STATE AND LOCAL PANDEMIC PREPAREDNESS

HEARING

BEFORE THE
COMMITTEE ON OVERSIGHT
AND GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS
FIRST SESSION
MAY 20, 2009

Serial No. 111–33

Printed for the use of the Committee on Oversight and Government Reform

http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE
54–388 PDF
WASHINGTON : 2009
### CONTENTS

Hearing held on May 20, 2009 ................................................................. 1

Statement of:
- Sosin, Daniel M., Director, Coordinating Office for Terrorism Preparedness and Emergency Response, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; Guthrie Birkhead, deputy commissioner for public health, New York State Department of Health; Rex Archer, director of health, Kansas City Health Department; Terry Allan, health commissioner, county of Cuyahoga, OH; and Paul Jarris, executive director, Association of State and Territorial Health Officials .......................................................... 12
  - Allan, Terry .................................................................................... 52
  - Archer, Rex ..................................................................................... 36
  - Birkhead, Guthrie ........................................................................... 25
  - Jarris, Paul ...................................................................................... 58
  - Sosin, Daniel M. ........................................................................... 12

Letters, statements, etc., submitted for the record by:
- Allan, Terry, health commissioner, county of Cuyahoga, OH, prepared statement of ........................................................................................................................... 54
- Archer, Rex, director of health, Kansas City Health Department, prepared statement of ......................................................................................................................... 38
- Birkhead, Guthrie, deputy commissioner for public health, New York State Department of Health, prepared statement of ................................................................. 27
- Issa, Hon. Darrell E., a Representative in Congress from the State of California, prepared statement of ........................................................................................................... 9
- Jarris, Paul, executive director, Association of State and Territorial Health Officials, prepared statement of ................................................................. 60
- Sosin, Daniel M., Director, Coordinating Office for Terrorism Preparedness and Emergency Response, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, prepared statement of ........................................................................................................... 14
- Towns, Chairman Edolphus, a Representative in Congress from the State of New York, prepared statement of ................................................................. 3
STATE AND LOCAL PANDEMIC PREPAREDNESS

WEDNESDAY, MAY 20, 2009

HOUSE OF REPRESENTATIVES,
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, DC.

The committee met, pursuant to notice, at 2:43 p.m., in room 2154, Rayburn House Office Building, Hon. Edolphus Towns (chairman of the committee) presiding.

Present: Representatives Towns, Cummings, Kucinich, Clay, Lynch, Kennedy, Van Hollen, Cuellar, Foster, Issa, Platts, and Bilbray.

Staff present: Jason Powell, counsel and special policy advisor; Kwane Drabo and Katherine Graham, investigators; Peter Fise, staff assistant; Linda Good, deputy chief clerk; Jean Gosa, clerk; Adam Hodge, deputy press secretary; Carla Hultberg, chief clerk; Marc Johnson and Ophelia Rivas, assistant clerks; Jesse McCollum, senior advisor; Jenny Rosenberg, director of communications; Shrita Sterlin, deputy director of communications; Ron Stroman, staff director; Lawrence Brady, minority staff director; Jennifer Safavian, minority chief counsel for oversight and investigations; Dan Blankenburg, minority director of outreach and senior advisor; Adam Fromm, minority chief clerk and Member liaison; Kurt Bardella, minority press secretary; and Ashley Callen, minority counsel.

Chairman Towns. The meeting will come to order. Good afternoon and thank you for being here.

This hearing comes as a dozen schools in New York City are closed due to the H1N1 influenza outbreaks. This hearing also comes as New York City, my hometown, suffers the first H1N1 fatality. I would like to begin this hearing by offering my sincere condolences to the family of Assistant Principal Mitch Wiener and also to the students, faculty, and staff of Intermediate School 238.

With adequate preparation, our Nation responds better to natural emergencies than any other country. However, the 9/11 terror attack and Hurricane Katrina demonstrated the consequences of inadequate planning and preparation. These events have also taught us that while national planning is required, it is the State and local public health departments, safety professionals, and first responders who are the most critical to get help to those in immediate need.

Today’s hearing will look at the ability of States and local communities to maintain an appropriate level of readiness to respond to a pandemic flu, and how Federal authorities can assist them in
mounting a sustained and effective response to a pandemic striking the United States.

Unlike a typical natural disaster such as a hurricane or a wildfire, outbreaks of pandemic flu affect all regions of the country virtually at the same time, making regional cooperation impossible. Also with a pandemic, it is necessary for public health teams to function 24/7 in a three shift pattern for a period of several months. These public health workers must conduct surveillance, lab tests, and treatments while coordinating school closings, surges at hospitals, and the storage and distribution of treatments and vaccines.

Shifting national priorities and the impact of the current economic downturn have led to budget cuts in health departments across the country. According to the National Association of County and City Health Officials, 53 percent of local health departments in the State of New York lost staff in 2008 and 40 percent expect to make more layoffs this year.

While dealing with budget and work force challenges, New York has become a focal point of the current H1N1 outbreak. Nationally, the public health work force has been recently reduced by over 7,000 workers with more reductions expected. Over 85 percent of local health departments reduced their staff in 2008 and 46 percent are expected to lay off more workers in 2009.

A recent and seemingly prophetic GAO report published on February 26, 2009 warns of the continued threat of a pandemic as our national priorities move from pandemic preparedness to the economy and other issues. Current events remind us that pandemics can strike at any time and with little warning. Our communities need to stay ready to respond to such a threat.

I am hopeful that this hearing will shed light on exactly how prepared we are to respond to a pandemic at the State and local level. I am also hopeful that our witnesses will help us discover what we all can do, not just in the Federal Government, to make sure our communities are ready to handle what Mother Nature dishes out. I want to thank all of our witnesses for appearing here today. I look forward to your testimony as well.

At this time, I would like to yield to the ranking member from California, Congressman Issa.

[The prepared statement of Chairman Edolphus Towns follows:]
Good afternoon and thank you all for being here.

This hearing comes as a dozen schools in New York City are closed due to the H1N1 influenza outbreak. This hearing also comes as New York City – my hometown – suffers its first H1N1 fatality. I would like to begin this hearing by offering my sincere condolences to the family of Assistant Principal Mitchell Wiener, and also to the students, faculty, and staff of Intermediate School 238.
With adequate preparation, our nation responds better to natural emergencies than any country on earth. However, the 9/11 terror attacks and Hurricane Katrina demonstrated the consequences of inadequate planning and preparation.

These events have also taught us that, while national planning is required, it is the State and local public health departments, safety professionals, and first responders who are the most critical to get help to those in immediate need.

Today’s hearing will look at the ability of States and local communities to maintain an appropriate level of readiness to respond to a pandemic flu, and how federal authorities can assist them in mounting a sustained and effective response to a pandemic striking the United States.

Unlike a typical natural disaster such as a hurricane or a wildfire, outbreaks of pandemic flu affect all regions of our country virtually at the same time, making regional cooperation impossible. Also, with a pandemic, it is necessary for public
health teams to function 24/7 in a 3 shift pattern for a period of several months. These public health workers must conduct surveillance, lab tests, and treatments while coordinating school closings, surges at hospitals, and the storage and distribution of treatments and vaccines.

Shifting national priorities and the impact of the current economic downturn have lead to budget cuts in health departments across the country. According to the National Association of County and City Health Officials (NACCHO), 53 percent of local health departments in the State of New York lost staff in 2008 and 40 percent expect to make more layoffs this year. While dealing with budget and workforce challenges, New York has become a focal point of the current H1N1 outbreak.

Nationally, the public health workforce has been recently reduced by over 7000 workers with more reductions expected. Over 85 percent of local health departments reduced their staffs in 2008 and 46 percent are expected to lay off more workers in 2009.
A recent and seemingly prophetic GAO report, published on February 26, 2009, warns of the continued threat of a pandemic as our national priorities move from pandemic preparedness to the economy and other issues.

Current events remind us that a pandemic can strike at any time, and with little warning. Our communities need to stay ready to respond to such a threat. I am hopeful that this hearing will shed light on exactly how prepared we are to respond to a pandemic at the State and local level. I am also hopeful that our witnesses will help us discover what we all can do—not just the federal government—to make sure our communities are ready to handle what Mother Nature dishes out.

I want to thank all of our witnesses for appearing here today, and I look forward to hearing their testimony.
Mr. ISSA. Thank you, Mr. Chairman. Thank you for holding this important hearing on State and local pandemic preparedness. I also want to thank our witnesses for taking time out of their busy schedules to testify before the committee. We recognize that in order to prepare for a hearing like this it isn’t just the work of those who will prepare, but in fact is of some of the most important people in our local and State response units.

In the event of an outbreak of pandemic flu, a coordinated response between the Federal, State, and local authorities from the Departments of Homeland Security and Health and Human Services to public health departments, hospitals, and emergency response teams in the smallest of American towns will be key to ensuring the health and safety of all Americans.

The question of whether there will be an outbreak of pandemic flu somewhere in the world of a proportion similar to that of the early 1900’s is not an if but a when. To address threats from SARS and avian influenza, the Bush administration created the National Strategy for Pandemic Influenza in 2005, a comprehensive approach for preparing for, detecting, and responding to a potential pandemic. The Strategy established guidance for Federal, State, and local preparedness and response. Additionally, since 2002 over $9 billion in grants have gone out to the States to strengthen hospital and public health preparedness. This coordinated response strategy is in the midst of having its first test, the outbreak of the H1N1 or swine flu.

As comprehensive as our plans at the Federal level might be, absent proper coordination with State and local governments, any type of emergency response will be lacking. Less than 2 months before the H1N1 outbreak first appeared, GAO reported that more could be done to facilitate coordination between Federal, State, and local governments and the private sector to prepare for a pandemic. Questions also remain about the adequacy of the strategic national stockpile, and how assets such as antivirals and respirators in the stockpile are distributed to the States during an emergency. Today we have an opportunity to learn more about the gaps that may exist and what we can do to address them should this epidemic worsen or before any health emergency.

Additionally, it is clear that we now have a number of financial problems at the Federal, State, and local level. It is inevitable that without an immediate requirement for pandemic flu preparation, States and localities would begin trying to divert funds to other areas. This would be done at perhaps the worst possible time. Even as we speak, the national stockpiles in some areas are being depleted simply because they have reached their expiration.

Only a week ago, I had individuals involved in our anthrax preparedness in my office showing me a table of the expiration of anthrax. In fact, this material is being destroyed. A small amount of it is going to our troops in Iraq and we are thankful for that. But the majority of it in all likelihood will not be used unless health officials begin to find either ways to certify a longer time before expiration or to disburse it to first responders who could, in fact, take advantage today of preparation for a possible anthrax outbreak.

This and many other areas are of importance to this committee. Although there has been good work done since 9/11 to help Amer-
ica be the best it can be in the case of any kind of an emergency—including a man-made one—budget cuts at the Federal, State, and local level are in fact of great concern to us. We have to know if we will maintain our preparedness and even improve it, particularly with regard to our coordination. Or are we saving pennies now to not be able to save lives later?

