from all regions of the state.
- Activation of the State's internet based Health Emergency Response Data System, or HERDS, which is our real-time, statewide electronic reporting system that provides an emergency communication link to all health care facilities through a secure Internet site. HERDS provides real-time data visualization, including GIS mapping of data, to track:
 - laboratory-confirmed influenza hospitalizations;
 - inpatient bedding capacity;
 - available ventilators;
 - isolation room capacity;
 - staff resources; and
 - availability of antiviral drugs and supplies in the hands of hospitals, pharmaceutical distributors and pharmacies by facility, county, and region of the state.
- Management of the state's Medical Emergency Response Cache (MERC) stockpile.
 - Distributed at the request of the NYC health department, 1500 treatment of courses of Tamiflu® on the first weekend of the outbreak for possible use in a containment effort in the Queens school outbreak. These medications were from the state-purchased stockpile.

- Received New York State's allocation of antivirals from the Strategic National Stockpile (SNS), bringing the total to 3.1 million treatment courses of antiviral agents.
- The Governor asked the Department to take the precautionary measure of deploying supplies of antiviral medicines and masks to local health departments. Supplies were shipped to 51 counties across the State.
- At Governor Paterson's request, the Department also held daily press briefings to update New Yorkers on our latest activities and the most recent information concerning the outbreak.

Some have suggested that public health may have over-reacted to these events because a severe pandemic has not yet materialized. I want to assure you that at each step of the way, prudent steps were taken to prepare and protect the population in the face of uncertainty and the many unknowns about the virus. State health department scientists who have spent their careers working on influenza have commented to me that this novel H1N1 virus represents the biggest shift in influenza viruses in their professional lifetimes. It is remarkable that we recognized it so quickly. If initial guidance, for example to close schools, may seem in retrospect to have been overkill, I would make the analogy to hurricane preparedness. When a hurricane is bearing down on you, you don't take the view that we can relax because it might veer off; you assume the worst and prepare for it. The 1918 pandemic killed an estimated 50 million people worldwide. A prudent approach is indicated. That is what the public health community has done in the past month with H1N1 influenza.

We are not out of the woods by any means. The New York State Department of Health is continuing to see new cases of H1N1. There is clearly continuing circulation of the virus in some communities leading to high absenteeism rates in some schools. Additional school closures have occurred. The Department is scaling back its activity, but to a heightened level of activity and awareness, certainly not back to "business as usual." We plan to maintain heightened surveillance for influenza-like illness through the use of sentinel health care providers and reporting of hospitalized patients with severe respiratory illness. Reporting and lab testing related to the H1N1 influenza is now a routine part of laboratory diagnostic surveillance. It is clear that continued development is necessary on protocols for school closure, social distancing, inter-agency collaboration, and communication in light of the lessons learned from the H1N1 episode. Finally, state and local health departments across the nation are making initial plans for the possibility of the availability of a vaccine against H1N1 to be distributed in the fall.

Today's hearing provides an opportunity to share and explore lessons learned as we prepare for the likelihood of a complex and dynamic fall flu season. I will now address the questions put to me by the Committee.

What types of resources and preparedness plans should a State have in order to be appropriately prepared to respond to a pandemic? What plans and resources are necessary across multiple sectors (e.g. public, financial, transportation, etc.) in order to sustain a coordinated response to a pandemic?

The first key to an effective emergency response is a comprehensive, emergency plan that is integrated across all levels of government (federal, state and local) along with the public and private sectors that includes specific pandemic response activities. In New York, the Pandemic Influenza Plan is an annex to the State's Comprehensive Emergency Management Plan. This plan is an "all hazards" plan which is relied upon for every type of emergency the state faces from snow storms, to power outages, to food borne disease outbreaks, to influenza pandemics.

In terms of plans for non-health related sectors, it is essential to protect critical infrastructure personnel to ensure continuity of operations, continuity of government and the functioning of society. Continuity of government and continuity of operations depends on depth in staffing to ensure an adequate response if an estimated 30% of the workforce is unavailable due to illness or caretaking of the ill during a pandemic. In New York, all local health departments and many state agencies have engaged in continuity of operations planning.

The most critical component of an effective emergency response is a well trained public health and health care workforce that is competent, skilled and who are provided the resources necessary to do their jobs. These individuals include those working at the state level but most importantly those working in the counties, cities and individual health care facilities throughout the State – the "boots on the ground" for public health in local communities. Without these individuals, a full and coordinated response to any health emergency is not possible. These staff constitutes the public health and health care infrastructure that must be in place to effectively respond to any and all health emergencies ranging from the immediacy of an airplane crash with multiple persons on board in need of medical attention to a long-term sustained response to an influenza pandemic.