Thank you, Mr. Chairman, for holding this hearing. I yield back.

[The prepared statement of Hon. Darrell E. Issa follows:]
Thank you Mr. Chairman for holding this hearing on “State and Local Pandemic Preparedness.” I also want to thank the witnesses for taking time out of their busy schedules to testify before the committee.

In the event of an outbreak of pandemic flu, a coordinated response between our federal, state and local authorities - from the Departments of Homeland Security and Health and Human Services to public health departments, hospitals and emergency response teams in the smallest of American towns - will be the key to ensuring the health and safety of the American public.

To address threats from SARS and Avian Influenza, the Bush Administration created the National Strategy for Pandemic Influenza in 2005, a comprehensive approach to preparing for, detecting and responding to a potential pandemic. The strategy established guidance for federal, state and local preparedness and response. Additionally, since 2002, over $9 billion in grants has gone out to states to strengthen hospital and public health preparedness. This coordinated response strategy is in the midst of having its first test—the outbreak of H1N1, or swine flu.

As comprehensive as our plans at the federal level might be, absent proper coordination with state and local governments, any type of emergency response will be lacking. Less than two months before the H1N1 outbreak first appeared, GAO reported that more could be done to facilitate coordination between federal, state and local governments and the private sector to prepare for a pandemic. Questions also remain about the adequacy of the Strategic National Stockpile and how assets, such as anti-virals and respirators, from the Stockpile are distributed to states during an emergency. Today, we have the opportunity to learn more about where the gaps exist, and what can be done to address them should this epidemic worsen, or before the next health emergency.

At a time when states are facing budget shortfalls and local governments are feeling the economic squeeze, public health departments have been hit hard by funding cuts. The consequences of this are serious even in the best of times, when we are not facing an imminent public health emergency. But in the face of a possible flu pandemic, the consequences become disastrous. Having the staff, capacity and resources necessary to carry out a disaster response plan is essential for mitigating loss of life, and also easing the potentially devastating effects that an outbreak of pandemic flu could have on our nation’s economy.
I hope our witnesses will help us determine what Congress can do to ensure the best response possible in the face of a pandemic or other health emergency. We have learned from our past experiences with disaster response that improving communication is critical to coordination with state and local governments. Ensuring that a proper framework exists for interoperable communication and implementing health IT and other technologies to help with the timely collection and dissemination of critical information and management of the Strategic National Stockpile are areas of concern that we need to address now, rather than after a pandemic flu hits the United States, demonstrating our weaknesses and devastating us through our failures.
Chairman Towns. Thank you very much for your statement. I yield 5 minutes to the gentleman from Rhode Island, Patrick Kennedy.

Mr. Kennedy. Thank you, Mr. Chairman. Welcome all of you.

I would like to get into the response to potential pandemic and the necessity to address the psychological response. Obviously, back in the 1940's, 1950's, 1960's there was that civil preparedness. Everybody got under their desks; everyone had a bomb shelter. There was a sense that we needed to get people prepared in the event of war, of World War III. One thing that it did for people is it gave them a sense that they had some control over their situation. In light of these announcements from the 24 hour barrage of the media, a lot of people get anxious and nervous because they don't know what they are supposed to do.

Do you not think that it is necessary for us to—even in light of the fact that now we have terrorism—to have people prepared in this country and to have a plan of action in advance at their workplaces, at their schools, when they are traveling to work, when they are at home, or whatever the situation may be as to how to do, what to do, and things they need to follow in order to respond to a given scenario? Isn't it important that they practice that scenario? Shouldn't we, as a society, encourage that kind of civil preparedness so that there isn't a mass deluge of people to the emergency rooms in this country, which is exactly the opposite of what you want in a kind of situation like this? Would you all comment on that?

Chairman Towns. Would the gentleman yield? We have not sworn them in yet, so hold the question. You have made a note. Then after I swear them in, they will give you an answer. All right?

The gentleman from Texas, Mr. Cuellar.

Mr. Cuellar. Mr. Chairman, I have some questions but I will reserve them so we can get started with the testimony. Thank you.

Chairman Towns. The gentleman from Illinois, Mr. Foster.

Mr. Foster. I thank the chairman for having this. I yield back.

Chairman Towns. Thank you very much.

Now will you please stand. I will swear you in so you can get to Patrick's question.

[Witnesses sworn.]

Chairman Towns. Let the record reflect that all of the witnesses answered in the affirmative. You may be seated.

Why don't we just go right down the line starting with you, Dr. Sosin? We will just come right down the line.
STATEMENT OF DANIEL M. SOSIN, DIRECTOR, COORDINATING OFFICE FOR TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES; GUTHRIE BIRKHEAD, DEPUTY COMMISSIONER FOR PUBLIC HEALTH, NEW YORK STATE DEPARTMENT OF HEALTH; REX ARCHER, DIRECTOR OF HEALTH, KANSAS CITY HEALTH DEPARTMENT; TERRY ALLAN, HEALTH COMMISSIONER, COUNTY OF CUYAHOGA, OH; AND PAUL JARRIS, EXECUTIVE DIRECTOR, ASSOCIATION OF STATE AND TERRITORIAL HEALTH OFFICIALS

Dr. Sosin. Good afternoon, Chairman Towns, Ranking Member Issa, and distinguished members of the committee. I am Dan Sosin, Acting Director of the Coordinating Office for Terrorism Preparedness and Emergency Response from the Centers for Disease Control and Prevention. Thank you for the opportunity to discuss the importance of State and local public health preparedness and response efforts and how we can further our response to public health emergencies in the United States.

Our Nation’s current response to the 2009 novel H1N1 influenza is a direct result of the investments and support from the Congress for State and local public health preparedness and the hard work of Federal, State, and local public health officials across the country. This outbreak has placed huge demands on State and local public health departments to rapidly expand on the ground investigations and response activities, and has highlighted how necessary it is to have a trained work force at the ready.

State and local public health departments are first responders to a wide variety of health threats, many of which never make the evening news. The many duties of public health departments include tracking the source, spread, and severity of health threats; educating the public on how to safeguard their health; and delivering medicines, guidance, and community interventions to lessen disease. Public health departments must have flexible and scalable capacity to respond to all hazards, both to major events such as influenza pandemics and terrorist attacks, and also to more routine events including community outbreaks of infectious diseases, chemical spills, and natural disasters.

The primary Federal support for emergency preparedness and response at the State and local public health department level is CDC’s Public Health Emergency Preparedness Cooperative Agreement. This Cooperative Agreement provides funding and scientific expertise in areas such as surveillance and health monitoring, epidemiology, laboratory testing, countermeasure delivery, incident management, and emergency communications.

In addition, public health departments received supplemental funding for pandemic influenza preparedness from 2006 to 2008 to support practical, community-based approaches to prevent or delay the spread of an influenza pandemic. Activities related to this supplemental funding include planning; community summits to facilitate engagement across Government agencies, business, and non-profit organizations; and exercises to test response capabilities such
as providing antiviral drugs and vaccinating broad segments of the community.

These efforts paid off. During the response to 2009 H1N1 influenza, public health departments at the State and local levels have been working around the clock. Emergency operation centers have been activated and emergency plans put into place across the country. Public health officials started tracking possible cases of H1N1 influenza, tested a large number of samples for the presence of the virus, provided information to communities about how to slow the spread of the virus, and educated the public about precautionary measures they could take.

This education worked. A national survey conducted by the Harvard School of Public Health earlier this month found that two thirds of respondents report that they or someone in their household washed their hands or used hand sanitizer more frequently in response to reports about H1N1 flu. Over half say that they made preparations to stay at home if they or a family member became sick.

Despite the great strides in preparedness and response for pandemic influenza, work remains to be done. More can be done to bolster the public health work force, which is the foundation of effective preparedness and response. Ongoing shortages exist in key occupations such as epidemiology, laboratory science, and public health nursing. It is also a challenge to have enough public health workers at the ready to deliver medicines and medical supplies during an emergency. The Nation’s systems for tracking disease can also be improved. For example, we do not have nationwide electronic systems to automatically manage and share data such as laboratory results that are vital for response efforts.

The path of the 2009 H1N1 outbreak may change. We need to be prepared for possible resurgence of this virus in the fall, potentially in a more virulent form. Complicating matters, other public health incidents that need our attention continue to arise such as food-borne disease outbreaks, floods, wildfires, and soon the hurricane season will be here. We must remain vigilant throughout this and subsequent outbreaks.

At no time in our Nation’s history have we been more prepared to face this kind of challenge. Nevertheless, more work remains to be done. We look forward to working closely with you to continue to prepare the Nation for evolving health threats.

Thank you for the honor to speak before you today. I am happy to answer questions.

[The prepared statement of Dr. Sosin follows:]
Testimony before the Committee on Oversight and Government Reform
U.S. House of Representatives

Strengthening State and Local Public Health Preparedness

Daniel Sosin, M.D., M.P.H., F.A.C.P
Captain, U.S. Public Health Service
Acting Director, Coordinating Office for Terrorism Preparedness and Emergency Response
Centers for Disease Control and Prevention
U.S. Department of Health and Human Services

For Release and Delivery
Expected at 2:00pm
May 20, 2009
Good afternoon Chairman Towns, Ranking Member Issa, and distinguished members of the committee. I am Dr. Dan Sosin, Acting Director of the Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) at the Centers for Disease Control and Prevention (CDC). COTPER coordinates national public health preparedness and response efforts and supports these efforts at the state and local levels.

Thank you for the opportunity to discuss the importance of state and local public health preparedness and response efforts, and how we can further improve our response to public health emergencies in the United States. The nation continues to respond proactively to understand the complexities of the ongoing outbreak of 2009-H1N1 influenza and to implement control measures. Our current response is a direct result of the investments and support from the Congress for state and local public health preparedness, and the hard work of federal, state, and local public health officials across the country.

**Importance of State and Local Public Health Preparedness**

The coordinated response to the 2009-H1N1 outbreak marks a great improvement of the nation’s public health response capabilities from just a few short years ago. Investments in public health preparedness have made a tremendous difference. One of the foundations of public health preparedness is a skilled workforce to respond quickly to new and unexpected threats. This outbreak has placed huge demands on state and local public health departments to rapidly expand on-the-ground investigations and response, and highlighted how necessary it is to have a trained workforce at the ready.
State and local public health departments are first responders to a wide variety of health threats, many of which never make the evening news. The many duties of public health departments include tracking the source, spread, and severity of health threats; assessing the impact of these threats and how the public can be protected; testing laboratory samples to identify the cause of infectious and non-infectious health threats; educating the public on how to safeguard their health; and working with elected officials and others to implement measures to protect the public. Public health departments must have flexible and scalable capacity to respond to both major events such as an influenza pandemic or a terrorist attack, and also to more routine events including community outbreaks of meningitis, measles, pertussis, seasonal influenza, and foodborne disease; chemical spills; and natural disasters such as floods, wildfires, and ice storms.

**CDC’s Support of State and Local Public Health Preparedness**

The primary tool for supporting preparedness and response in public health departments is CDC’s Public Health Emergency Preparedness (PHEP) cooperative agreement. This cooperative agreement provides funding to all 50 states, 4 localities (Chicago, Los Angeles County, New York City, and Washington, D.C.), and 8 U.S. territories and freely associated states. As part of this program, CDC provides public health departments with scientific expertise in areas including surveillance and epidemiology, laboratory testing, countermeasure delivery, incident management, and communication to meet the information needs of the public and health practitioners and support their decision-making. CDC’s longstanding working relationships with state and local public health departments are critical to the success of this program.
During a public health emergency, CDC’s priority is to support response at the state and local levels. CDC works with partners and experts to develop and disseminate science-based recommendations and community guidance so that clinicians, laboratory professionals, and other public health officials will know what to do when an emergency affects their community. Interim recommendations are posted on the CDC website – www.cdc.gov. As more is learned about a health threat, CDC refines these recommendations to reflect evolving knowledge. In addition, CDC communication experts work with their state and local counterparts to develop timely information for the public that fills information gaps, builds trust in the governmental response, and supports good individual and family decisions for safeguarding health.

CDC works closely with state and local public health officials and when needed provides experts in fields such as epidemiology and laboratory science to assist in investigations of health threats. CDC also performs complex laboratory tests, develops new laboratory methods to transfer to state and local public health labs, and provides resources, such as federally stockpiled medical supplies. CDC maintains the nation’s Strategic National Stockpile of medications and supplies that may be needed to meet extreme demands during events like the present 2009-H1N1 influenza outbreak or other public health emergencies. As part of our pandemic preparedness efforts, the U.S. Government has purchased supplies of antiviral drugs for the Strategic National Stockpile, as well as respirators and other personal protective equipment. CDC has also exercised with state and local officials to test distribution and dispensing of these supplies.
Return on Investment in Public Health Preparedness

In 2002, the Institute of Medicine evaluated our national public health system and found outdated technology, an insufficient workforce, antiquated laboratory capacity, and ineffective communication networks. Since then, the nation has made great progress in preparing for public health emergencies. Investments in public health preparedness through the PHEP cooperative agreement have led to achievements such as improved surveillance systems, a greater number of epidemiologists at the state and local levels, more state and local public health laboratories participating in the national Laboratory Response Network, and increased planning and exercising for delivering medicines and medical supplies. In addition, public health departments are now integrated into the national system for managing emergency response efforts (led by the Department of Homeland Security), significantly improving coordination and communication among federal, state, and local response agencies in emergency situations.

Public health departments received supplemental funding for pandemic influenza preparedness from 2006 to 2008 to support practical, community-based approaches to prevent or delay the spread of an influenza pandemic. The supplemental funds built upon the base response capabilities supported by the PHEP cooperative agreement. These targeted efforts started with states reviewing their existing pandemic influenza preparedness status, identifying gaps, and working to fill those gaps. For example, in 2006, influenza surveillance in many states was limited only to the annual influenza season; now all states conduct surveillance year-round. Ongoing influenza surveillance tells us when and where influenza activity is occurring, tracks illness, determines which influenza viruses are circulating, and detects changes in influenza viruses.
The supplemental funding also allowed public health departments to hold community summits to facilitate planning efforts across government agencies, businesses, and non-profit organizations. Public health departments conducted exercises testing response capabilities such as providing antiviral drugs and vaccinating broad segments of their population.

Preparedness in Action – Responding to 2009-H1N1 Influenza Outbreak

As a result of the nation’s investment in public health preparedness, within two short weeks, CDC, working with state and local public health departments, quickly identified a novel virus, determined its genetic characteristics, and compared the genetic composition of specimens from U.S. patients to others around the globe to watch for mutations. Working with our FDA colleagues, CDC also quickly developed and deployed kits for state and local public health laboratories to test for the novel 2009-H1N1 influenza virus. These steps, along with capacity already in place as a result of planning and exercising, allowed for rapid diagnostic and epidemiologic capabilities, leading to a clearer understanding of the transmission and severity of illness caused by this virus. In addition, CDC staff in quarantine stations across the country responded to reports of ill travelers at air, land, and sea ports of entry by assisting with disease control measures, notification and surveillance activities, and health recommendations for passengers.

CDC quickly ramped up its Emergency Operations Center (EOC) and staffed response efforts with experts working 24 hours per day, 7 days per week, facilitating strong coordination with state and local health departments, the HHS Secretary’s Operations Center, and the Department
of Homeland Security. The EOC has coordinated the deployment of more than 1,100 CDC employees to assist in the response either at our headquarters in Atlanta or in the field across the U.S. and internationally. Moving cautiously in the face of a new virus to which U.S. residents lack immunity, rapid human-to-human transmission, and indications of severe disease abroad, our nationwide pandemic influenza plans were executed and federal countermnasures were deployed.

All states and territories received one-quarter of their share of antiviral drugs and personal protective equipment from the Strategic National Stockpile to bolster their response to the 2009-H1N1 influenza outbreak. During this outbreak, CDC demonstrated that we can deliver—and states can accept—critical medicines and medical supplies in preparation for extreme demand.

CDC’s communication specialists and health educators also played a major role in the response. They served as a central location to gather, analyze, validate, and share information from multiple sources. CDC held frequent 2009-H1N1 investigation update calls with clinicians and over 150 public health and medical organizations; we sent secure reports to state public health officials, with over 55,000 officials viewing the reports; and we communicated about the virus with more than 150,000 followers via the CDC Emergency Twitter feed at: http://twitter.com/CDCemergency. In addition, CDC answered more than 30,000 phone and e-mail inquiries on 2009-H1N1 influenza, and kept our 2009-H1N1 website – http://www.cdc.gov/h1n1flu/ – updated with the latest health recommendations. In less than three weeks, the 2009-H1N1 influenza website grew to include more than 200 pages of information. This website proved to be a great resource to the public, as it experienced a high of almost 8 million page views in a single day.
At the state and local levels, public health departments have been working around-the-clock. State emergency operations centers have been activated and emergency plans put into place. Public health officials implemented surveillance for possible cases of 2009-H1N1 influenza and helped inform community decisions about ways to slow the spread of the virus in communities. The nation’s public health laboratories quickly identified and sequenced a new strain of influenza, implemented rapid assays, and validated them for emergency use in a widening network of laboratories across the country. Public health professionals answered questions and educated the public about precautionary measures to prevent the spread of the virus. This education worked. A survey conducted for CDC by the Harvard School of Public Health earlier this month found that two-thirds of respondents report that they or someone in their household has washed their hands or used hand sanitizer more frequently in response to reports about 2009-H1N1 flu, and over half say they have made preparations to stay at home if they or a family member is sick.

Where Do We Go from Here?

Despite the great strides in preparedness and response for pandemic influenza, work remains to be done. The nation’s surveillance and monitoring systems can be improved. For example, we do not have nationwide electronic systems to automatically manage and share data that are vital to response efforts, such as laboratory results. Electronic laboratory systems are operational in pockets of excellence, such as in North Carolina, New York City, and Indianapolis, but these successes need to be built upon across the country.
We can also do more to build on the electronic health information infrastructure to have real-time visibility of the types and prevalence of disease in hospitals across the country. CDC and states have the capabilities needed to do this, but the systems cannot always “communicate” with each other, and coverage is not yet nationwide. We do not have enough information from private physician offices to monitor the frequency of relevant illness. This information is crucial to help communities make decisions, such as whether to close schools, and to help public health officials know where to focus their investigations and efforts to prevent further spread of illness.

At the foundation of effective preparedness and response is a strong public health workforce. Having all the data does not help unless one has the skilled workforce to interpret and act on the data. Dr. Paul Jarris of the Association of State and Territorial Health Officials (ASTHO) recently noted that the public health workforce lost close to 12,000 jobs in the past year. Moreover, in an ASTHO survey conducted in 2007, most states reported workforce shortages in public health professions including epidemiologists, laboratorians, and public health nurses.

During an outbreak of a new virus, epidemiologists need to be on the ground to study how and why the disease is spreading, and how serious the effects are. Many state and local public health departments are limited in the number of epidemiologists able to gather and analyze data quickly and inform response efforts. The challenge of covering new threats versus sustaining other vital health department functions can also compromise the collection of crucial information. Scientists also evaluate potential interventions at the state and local level, such as the value of different treatment options or whether to cancel public events.
Moreover, public health laboratories vary in the sophistication of their testing equipment and information technology. The combination of workforce shortages in laboratory professionals and variability in laboratory capacity can produce bottlenecks in confirming cases and understanding vital characteristics of an outbreak. With stronger laboratory capacity in states, we could accelerate the detection and study of new viruses such as the 2009-H1N1 virus, helping us better understand and respond to emerging health threats. State and local capabilities are also needed for delivering medicines and other supplies to the people who need them. As with other public health department response activities, it is a challenge to have enough public health workers at the ready to deliver medicines and medical supplies during an emergency.

Preparing for the Unexpected

Preparedness and response for pandemic influenza and other health threats requires investment. Ongoing work at the local, state, and federal levels is needed to keep the nation ready.

Complicating matters, other public health incidents that need our attention continue to arise: foodborne disease outbreaks, floods, wildfires, and soon hurricane season will begin. We must be ready for all these threats, especially since unexpected threats could occur simultaneously.

The path of the 2009-H1N1 outbreak may change; and we need to be prepared for a possible resurgence of this virus in the fall, potentially in a more virulent form. We must consider what might be needed if this outbreak deepens in communities across the United States. The Government cannot solve this alone; personal preparedness is key and all of us must take constructive steps. If you are sick, stay home. If children are sick, keep them home from school.
and childcare. Wash your hands. Cough into your sleeve. Taking all of these reasonable measures will help us reduce the number of influenza cases.

There has been tremendous progress in the United States and abroad to prepare for this kind of an outbreak or even a pandemic, and we must sustain progress to be ready for future threats. Congress has provided strong leadership and support for these efforts. Our improved detection and response in the United States is a direct result of this investment. While we must remain vigilant throughout this and subsequent outbreaks, at no time in our nation’s history have we been more prepared to face this kind of challenge. Nevertheless, more work remains to be done. We look forward to working closely with you to continue to prepare the nation for evolving health threats. Thank you for the opportunity to share this information with you today. I am happy to answer any questions.
Chairman Towns. Thank you very much, Dr. Sosin.

Dr. Birkhead, let me just say a few words about you. He is the deputy commissioner for public health for the State of New York, and is an associate professor of epidemiology at the University of Albany School of Public Health. Dr. Birkhead.

STATEMENT OF GUTHRIE BIRKHEAD

Dr. Birkhead. Thank you very much, Chairman Towns, Congressman Issa, and distinguished committee members. Thank you for the opportunity to testify today.