Does New York have adequate resources to respond to a public health emergency such as a pandemic? How has the economic downturn affected pandemic preparedness in New York?

New York has developed its health emergency response program with a combination of state and federal funds. Following the events of September 11, 2001, New York and all states received significant increases in their federal Public Health Emergency Preparedness (PHEP) Cooperative Agreement from CDC and also received Hospital Preparedness Program (HPP) Cooperative Agreement from Department of Health and Human Services (DHHS). Both components are necessary to ensure an effective response. In addition, all states received a specific Pandemic Influenza Supplemental grant for three grant years from 2005 to 2008. Those funds have now ceased. New York City also receives these grants directly from the federal government.

This federal funding has played a critical role to the state in developing its current preparedness response capacity. The comprehensive all hazards and pandemic flu

preparedness plans mentioned previously have been developed and are continually exercised, reviewed and revised, in part, with these resources. Hospital and laboratory surge capacity has grown substantially. Sophisticated systems for disease surveillance and electronic information sharing have been developed and successfully employed in response to real incidents. Through drills, exercises and responses to real emergencies, New York has met or exceeded the federal Department of Homeland Security's multiple "target capabilities" designed to measure progress made in vital areas of preparedness. Most importantly, a critical mass of knowledge and expertise has been created, thanks to the thousands of state and local health department staff and other partners who have been trained in multiple components of health emergency preparedness and response.

New York State has also directly provided \$60 million in the State budget to support the state preparedness program. These resources have been used to support the purchase of supplies and medications for the State's Medical Emergency Response Cache (MERC). The MERC is a state-owned stockpile of pharmaceuticals and medical equipment for immediate use in advance of the Strategic National Stockpile (SNS) and to supplement the SNS assets. New York has used its budgeted state resources to purchase the maximum number of allowable 2.2 million treatment courses of the antivirals, Tamiflu® and Relenza®, under the federal subsidy plan for antiviral purchases. It has also purchased 1700 ventilators to be used to provide intensive care to patients with respiratory failure during a pandemic or other health emergency.

As mentioned previously, local health departments in New York are key to the local public health response to health emergencies, including the H1N1 outbreak. New York State has made it a priority to fund local health departments and through a combination of state and CDC Public Health Emergency Preparedness dollars, has provided nearly \$96 million to local health departments to enhance their preparedness and response capacity for health emergencies. In the last seven years, all local health departments have prepared and exercised "all hazards," mass vaccination clinics using seasonal influenza vaccine, and other pandemic flu plans. The importance of this funding is such that as the State Health Department absorbed a nearly 40 percent cut in its CDC preparedness grant over the past 5 years, state dollars have been used to make the county funding whole until the current state fiscal year. The current fiscal crisis in the state did lead to a reduction in the county grants by almost 40 percent for the remainder of the current contract cycle. In addition, during the past five years, funding in the DHHS Hospital Preparedness Program (HPP) has also been reduced 24 percent. And, as mentioned, the Pandemic Influenza Supplemental funding for States was eliminated in 2008.

With this by way of background, the current discussion of additional federal funding to help states and locals deal with the H1N1 outbreak is welcome news. Such funding will be critical for states to maintain and strengthen their public health response capabilities in the face of what will likely be an ongoing public health threat. In particular, state and local health departments are likely to play a key role in any mass vaccination efforts should an H1N1 influenza vaccine be made. Such a vaccination program likely would be unprecedented in its scope, particularly if significant segments of the population are

In the short-term it is likely that New York is well positioned to mount an effective response; however as the time frame grows longer and the epidemic more severe, our ability to effectively respond will diminish. One time funding, will be critical to support these efforts, but Congress should also look at restoration of the 40 percent and 24 percent loss in federal funding for public health and health care preparedness, respectively, that states have sustained in the last five years. One time funding cannot provide for the ongoing infrastructure needed to address current and future public health emergencies.

Does New York have a detailed preparedness plan for handling such activities as lab preparedness, epidemiological investigations, treatment, medical surge and antiviral and vaccine storage and distribution to response to an outbreak?

As mentioned previously, New York's Comprehensive Emergency Management Plan, including a specific operational annex for pandemic influenza, addresses each of these concerns.