The events of the last month with the dramatic emergence of the H1N1 swine influenza and the equally rapid public health response have proven the value of the investment we have made as a Nation in health emergency preparedness planning in recent years. In a short time we have learned a lot about H1N1, but we still have a lot to learn. Last week it appeared that things were getting back to normal, but the virus has continued to circulate in many communities. A number of schools, as the chairman noted, have been closed in New York City this week due to high rates of absenteeism from H1N1. In my testimony today I will provide a little background about New York’s response and address the committee’s questions.

On April 25th, the New York Governor David Patterson directed the State Health Department to activate its emergency preparedness plan in response to the H1N1 cases in New York State. This plan was developed over a number of years of pandemic planning and involves the collaboration of programs across the Health Department, other State governmental agencies, and local public health departments including the New York City Department of Health.

In terms of the committee’s question on the need for resources and the impact of the economic downturn, two Federal funds sources have played a critical role to the State in developing its current preparedness: the CDC Public Health Preparedness Cooperative Agreement, which Dr. Sosin mentioned, and the DHHS Hospital Preparedness Cooperative Agreement. These funds, I would point out, have been reduced by 40 percent and 24 percent respectively in the last 5 years. In addition, the State did receive pandemic influenza supplemental funds, as Dr. Sosin noted, from 2005 to 2008, but those funds have now also ceased. New York City also receives this same direct funding.

New York State has provided $60 million in the State budget to support State preparedness programming. These funds have been used to purchase supplies and medications for the State’s emergency stockpile, including the supply for New York City. We have purchased the maximum number of antiviral treatment courses allowed under the Federal program and now have 3.1 million treatment courses of antivirals on hand. We also purchased other supplies such as 17,000 ventilators for patients with respiratory failure during a pandemic.

New York has made it a priority to fund local health departments which are key to the local response, the boots on the ground if you will, for local response. We have provided $96 million in State and Federal funds over the last 7 years to our local health
departments. Funding to locals was viewed as so important that the State Health Department absorbed the entire cut in the CDC preparedness grant in recent years in order to keep the county funding whole. However, due to the current fiscal crisis, county funding finally was reduced by almost 40 percent for the remainder of the current contract cycle. Ironically, this occurred on April 1st, just before the H1N1 hit. Many local health departments had to lay off preparedness staff at that point.

In this context, the current discussion of the additional $350 million in one-time Federal funding to State health departments and locals to deal with H1N1 is welcome news, although the exact number should be examined to be sure it is enough when we are clear on what we are being asked to do with it. 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 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 would be unprecedented in scope given the size of the population to be vaccinated. Federal funds will be critical to these efforts, but it is also critical for Congress to look to restoration of the cuts I mentioned in the base public health and hospital preparedness programs, respectively, that States have sustained over the last 5 years. One-time funding cannot provide for ongoing infrastructure needed to address H1N1 and future public health emergencies.

In conclusion, some have suggested that public health may have overreacted 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 about the virus. State Health Department scientists who have spent their careers working on influenza have commented to me that this H1N1 virus represents the biggest shift in influenza viruses in their professional lifetimes.

While initial guidance, for example, to close schools following a single case 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 have to assume the worst and prepare for it. That is what the public health community has done in the past month with H1N1 influenza.

We are much better prepared than we were even a few years ago. However, there are gaps in health preparedness infrastructure that can only be addressed by stable base funding to maintain that infrastructure. I urge Congress to consider restoring those funds.

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

[The prepared statement of Dr. Birkhead follows:]
Testimony By

Guthrie Birkhead, M.D., M.P.H.

Deputy Commissioner

New York State Department of Health

Presented to:

The Committee on Oversight and Government Reform

Wednesday, May 20, 2009

Washington, D.C.
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:
  o laboratory-confirmed influenza hospitalizations;
  o inpatient bed capacity;
  o available ventilators;
  o isolation room capacity;
  o staff resources; and
  o 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.
  o Distributed at the request of the NYC health department, 1500 treatment 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.
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 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.
Chairman Towns. Thank you very much, Dr. Birkhead.

Dr. Rex Archer is the director of health for Kansas City, MO and is a past president of the National Association of County and City Health Officials. Welcome, Dr. Archer.

STATEMENT OF REX ARCHER

Dr. Archer. Good afternoon. Protecting and serving a population of 475,000 in Kansas City, MO is a challenge. We have a 143-year history and tradition of protecting against contagious and communicable diseases.

Approximately 10 years ago in the spring of 1999, I started asking where we were as a Nation at the local public health department level in preparing for bioterrorism or various emerging infectious disease threats. As often happens when you ask those questions, they put you as Chair of a committee. So we have had a committee in NACCHO for 10 years that has been working on these issues. We have made a lot of progress but there is the old saying, the only thing harder than preparing for a disaster is answering the question of why you didn’t. So with that, I believe that our charge is in looking at how we may need to reform some aspects of public health.

Actually, we can borrow a model from fire departments. If you think about a fire and influenza, a fire burns through buildings and influenza burns through people. Fire departments don’t respond with the minimum they need to put out a fire. They come in with extra trucks in our urban areas to put out that fire because you don’t want to chase a fire. They have surge capacity to respond to those types of events.

Ninety-nine percent of the time there aren’t fires going on in our urban fire departments, but 99 percent of the time our local health departments are being challenged with covering all their mandates right now. So we don’t have that surge capacity that we need to be able to respond. As an example, I really believe that if I think about our health department and where we were back in 1999, we were less than 5 percent prepared to manage a Category III pandemic from influenza. We have made tremendous progress, but I think we peaked back in about 2006.

In a sense, we have a perfect storm going on with Federal, State, and local funds being cut. We don’t have the people there to maintain our plans that were developed. The pandemic flu funding was critical for us to develop relationships with our churches and our faith community in general, with our schools, and with our business community. But this exercise that we have been going through recently with this H1N1 has really pointed out that the things that we put in place a few years ago, those communities are now asking us to respond, but the people aren’t there anymore because the funding went away.

As an example, I have 186 staff for serving that almost half a million people, but only 20 of them are really available for this kind of event. They are often funded out of grants, and that is an issue I think we need to look at. We could change the Federal guidance so that people under grants are expected to be cross-trained and prepared for these kinds of issues, whatever the funding source
coming down, so that we would have them and be able to deploy them in these kinds of incidents.

Basically, if we had had to go any longer with this event, we were at the point where we had prepared to stop and reduce our number of restaurant inspections, and to stop some of our contact tracing for sexually transmitted diseases. We were running our staff at 12 to 14 hours a day with half that time even over the weekend. And that was all really voluntary because we don’t pay them overtime. So it really makes it very difficult to manage.

Our response, though, was extremely effective. We activated and CDC was very helpful in communicating with us; the National Public Health Information Coalition was useful. The things that we had were in place. My fear is, though, that we are losing ground.

If I had to really sum up, I want to thank the other local health departments, the State Health Department, and CDC for all of their work. But we really need the staff to keep the relationships. When you develop relationships with school systems, with faith communities, and with businesses but then those people go away, the plan can be there on the shelf but you can’t exercise the plan in an emergency.

Thank you.

[The prepared statement of Dr. Archer follows:]
Good afternoon, Mr. Chairman and Members of the Committee. Thank you for the opportunity to speak with you today. I am Dr. Rex Archer, Director of the Kansas City, Missouri Health Department. I applaud this Committee’s efforts to scrutinize our preparedness efforts. Let me start with a phrase often used in public health, and I’m sure in other venues. “The only thing harder than preparing for a disaster is trying to explain why you didn’t.” There are two overarching issues to consider in viewing the state of preparedness in America today; 1) Knowing what to do; and 2) Being able to do it. Considerable time and funding resources have been expended to help us know what to do. Unfortunately, we are severely under resourced for our needed capacity to do it and have been losing ground the last two to three years.

There’s an old adage, “Don’t chase a fire.” You might ask, how does that apply to preparedness for and response to an influenza pandemic? One of the things that we learned from other public safety partners, fire fighters, is that you don’t chase a fire when you are responding to a fire call. If you send the minimum number of trucks you think you’ll need, or even less than you think you’ll need, then you’re more than likely going to constantly be asking for more trucks. By the time each arrives at the scene, the fire would have spread so that you’re chasing the fire. It’s not a safe or prudent way to fight a fire.

Influenza is like a fire, except instead of burning through dwellings, it burns through people. If, as with the example above, we underestimate the severity of the influenza outbreak, it may be too late to control it. My remarks today are pertinent to a category 3 level influenza pandemic. A lower level pandemic would require fewer resources, but a pandemic level such as in 1918-19 would take considerably more resources.

What types of resources (e.g., human resources, monetary resources, supplies, etc.) and preparedness plans should a State and/or locality have in order to be appropriately prepared to respond to a pandemic?
Staffing and Surge Capacity. CDC’s leadership, communications, and support have been critical during this outbreak of novel H1N1 influenza. I do question whether they could have sustained their quality of service at a Category 3 or higher pandemic. At the local level, the analogy to a fire department is once again helpful. Unlike public health departments, urban fire departments have more substantial staffing and resources so that 99.99% of the time they have substantial surge capacity. They are able to handle an individual fire event, respond to multiple fires in their jurisdiction, and can bring substantial resources to a major emergency within that jurisdiction without drawing on external assistance. Their resources are not already maxed out before the alarm sounds and the entire department’s resources are rarely called on to reply to one alarm. Public health staffs across the country, on the other hand, are typically fully engaged on a daily basis and have little or no surge capacity. It isn’t even included in their budgets. There are rarely dedicated funds that apply or substantial budgeted overtime. In fact, many key staff are not even overtime eligible. The only readiness staff are usually those who assist in the community with creating plans.

Attachment 1 graphically reflects the increasing resource demands as levels of severity and response increase. There are few recurring dollars for readiness planning, either internally or to truly reach our community partners. Our department has zero (0) local funds for this purpose. This creates a real challenge during threats, outbreaks, or epidemics. Although under a threat right now, we must maintain a daily work load of TB contact tracing & treatment, STD management, maternal & child health, food, air quality, nuisance abatement, and multiple other tasks with the same staff who must also transition to the National Incident Management System (NIMS) to manage the public health event. Attachment 2 reflects staffing and staffing availability to address emergencies.

Activation of an Incident Command System (ICS) requires setting up an organizational structure with an incident commander, operations function, planning, logistics, finance/administration, and public information officer (to name a few) components to manage the emergency, as we did in Kansas City on April 27, 2009. The functions and staffing needs differ based on the nature and magnitude of that emergency. Most functions typically utilizes two or more staff times. Public health can rarely do this so they tend to work single 12-hour shifts, with 24/7 pagers for contact outside the 7am to 7pm time window. That can work, but only for one to two weeks at most and for a low-level event that does not include rapid and sustained transmission between humans or a high mortality rate. For each position that is needed during an emergency, the position should be at least three people deep to be able to rotate in that function even if it is a short-term event, meaning the matter of a few days to a week. If it is a longer term event, at least five deep staffing is really needed in each position in order to rotate people out to preserve safety and effectiveness. This also assumes that people can stop doing the daily activities which they regularly manage. Without adequate staffing, event managers can’t run 12-hrs on/12-hrs off (but still on call) for extended periods of time and still manage an event well. If an event is not only potentially long-term but is also an infectious disease, closer to seven people may be needed in each position.