Laboratory Preparedness - Enhanced laboratory capacity is assured through establishment of a bio-defense laboratory at the State Health Department's Wadsworth Center Laboratories. Staff in other laboratories are cross trained to enable the laboratory to tests samples 24/7 if necessary. Wadsworth was among the first state laboratories to be certified by CDC to do confirmatory H1N1 testing. In addition, the State has provided funding to upgrade public health laboratories in Erie and Westchester counties to Bio-Safety Level 3 to ensure regional lab capacity and laboratory surge capacity for influenza testing. New York City's public health laboratory also provides this testing.

Epidemiologic investigations - The State has developed robust systems to quickly identify and respond to emerging disease threats by tracking emergency department visits for disease syndromes of public health interest (e.g. fever and respiratory symptoms). The state also has electronic laboratory reporting and epidemiologic data reporting systems to assure timely and complete reporting of disease cases. The State plan for epidemiologic surge capacity works by cross-training state and local health department staff to follow-up and manage suspected and confirmed cases.

Treatment and medical surge - Hospital Preparedness Program (HPP) funding from DHHS has been used to create hospital surge planning for 900 surge beds across the state outside of New York City. Similar plans are in effect within New York City.

Antiviral and vaccine storage and distribution - Managing pharmaceuticals and response supplies and equipment is an important public health step to take in anticipation of influenza pandemic. New York accomplishes this using its Medical Emergency Response Cache (MERC), integrated with influenza vaccine storage and distribution, and the federal Strategic National Stockpile (SNS). All aspects of stockpile management are addressed including request, receipt, storage, and distribution. The state plan is integrated with local health department plans to accept, manage, distribute and dispense assets to end points (hospitals, clinics, providers).

In addition to these steps, and those mentioned previously, the state has also developed the following preparedness programs and systems:

- Integrated Health Alert and Notification System, (IHANS). The IHANS system allows the Department to send and receive emergency notifications and information messages to all stakeholders through multiple and redundant means of communication, including Blackberry emails, FAX, secure-web postings, and sequential phone calls, including cell phones, pagers, office and home phones. The system was used extensively during the recent H1N1 swine influenza outbreak for providing updates, guidance, risk communications and notices/logistics of important briefings with external partners and internal programmatic staff. During a normal week, the system is used for notifications described above and average usage/numbers of users notified is approximately 50,000/week. During the first 3 weeks of the H1N1 swine influenza response, the system provided over 206 notifications, to a total of 278,377 recipients.
- Disaster recovery site with generator back-up to assure redundant, electronics communications without electric grid power if needed during an emergency.
- Public awareness campaigns to remind the public of common-sense measures they should be taking to prevent exposure to influenza and minimize transmission of illness. The goal of this social marketing campaign is to normalize risk reduction behaviors that would be essential in a pandemic or other respiratory communicable disease outbreak.
- Recruiting and deploying medical volunteers to provide essential health services during disaster or other health emergencies is achieved through ServNY. This program was developed through a multi-entity partnership that includes local health departments, the New York City Department of Health and Mental Hygiene, the Medical Society of the State of New York, Hospital Associations, other medical professional organizations, and the NYS Department of Health

What solutions are available to increase pandemic preparedness at the state and local level that are not dependent on funding?

Two necessary ingredients that money can't buy are effective leadership and clear and coordinated communication. In New York we have been fortunate to have effective leadership during this crisis starting with Governor David A. Paterson. Governor Paterson became involved directly with the daily, sometime twice a day, press briefings during the first two weeks of the outbreak. He also assured that the health department had all resources necessary to respond to the outbreak.

In terms of clear and coordinated communication, the importance of a single message to the public cannot be overstated. For example, a single message coming from many points (meal sites, providers, public service announcements, etc.) that focuses on normalizing behaviors that are essential for prevention, such as covering your mouth when you cough, hand washing, and staying home when you are ill can promote

behaviors critical to preventing infection. Clear and concise guidance to the public health and medical communities is equally important.

Conclusions

A strong state and local health department response is critical to dealing with the current H1N1 outbreak. It will be even more critical in the fall if the disease returns in a more virulent form and mass vaccination of the population is embarked upon. The additional federal funding under discussion will be key to that response. H1N1 is real and it is still with us.

Looking to the future, when H1N1 is gone, State and local health departments still will be critical to the response to future health crises. We are much better prepared than we were even a few short years ago, as the current response to the H1N1 outbreak has shown. However there are gaps in the public health infrastructure that can only be addressed by stable, base funding. I urge Congress to also consider restoring the reduction that has occurred in these funds. The current H1N1 outbreak reminds us how critical the public health safety net is to the collective public safety.

Thank you, Mr. Chairman, and I look forward to your questions.