Existing pandemic influenza plans at the Federal, state and local levels should be built on the assumption that up to forty percent of the public health staff will be unable or unwilling to respond due to illness, family members’ illness or fear of infection. In a pandemic, we could not
rally on a mutual aid agreement with another health department because a public health event would affect most jurisdictions at relatively the same time. Public health is a people-to-people profession, wherein technology provides major assistance but cannot manage a pandemic event. Nor can technology maintain relationships with essential partners, businesses, restaurants, schools, nonprofit associations, health care providers, etc. It is still a face to face activity.

Communications and Community Liaison. Ability to respond to public health events is based on solid planning, training, communications, and relationships with community partners. Much of the work we do is based on relationships with community partners such as health related nonprofit organizations, faith based community, and business coalitions. Using the business community as an example, for a larger metropolitan area, at least one full-time position is needed whose main role and responsibility is liaison to the business community for partnering, to assist in preparation for pandemics and other public health challenges. Without this ongoing liaison, private industry has little incentive to provide information or lend technical assistance and resources during an event. This function would also work to have communications systems put in place for rapid communications in an event. This is necessary to reinforce communications through the media, and to create a methodology for providing tailored information to the community group. Businesses need different specific assistance and information during an event, from information we would provide to skilled nursing facilities, restaurants, or to schools.

One of the best ways to manage rumor control in an event is for people to hear a consistent message through the media, through one-on-one individual interactions, discussions with their doctors and medical community, through communication channels at work and their faith community, etc. and through the schools (if they have kids that are involved with school activities); if all those messages are consistent and timely, people are more likely to respond without under or over reacting to the event.

As we all seek to increase capacity and stretch scarce tax dollars, we must consider where we look to obtain necessary resources at least cost. I would suggest we consider variations of the use of outreach workers. Outreach workers embedded or in close association with health departments are a potential gold mine of staffing and assistance during a public health event. Having adequate community outreach workers to be able to work with neighborhood associations for multiple public health purposes can improve health outreach on a daily basis, and can be invaluable in a public health emergency.

A principle of emergency planning is the fact you don’t attempt to build credibility and trust during an emergency, because it is pretty risky to expect that. You must have trust and communication developed before an emergency. If the first time a health department interacts with a community agency or association is during an emergency, there is a substantial credibility issue that can inhibit or slow our ability to contain or stop the event in its tracks. Those interactions must occur on a daily and regular, often weekly basis. Staffing levels in health departments must include time for interaction with schools, churches, businesses, and nonprofit agencies. No one bemoans the fire protector seen sitting outside the fire station or just cleaning the truck because we know they may be called at any minute to respond. Yet we do not consider public health professional staffing patterns with the same relative possibility in mind to plan for and respond to a public health emergency. We can get full use of these staff during non-
emergency circumstances and have full use during new emergencies. Attachment 3 provides a graphic image analogy between limited and full use of resources.

Faith communities provide a challenging and potentially huge resource during emergencies. In a public health emergency, faith communities have a closely aligned mission purpose and offer yet another means of communications and an irreplaceable volunteer base. While individuals are often reluctant to sign on as public health volunteers, congregations are anxious to fulfill a mission as a whole. Liaising with faith leaders in the community is crucial to responding to public health emergencies, especially to fill the void that dedicated public health staff are no longer funded to address. Most importantly, routine contact and interface with faith leaders provides a platform to draw on resources to deal with an emergency. Having an adequate number of liaison positions to also include coordination with parish nurses and other lay leaders and various congregations creates shared vision, facilitates trust and partnership. Routine contact in non-emergent times, working together on community health issues, cements communication and trust, leading to access to a valuable resource to gear up rapidly under a pandemic. If we have not done pre-planning and worked with those communities, the diseases may spread as much or more through those channels as any others.

Volunteers. One of the biggest values in use of monetary resources is having the actual trained staff to respond. Unfortunately, it is also an area that I believe is a real challenge from the monetary resources standpoint because of inadequate funding for the recruiting and training of “volunteers.” This is an area that I think has been doing amazing work on the cheap, but that’s also very dangerous. Medical Reserve Corp (MRC) is an important program, but I feel that ultimately in many communities is likely to, if not fail, at least not meet anywhere near the challenge that’s required. MRC can move professionals from one location to another to meet a localized or regional emergency. In a pandemic, those resources will be needed right at home.

The model needs to be re-considered. We don’t expect our National Guard or military reserves to be all-volunteers, with no pay and with no pay for training or time away from their jobs to obtain that training. Many response agencies pay for staff to cross train to increase versatility in an emergency. There are no such funds in public health to encourage this process. In Kansas City, nearly 55% of our positions are grant funded. That means most of those individuals are paid by a specific grant – that’s what they’re funded to be working on. Our ability to take them away from the grant functions to cross-train them on emergencies is limited. We will use them in an emergency, but with the knowledge there are no funds to pay for their specific functions and it is possible that the granting agency could deny their costs.

In many departments, a substantial number of staff that respond in an emergency are not overtime pay eligible. Their job descriptions emphasize their routine expectations. So, to train them and/or utilize them outside of the normal 8-5 work day means they are truly volunteering. It is also important to remember that all public health staff are already semi-volunteers. They are paid considerably less than the private sector, but choose public health at a lower salary because of their passion for prevention. We should not expect them to “volunteer” even further.

I believe we should be paying our people to train and work in public health emergencies the same way we pay our National Guard members to train for emergencies. Moreover, public
health staffs should be paid to train and work in public health emergencies in the same way we pay our firefighters and law enforcement.

**Public Information.** Another critical emergency response resource is the public information function. As with community credibility and trust, rapport with the public media must be in place during normal working conditions. You must be a credible source, make yourself available to the media, acknowledge the vital role they play in public communications, and have a professional relationship that allows for give and take to keep the public informed.

In smaller jurisdictions, staff performs multiple roles that are not part of their daily routine and for which they are therefore far less prepared or connected to manage media needs in an emergency. Failure to have media connectivity can make things go sour pretty fast in an emergency. In a larger metropolitan area, that takes several FTE’s working full-time with the media, with 24/7 availability with 90% response in less than ten minutes. During daily operations, the media will have interest in restaurant closures, air quality notices of violations, facts on the effects of smoking, and a myriad of other health topics of interest or concern to readers/listeners. Availability provides a means for health education, and ultimately provides a rapport that when an emergency occurs you have the credibility to take the leadership role necessary to assure the story is accurate with the correct tone in communicating with the public.

There also needs to be surge capacity because the number of media contacts goes up exponentially during an event. Smaller communities may not have much experience with the media. When the first case or two occurs, or maybe when the first death is announced, they can basically be crippled or nearly taken off line in their operations because of the number of media that will show up and camp out at their door step. That’s where we need **mutual aid agreements** for regional coverage or ways for federal funding to pay for these public information officers (PIO) to allow us to redeploy public information officer assets to other locations.

This has happened during the current H1N1 experience in the Kansas City area. The media descended on a smaller neighboring health department which did not have a full-time PIO. Their PIO was also their deputy director, who has other operational responsibilities as well during an emergency. We provided assistance in preparation and execution of the news conferences. In the metro area, the initial tone and the way an event is handled with the media from the very beginning, regardless of the jurisdiction, can have major consequences for all jurisdictions in that area as an event unfolds.

**Continuous Planning.** Kansas City Health Department plans include cross pollination with other regional health departments for continuity, consistency, and inter-dependability. Those plans should also relate to plans that other institutions, whether businesses or faith communities, have thought through in regards to a pandemic response.

It’s important to remind people that no plan survives intact the first engagement with the enemy. As a senior military leader, the late President Eisenhower once said, “A plan is nothing, but planning is everything.” A plan is only a blueprint for what you think you will do. Reality dictates potentially multiple paths and you cannot predict which path you will follow, nor can
you predict each scenario you may face. A plan is a consistently changing document that must be revised at least annually based on the factors at hand. A response plan is a living document requiring input and buy-in from the very people who will be there to carry it out when a public health response is needed. The people who developed the plan should be the people who drill the plan, do the" hot washes" after various drills or actual live incidents, and then adjust and correct the plan. In an event, they should be the ones that frequently end up in the boxes of the organizational incident command structure either in the planning function or the logistics function. They frequently perform more than one incident command function. In many areas, particularly in metro areas, there needs to be multiple people who can perform those functions during an event. Sometimes we have only one or two people performing critical, longer term functions, which dooms their part of the emergency support to failure. This doesn’t happen when the plan are made by outside consultants who are not required to respond to the emergency.

National Progress in Preparedness. When I started raising these issues and concerns 10 years ago, there was really no voice talking about this so the National Association of County and City Health Officials launched a committee, that I chaired, to look at bioterrorism and other emergency response issues. That summer of 1998, the CDC shared its first draft strategic plan to look at bioterrorism and chemical terrorism. We’ve come a long way since then. If I had to say where we were in pandemic-like influenza preparedness 10 years ago, I would say that we were probably at 5 percent of needed capacity to deal with a pandemic. In the last 10 years we may have expanded our capacity roughly 500%, so that we’re now at a 25% overall figure in regards to what we need. Attachment 4 provides a visual image of surge capacity (what public health needs) versus knowledge versus preparedness (what public health has). Then again, that’s in reference to a Category 3 level pandemic. With the exception of vaccine production capacity we’re probably pretty close to what we need for a Category 1 pandemic. A few communities are close to what they may need for a Category 2 pandemic, but most have lost capacity since 2006. Unfortunately, many local health departments have lost substantial funding over the last 5-6 years. As an example, we no longer have any general fund support for our department, whereas, we had almost $11M of general fund for health purposes 10 years ago. We believe as a general rule we should have approximately 1 epidemiologist, or disease detective, for every 700 disease reports that come into health departments if we’re going to do adequate tracing of those reports (particularly if a lot of those reports need follow-up information).

Vaccine Availability. The biggest resource that has not been adequately addressed that we need and every local health department needs to fight a pandemic is getting vaccine on board as quickly as possible. We need expanded vaccine production capacity. When everyone in the mall or grocery has been flu vaccinated, then the risk goes down; but even if you received vaccine, but no one else did in the places you go, your risk goes up. If you vaccinate people in schools, universities, and day care settings, the elderly are at less risk from exposure from others. Many individuals whose immune systems are not as strong really rely not just on getting the vaccine themselves but also on others in their community being immunized.

Does Kansas City, Missouri have adequate resources to respond to a public health emergency such as a pandemic?
The answer is yes! But, only to a Category 1 event. As with all other governmental entities, the City of Kansas City, Missouri is challenged with a myriad of fiscally demanding requirements in an environment of scarce resources. Attachment 5 depicts that the specific public health response can not be effective if the foundation under it is crumbling. There has been inadequate recognition at any governmental level of what public health requires to fulfill its role in emergency response in a pandemic. Public health must have adequate numbers of trained staff and staff training. We must have sustained readiness education resources (funds) to reach out to the public, other government agencies, nonprofit groups, businesses, and the faith community so they know what we provide, can provide, and in an emergency, where we fit in managing the event on their behalf. Training of volunteers, equipage, periodic re-training, and orientation is a low cost source of support to help address transportation, traffic control, entry control, and other non-professional staffing needs during a pandemic but there are no funds.

The following describes how my department managed the recent H1N1 outbreak.

Assumption: A Category 1 event will require a different level of resources than a Category 2 or 3 event. Although Kansas City Health Department eventually lowered its classification of the 2009 H1N1 event to a Category 1, the beginning early deaths reported in Mexico had us concerned that this outbreak might rise to a Category 3.

Situation: Most public health services were still offered to the citizens of Kansas City during the event, but even with only 3 confirmed cases, 5 epi linked suspect cases and numerous disease investigations, the Department felt the impact. The numbers alone do not drive response. Nationwide as well as worldwide events now directly impact response preparation and level of effort much sooner.

- Incident Command Staff, Public Health Preparedness Staff and Communicable Disease Staff worked extended hours (10-14 hours/day) and weekends for two weeks.
- Numerous events and activities were cancelled due to:
  i. Diversion of staff to Emergency Response duties
  ii. Public Information requests/demands
  iii. Epidemiological Investigations
  iv. Disease Surveillance specific to H1N1
  v. Increased local, regional and statewide meetings and conference calls
  vi. Warehousing and distribution operations for Strategic National Stockpile (SNS) materials
  vii. Security requirements for transporting, distributing and storing SNS materials became necessary
- 75% of duties scheduled to be performed by at least 20 of the Department’s lead staff had to be suspended for the two-week period.
- When daily public health activities are suspended, diseases will continue to occur. The longer the delay in public health interventions, the greater the potential for disease outbreak.
- Tuberculosis treatment must continue during even the most severe pandemic influenza.
Does Kansas City, Missouri have a detailed preparedness plan for handling such activities as lab testing, epidemiological investigations, treatment, medical surge, and antiviral and vaccination storage and distribution in order to respond to an outbreak?

The Kansas City Health Department has developed a comprehensive plan that addresses Communicable Diseases with an appendix dedicated entirely to Pandemic Influenza. The plan is incorporated into the City's all-hazard Local Emergency Operations Plan as Annex M – Health and Medical Plan and is revised annually based on lessons learned from exercises and real events as well as annual reviews of the Basic Plan, each Appendix and Attachments. We ratcheted up our response level through to Phase 4 during the first week, and slowed activity to sustain operations at Phase I. The Kansas City, Missouri staff is capable of and currently is engaged in epidemiological investigations and could sustain a Category 1 pandemic response, albeit with an ever increasing negative impact to daily functions. Staffing levels in a Category Two pandemic event, however, would be inadequate to the task.

How has the economic downturn affected pandemic preparedness in Kansas City, Missouri?

While the Department has developed a comprehensive response plan and laid the foundation for critical partnerships in carrying out the plan, the funding that made this possible was discontinued in 2008. As the Department has needed to increase its capacity for operations (e.g., inventory control of antivirals obtained from the SNS), the demands on existing staff has significantly increased. Simultaneously, funding for pandemic influenza response was cut from the budget altogether and the Department anticipates a 20% cut in the funding for the Cities Readiness Initiative in the next contract year when it should receive an 100% increase.

The result is that management staff continue to take on more and more responsibilities because there is no one else to do so. We rely on fewer staff to carry our increasing burden. Due to the economic downturn, open positions have not been filled and many have been cut city-wide. With every City department experiencing increased work load with fewer employees, KCHD can depend on less support from those agencies during public health emergencies. In area businesses, if employees are not engaged in direct operations in some way, their jobs are vulnerable. Added management risks are accepted hoping better times return before an emergency occurs. As this means planning positions are eliminated or left vacant, funds are not set aside for planning time, coordination with external partners, training, or exercising of plans has mostly ceased. Businesses in the area have shown less enthusiasm for participation in readiness processes. Business survival is priority one.

"Administrative" functions such as readiness planning which do not directly help make the assembly line run today, are temporarily expendable. On the other hand, during the recent outbreak, local businesses and business coalitions have been eager for information and receptive to CDC and other related templates that will help them take short term steps to sustain operations. Unfortunately, we have provided very limited response due to our own staffing shortage.
What solutions are available to increase pandemic preparedness at the state and local level that are not dependent on funding?

There is no free lunch. One time funds are not enough. We must maintain progress or lose ground. The two-year pandemic preparedness initiative that recently ended began the process of forming partnerships with the faith community, federal agencies, volunteer agencies, businesses, hospitals, and schools. That process brought us a long way toward preparedness with minimal cost. Gaps were identified in planning and resources and many of those gaps were resolved. There are many more that cannot be resolved without monetary investments. Someone must fill the liaison roles to maintain the contact and coordinate execution of those plans. These organizations already have structure and hierarchical organization. They are located in all areas of our jurisdictions. Emphasis should continue with education, training, cooperative planning, table top exercises, and other related minimal investment opportunities.

In closing, I would like to thank you for the opportunity to share our experience and insight today. You asked me to shine some light on challenges we face, and I have tried to do so, however, I would be remiss not to include some positive input as well. In addition to the outstanding efforts of local and state health departments across the nation during the current H1N1 event, the Center for Disease Control and the National Public Health Information Coalition have been vital components in providing valuable information and support for state and local use. Their coordination and partnership helped provide tools and messages needed to communicate timely, accurate, and consistent information to the public.

Rex Archer, M.D., M.P.H.
Director of Health
Kansas City Missouri Health Department
2400 Troost Avenue, Suite 4000
Kansas City, MO 64119
Ph. 816-513-6239
Demand vs. Capacity

Category 3 Pandemic

Category 2 Pandemic

Category 1 Pandemic

Current Capacity

Attachment 1
How Public Health Has Prepared for a Pandemic

What Public Health Has
Fewer Staff
Plans
Some Equipment
Training
Some Partnerships
Warehouse Capability, in infancy stages
Meds/Pod system
(medical or non-medical automated medical screening and dispensing system)
Personal Protective Equipment

What Public Health Still Needs
Funding
CRI funding - Losing 20% in FY 2010
Lost Pan Flu funding - 2008
PHP funding level for last 3 years (costs continue to rise)
Equipment Maintenance
Continued education for staff
Partnerships Maintained
Outreach to
faith communities, businesses and schools
Volunteers
Phone banks
Auxiliary staff

Public Health continues to plan for the unknown
Assuring Public Health Infrastructure

CDC

Public Health Response
- Biodefense
- Other Health Threats

Basic Infrastructure
- Communication and Information Systems
- Workforce Development Systems
- Organizational Capacity Standards

Essential Capabilities
- Surveillance
- Laboratory Practice
- Disease Investigations
Chairman TOWNS. Thank you very much.

I would like to yield to the gentleman from Ohio, Mr. Kucinich, to introduce the next witness.

Mr. KUCINICH. Thank you very much, Mr. Chairman. It is my pleasure to introduce Mr. Terry Allan. Mr. Allan is the health commissioner for Cuyahoga County, in which my constituency of the 10th district is included. He is the commissioner for the Cuyahoga County Board of Health. The Cuyahoga County Board of Health is the local public health authority for over 886,000 citizens and 57 greater Cleveland communities. So he has a lot of responsibilities. Mr. Allan is also president-elect of the Association of Ohio Health Commissioners and the former regional coordinator for Public Health Preparedness in the northeast region of Ohio.

Thank you very much, Mr. Chairman. It is a pleasure to have you here, Mr. Allan, for your testimony to our committee.

Chairman TOWNS. Thank you very much. We yield him 5 minutes.

STATEMENT OF TERRY ALLAN

Mr. ALLAN. Mr. Chairman, Ranking Member Issa, and Congressman Kucinich, thank you for the introduction, and members of the committee, we appreciate the time to talk to you today.

I want to give you my perspective from greater Cleveland on what we know and what we still need to do from our experience over the last several weeks. The H1N1 response really has been a live exercise testing our capabilities and illuminating our gaps and challenges that we still have ahead of us as we really prepare for what is to come, the unknowns for the coming flu season this fall.

Funding cuts have been mentioned. Close to 40 percent have effected Ohio as well as local health departments. Certainly, as we look at the State and local funding challenges that everyone is facing, we expect those further cuts to be on the horizon. That is very concerning to us just as we acknowledge our capabilities, which I will talk a little bit about, but also illuminate our challenges.

In greater Cleveland, we have been working hard for many years, working with our partners throughout the region on our 24/7 response capability and our comprehensive planning; establishing strong relationships with the first responder community, a regional cooperation with mutual aid to assist across that five county region that Congressman Kucinich mentioned; improving our ability to determine the distribution and determinants of disease, our epidemiology capacity; improving the ability to communicate with the public, which was very critical so that they had a trusted communication point during this event; and developing a working knowledge of incident command structure that police and fire have been working with for many years.

In terms of our gaps, we still have a lot of work to do around volunteer recruitment, training, and retention. Right now in the greater Cleveland area, we have about 5,000 volunteers. We need closer to 8,500. In our five county region, we need about 15,000 volunteers. They need to be trained; they need to be oriented; and they need to be made available very quickly to assist us if we need to ramp up.
Our regional distributions of antivirals—which very much came to point here in recent weeks to distribute those to our community partners, to hospitals, and to perhaps the indigent folks who have nowhere else to receive these services—are critical. So are alternate care site planning when hospitals are full, surge capacity in terms of staffing that Dr. Archer mentioned, and social distancing plans.

We may need to be telling folks if things were to get very severe, in the worst of circumstances, to stay home from school, to stay home from work, to telecommute. The kids would then need to stay away from the mall so we are not in a position of passing the virus around. Vulnerable populations, the poor and disabled, are particularly at risk. We need local surveillance capacity to be able to identify early on when an outbreak may hit your community.

In my view, public health is an essential partner and must be viewed as part of the national defense system. Acquiring stable and adequate funding for public health is absolutely critical if we are going to be available and reliable for the public in a way that they have a right to expect. Because of the budget cuts, we are particularly concerned and hopeful at the same time about the $350 million that was talked about in supplemental money that the House was gracious enough to put into the budget. We are hopeful that it will be part of a conference discussion.

In terms of personal preparedness that Congressman Kennedy spoke of, we have suffered nationally, we believe, from pan-flu paralysis with the general public becoming fatigued from our calls. They have an emergency plan for your community. Our H1N1 response is an opportunity to develop a culture of preparedness. Folks are paying attention right now, so every family knows what to do.

We need resources now, because as of August 2009, our pandemic flu funding will be zeroed out. So, it is our hope that we will have the opportunity to continue these efforts. It really is about people. It is people on the ground that are there to respond day in and day out to assure the public and to limit the scope and magnitude of an outbreak.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Allan follows:]
Statement of the
Cuyahoga County Board of Health
5550 Venture Drive
Parma, OH 44130

Submitted by Terry Allan, MPH, Health Commissioner
to the
Committee on Oversight and Government Reform
United States House of Representatives

May 20, 2009, 2pm

Opening Statement

Mr. Chairman and members of the committee, I very much appreciate the opportunity to testify today, along with my public health colleagues, on the resource constraints affecting the readiness of States and localities to respond to future pandemics. My name is Terry Allan, and I'm the Health Commissioner at the Cuyahoga County Board of Health. We serve as the public health authority for over 886,000 Greater Cleveland residents in 57 communities. I have been with the Board for 20 years and have served as the health commissioner since 2004. From 2002 to 2004, I was the Regional Coordinator for Public Health Preparedness for five counties in the Northeast Region of Ohio, occupied by about 2 million residents.

There are many lessons to be learned with the emergence of the 2009 H1N1 Influenza A virus in Mexico and the United States. It presents a critical opportunity to evaluate local public health preparedness and response capacity, illuminating our obvious strengths and clear challenges that face us as we prepare for the coming flu season and beyond. I'd like to briefly share some of our local progress and quantify the impact of funding cuts on meeting our preparedness goals and rightful public expectations.

Prior to 9/11, public health in many locales had only intermittent involvement with the emergency response community and might assist in the response to extreme heat or cold events, flooding, or other natural disasters. Since that time, public health has become an integral partner in all-hazards community preparedness, actively preparing and/or responding to emerging issues like anthrax, smallpox, avian influenza and now H1N1. We have developed strong relationships with safety forces like police and fire departments and have advanced existing relationships with hospitals, EMS, and our local emergency management agencies. We have bolstered our 24/7 response capabilities, built valuable epidemiologic capacity to understand the distribution and determinants of disease outbreaks, worked on a regional basis to advance our response and exercise plans, established mutual aid agreements across multiple political subdivisions and developed a functional understanding of incident command and our role in the National Response Framework.

Serving the cities, villages and townships of Cuyahoga County since 1919

THIS AGENCY IS AN EQUAL PROVIDER OF SERVICES AND AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER CIVIL RIGHTS ACT 1964
Much work is left to be done. We need to substantially augment and in some cases, initiate and integrate local plans for 1) volunteer recruitment, training and retention; 2) alternate care sites and surge capacity to assist people outside of the hospital setting if their resources are exceeded; 3) specific provisions for vulnerable populations like the indigent or disabled; 4) antiviral distribution; 5) social distancing strategies to limit how we interact with one another to reduce influenza transmission and 6) local biosurveillance for early detection of outbreaks.

Unfortunately, all of these important advances and identified needs are at risk of being lost or never addressed because of serial funding cuts. Since 2005, community funding for public health preparedness in Cuyahoga County, including the City of Cleveland, has dropped from a high of $2.2 million to the current level of $1.3 million as the public's concern about a potential influenza pandemic has waned. Notably, funds for pandemic preparedness have been zeroed out in the coming grant year, which begins in August of 2009. This amounts to a 36% cut, with the likelihood of further cuts on the horizon. Over time, this trend is eroding our existing capacity and preventing us from developing the ability to meet our required target capabilities for local public health response. A compounding disadvantage emerges in the increasing list of local expectations in the face of these losses. Reversing this trend and sustaining funding levels for public health emergency preparedness must become a national priority.

In order to meet our obligations to the public, state and local health departments need an adequate and stable funding source to assure that we can prepare, detect and respond to a future pandemic. Without this assurance, the collective response capacity of the local public health system will be fractured and widely variable in urban areas and may be particularly pronounced in rural areas in Ohio and elsewhere. About 5 years ago, through national preparedness funding, the local public health system in Ohio proudly established a benchmark of one epidemiologist per 200,000 population. Given our funding trends, this is clearly an unsustainable benchmark. These resources were built over time and have created a well of talent and experience that will be lost, given the current course.

I believe that our initial local response was robust and decisive in combating H1N1, but the network of local public health agencies would have been severely outgunned had H1N1 exhibited the severity characteristics of the 1918 pandemic. The local public health system must be considered part of our national defense system: a valuable asset in the prevention of disease, promotion of good health and protection of our citizens. Ultimately, we need to have adequate staffing in place to prepare and reliably respond to meet national expectations at the state and local level. This will require a long term investment in states and in the existing network of approximately 3,000 local public health agencies across the United States.
Many local health departments were formally alerted about the H1N1 outbreak the late evening of Friday, April 24th. On Saturday, April 25th, we immediately alerted our community preparedness partners through our Northeast Ohio Health Alert Network and became aware of a suspect case of H1N1 in the City of Elyria, Ohio, located in Lorain County, about 15 miles from downtown Cleveland. By 8:30 a.m. on Sunday, April 26th, we were informed that the Elyria case was confirmed for H1N1 prior to Secretary Napolitano declaring a public health emergency at the White House that same day. Consequently, we prepared a press release (to be released first thing Monday morning) on the situation in Elyria and provided further educational guidance for the public.

On Monday, April 27th, we met with the Health and Medical Subcommittee of the Urban Area Working Group, a group of local preparedness leaders including police and fire department leadership, emergency coordinators from our area hospitals, infectious disease physicians, the Cuyahoga County Coroner, the Cuyahoga County Emergency Manager and local public health leadership. A decision was made to activate a 24/7 City of Cleveland/Cuyahoga County combined Emergency Operations Center (EOC) housed at the City of Cleveland EOC to begin assuring clear and unified messaging and to track the progress of and response to the outbreak. Additionally, our public information officer developed fact sheets and informational links to CDC on our website. Myself and Matt Carroll, the Director of the Cleveland Department of Public Health, began rotating in the role of incident commander. Twice daily conference calls were held with community partners from hospitals, nursing homes, safety forces, schools and universities, daycares, and businesses. A regular email briefing was established for local elected officials.

In short order, we had activated our response plans, mobilized staff for surge capacity, assured continuity of normal daily operations at the health department, and established our link to the media and the public to provide trusted information. These actions were evidence that public health had formally integrated as an essential partner in our community emergency response system.

Dispelling Public Fears and Addressing School Closures

Multiple media briefings were held to assure that the most current and reliable information on the outbreak was coming from public health through the EOC. We worked to dispel unfounded fears, identified and tracked suspect and probable cases and their close contacts and dispelled a wide range of false rumors that were circulating throughout many communities. We found that public health became the trusted source for providing clear and current information on the status of the outbreak. With some schools in the area unilaterally closing because of fears about ill students or faculty, we advised and immediately corrected false information and assured that CDC school closure guidelines would be followed. The public quickly came to rely on the local health departments to gauge how serious the developing outbreak was and we continuously recited the mantra that the situation was cause for concern, but not alarm.
believe that these extensive efforts had an important effect of reducing panic and anxiety in the community; knowledge became a source of power for the community.

**Funding Cuts Impede and/or Prohibit the Completion of Preparedness Plans**

As we reflect on the last several weeks, we are also looking ahead to the Fall of 2009 and beyond, not knowing if the virus will shift or drift, to continue the essential work of preparedness to protect the public. However, our “To Do” list is still long and the resource outlook is currently not commensurate. If funding levels continue to drop as anticipated, we will be unable to advance our detection, preparedness and response capacity to the level that will be necessary if a more severe virus were to emerge in the United States or elsewhere in the world. Advancing the volunteer recruitment, training and retention, planning for alternate care sites and addressing surge capacity to serve people outside of the hospital setting, protecting our most vulnerable citizens, advancing antiviral distribution and social distancing plans and augmenting early outbreak detection systems are all important capabilities that public health must accomplish. A relatively modest and sustained increase in funding at the state and local level can reap huge public health preparedness dividends now and into the future.

Now is time to recognize and honor the role of the public health system as an integral component to our national defense system. In the face of a virulent pandemic, the consequences might otherwise be quite severe.

Thank you
Chairman Towns. Thank you very much.

Dr. Paul Jarris is a family physician currently serving as the executive director of the Association of State and Territorial Health Officials. He is also the former commissioner of health for the State of Vermont. Doctor, you have 5 minutes.

STATEMENT OF PAUL JARRIS

Dr. JARRIS. Thank you, Mr. Chairman, Ranking Member Issa, and other Congressmen for this opportunity to speak before you. I have submitted written testimony to you, but rather than repeating some of what has been said before, I think I will try to emphasize some points.

Chairman Towns. Your entire statement will be included in the record.

Dr. JARRIS. Thank you. There are a couple of points that I think are worth stressing. As much as we would like to believe that this episode is over, this episode is not over in the United States. We still face a novel influenza that is spreading rapidly in this country. It is in 48 States as well as the District of Columbia. We have confirmed in the laboratory 5,700 ill individuals but there are probably more along the order of 100,000 Americans who have been made ill so far.

We frequently hear the comment that this is just like another seasonal influenza. It simply is not. The average age of the ill individual with this outbreak right now is 19. The average age of an individual in the intensive care unit with this illness is 23. That is not a seasonal influenza. Seasonal influenzas also do not occur this time of year. So this is a novel and new virus. We simply do not understand it yet.

We do not know what is going to happen in the fall. I would argue that if we are lucky, this will come back in the fall, if it goes away in the summer, at the same level of virulence. But it would not be responsible for us to not keep history in mind and recognize that in 1918 that second wave was far more severe. In 1957 in Japan, that influenza came back with a second wave that was much more severe. So history would mandate that we are prepared in the fall for what comes at us.

I do believe that we can be very proud and your committee can be very proud of the performance of the Government. Dr. Sosin, Dr. Besser, and all of Health and Human Services in the Federal Government should be commended on the way this was organized so that the Federal Government, State governments, and local governments came together as a single public health entity to respond to the American people. The Harvard survey is testament to that when 80 percent of the public reports that they are satisfied with the governmental response and 88 percent say that they are satisfied with the information they have gotten.

I think we all wish we could go home. It is not going to get any better than that. But we still have many challenges yet to face. Now we did, based on the investments Congress made, plan and exercise these plans over the past number of years. Our response to date has been quite good.

But as we all know, plans do not survive the first contact. Many assumptions in our plans were incorrect. We assumed that this
virus would start overseas, that we would have a month to 2 months to figure out how transmissible this virus was and how severe it was. Well, it didn't. It began in North America so we had to activate plans without really understanding the virus and how transmissible and how severe it was. We don't fully understand that right now. But we were able to adopt and modify what we were doing and I think provide a very good response.

As you have heard the other witnesses testify, there is a big difference between a 3-week response, which we have just gone through, and a full epidemic or pandemic response which may be 6 months or more. We simply cannot sustain the level of response we have had in this Nation to date. As was mentioned, we do not have the work force. We don't have the depth on the bench. It is only humanly possible to work two to three shifts for so long with a work force that has been cut by 11,000 in the past year and likely will be cut by 11,000 more at the local and State level. It is not humanly possible to maintain this response. That is why we need your help.

As was mentioned before, we have seen significant cuts in State and local preparedness funding that comes through the CDC. We have seen significant cuts in the hospital preparedness money which comes out of ASPER in HHS. In addition, we have had no pandemic planning funding at the State and local levels since August 2008. So what you are seeing is a response but there is no fuel in the tank. We are asking you please to assist the States and the locals to mount a response for what may come at us in the fall.

Very quickly, I will give you one example of what we have to prepare for. We are likely to develop a pandemic influenza vaccine. This novel H1N1 vaccine for the fall, it likely will require two doses. That is 600 million vaccinations we may have to give in the fall on top of the usual 80 to 100 million doses we give for seasonal influenza. So we are talking about potentially 700 million vaccinations to give in the fall with a work force that is diminished. The complexity of that, not only the cost of it but the complexity of administering that to Americans in a timely fashion, is tremendous.

The vaccine will roll off the production line at 15,000 to 20,000 doses a week. It will be distributed by the Federal Government to the States on a per capita basis. So it will be dribbling in over a number of months and we have to go down a priority list to protect the first responders, the health care providers, and others. So as one example, that is the level of complexity we face and that is the need. We need resources for the fall.

I would be happy to answer questions. I apologize for going over time.

[The prepared statement of Dr. Jarris follows:]
Testimony before the House of Representatives
Committee on Oversight and Government Reform

Paul E Jarris, MD, MBA
Executive Director
Association of State and Territorial Health Officials

2231 Crystal Drive, Suite 450
Arlington, VA 22202

May 20, 2009
2:00 pm
Good afternoon, Chairman Towns, Ranking Member Issa and members of the Committee. Thank you for inviting me to testify before your Committee to update you on the state and territorial response to the novel H1N1 influenza A epidemic and the readiness of health agencies for a potential future influenza pandemic.

I am Dr. Paul Jarris, Executive Director of the Association of State and Territorial Health Officials (ASTHO). ASTHO is the national nonprofit organization representing the state and territorial public health agencies of the United States, the U.S. Territories, and the District of Columbia. ASTHO Members, the chief health officials of these jurisdictions, are dedicated to formulating and influencing sound public health policy and to assuring excellence in state-based public health practice.

A Strong Governmental Public Health System at Work

The Governmental public health system (federal, state, territorial, and local) is front and center as we prepare for, respond to, and recover from disease outbreaks including pandemics. States and territories have made significant progress in pandemic planning as evidenced by our effective response to the ongoing H1N1 epidemic. A recent Harvard School of Public Health survey showed that more than 80 percent of Americans are satisfied with the way public health officials have managed the response to the H1N1 outbreak. Eighty-eight percent of Americans are satisfied with the information public health officials provided to them.

Despite the challenges of the current economy, federal, state, territorial, and local governments have come together to serve the American people as a unified enterprise. During the last three weeks, the Centers for Disease Control and Prevention (CDC), ASTHO, state, territorial, and local public health departments have stood up their emergency operations centers. ASTHO detailed our preparedness specialists to the CDC’s Emergency Operations Center in Atlanta to serve as liaison officers at their State and Local Desk. CDC, ASTHO and the National Association of County and City Health Officials moderated daily conference calls with state and local public health leadership to maintain real time situational awareness. ASTHO also facilitated regular regional conference calls between the states and their federal regional representatives to tackle and coordinate vexing planning and response issues. On a daily basis we shared best practices among states for the benefit and use of every agency. ASTHO
provided a critical interface between state and territorial response and federal planning and coordination.

State and Territorial Public Health Preparedness

In FY 2006, Congress invested $600 million in state and local pandemic influenza supplemental funding to support three years of preparedness activities. This funding was fully expended in August 2008. The federal investment enabled state and territorial health departments to lead the development of comprehensive pandemic influenza operational plans. Health agencies have partnered with agriculture, homeland security and emergency management, education, justice, labor, transportation, treasury and commerce, and other state and federal agencies to drill, revise, and refine plans to meet the goal of continuous state operations during a pandemic or other disaster.

Since December 2005, when the first emergency pandemic influenza supplemental was appropriated, state and territorial public health agencies have developed and tested antiviral drug distribution plans; purchased medical and other response supplies including antivirals, ventilators, respirators, laboratory equipment, and personal protective equipment; and exercised their plans for mass vaccination. At this moment, states and territories are carefully considering, and carrying out community mitigation strategies such as closing schools as recommended by federal guidance.

Prior to the current outbreak, all states and territories had their pandemic influenza operational plans assessed by a team of U.S. Government experts and their findings were reported to the Homeland Security Council. The comprehensive, effective, and integrated response with the CDC to H1N1 is a result of the investment Congress made in state and territorial public health preparedness.

State and Territorial H1N1 Response

State and territorial health agencies are on the front line of our nation’s response to this novel influenza epidemic. Disease investigators are on the ground 24 hours a day, 7 days a week to detect infectious disease outbreaks and our state laboratories stand ready to test specimens to identify new and seasonal
influenza strains. Our top priority is to protect the public’s health, no matter what the situation. State and territorial public health officials prepare for and respond to all health threats including infectious disease outbreaks, natural or man-made disasters, and food borne illnesses. Public health agencies also understand the complex and devastating effects of pandemics.

However, the current epidemic is occurring during a period of economic hardship. State, territorial, and local health departments are suffering the same effects of the current recession as other sectors of the economy. State, county and municipal budget shortfalls have resulted in the loss of over 11,000 public health workers in the past year, and additional job losses are expected during the remainder of this year. As more public health professionals are laid off to balance state and local budgets, health departments will become even more strained in the fall, should H1N1 turn out to be more lethal. There is no dedicated public health emergency reserve fund states can draw from to pay for the response.

We need to build our workforce now so that we can sustain the current response and prepare for the future. Health departments are stretched to the limit working long and extra shifts, while remaining ever vigilant to handle other emergencies as they occur. State, territorial and local health departments do not have the personnel and financial capital to continue this level of response over a long period. Right now these health departments must also be prepared to respond to other public health threats arising from flooding, hurricanes, tornadoses, and wildfires. Sustained investment is needed. But, federal public health emergency preparedness funding for states and localities declined approximately 25 percent since 2005 and state budget cuts prevent us from absorbing these losses.

Further, state and territorial health departments are committed to carrying out mandated essential functions such as conducting restaurant inspections, maintaining a safe water supply, providing maternal and child health services, screening newborns, giving immunizations, and numerous other activities critical to the public’s health. Even before the outbreak, over 60 percent of health departments had reduced public health services, and 30 percent had eliminated entire programs. Additional reductions may be required to balance state budgets. These cuts cannot continue while more and more people in the U.S. are relying on our health departments to provide critical, front line services to protect their health.
It is essential that the state and local public health workforce and infrastructure be reinforced to enable enhanced influenza surveillance, case detection, epidemiological investigation, laboratory testing, medical surge capacity, fatality management, and disease control measures in the event that this novel virus returns with increased deadliness in the fall of 2009, as occurred in 1918. The federal government can purchase enormous quantities of new H1N1 vaccine, but without the public health workforce to distribute and administer it, the vaccine will do no good.

Previous federal investments made possible the effective federal, state, territorial, and local response to H1N1 virus over the last several weeks. Nevertheless, gaps remain and existing resources dedicated to preparedness are insufficient to carry on our response to this novel virus. The current epidemic is stressing our diminished public health workforce after only three weeks of response. A severe epidemic or pandemic will require a three to six month mobilization. Sustaining a response of this magnitude is not possible given the current human and financial resources available to state, territorial, and local public health agencies. Moreover, during the fall, public health will need enhanced surveillance to detect influenza outbreaks and sort out illness caused by seasonal influenza versus illness caused by a return of the novel H1N1 virus.

We must be prepared to sustain a public health response should we face a pandemic with the severity and duration that would require rapid dispensing of antivirals to millions of sick or exposed individuals, launching a national vaccine campaign for hundreds of millions of Americans, and providing professional medical attention in the face of an overwhelmed health care system.

Allow me to mention three key areas where we can improve our readiness:

Disease Surveillance – We need more epidemiologists on the ground to identify outbreaks, monitor the spread of a disease, and inform our response as the outbreak continues. We recommend investing in standardized electronic reporting systems and centralized databases to analyze and respond to geographically widespread outbreaks. It is essential that we have real time capabilities to monitor the prevalence of diseases and identify which populations are most susceptible to certain illnesses whether it is pregnant mothers, children, young adults, or the elderly.
Laboratory Capacity – During our response, public health laboratories quickly exceeded testing capacity. Not only were there not enough laboratorians to maintain three shifts seven days a week, but states also needed additional reagents and other equipment to run the large number of tests required throughout this outbreak. Going forward state health laboratories would benefit from increased investment in electronic health information infrastructure. We recommend increasing our nation’s investment in bi-directional data exchange of laboratory test orders and results with CDC. Our country would also benefit from interoperable regional electronic laboratory information sharing networks among state laboratories and health departments. Stronger laboratory capacity will speed our detection of potential cases and enhance our understanding of the characteristics of novel viruses.

Public Health Nursing – State and territorial public health nurses make up 25 percent of a health department’s workforce. They are a critical component of our public health infrastructure providing expert advice and guidance to the public and health professionals. Public health nurses frequently oversee crucial emergency response activities such as the mobilization of mass immunization clinics. They are instrumental in overseeing and training volunteer nurses on the safe administration of antivirals and vaccines which includes properly screening individuals for contraindications to medicines or vaccines. During emergencies, we rely on our public health nurses to ensure that vaccines are distributed efficiently, administered correctly, and are properly handled (i.e. refrigerated). We applaud Congress for including funding for nursing workforce development programs in the American Recovery and Reinvestment Act of 2009; however, additional investments are needed to reduce the serious public health nursing shortage in our state, territorial, and local health departments.

We cannot be complacent. We cannot let our guard down. We must redouble our investment in the nation’s public health system. Protecting America’s health and effectively responding to emergencies, whether pandemics or terrorist attacks, requires sustained commitment and financial support.
Chairman TOWNS. Thank you. Let me thank all of you for your testimony.

Let me say that is sort of frightening when you think about it in those terms and then with you saying that you are losing staff. It seems to me that you should be adding staff at this time.

Dr. Birkhead, Dr. Archer, Mr. Allan, your States have created a preparedness plan and you submitted it to CDC. Are your States currently able to carry out those plans as submitted? Dr. Birkhead.

Dr. Birkhead. Yes. I think, as Dr. Jarris said, we have been carrying them out for the last 3 weeks. It is fortunate that we had gone through that planning process. We have actually implemented the plans that we developed. But I think the point is how long it is sustainable.

We at the State level have had to pull staff from many different areas of the Health Department off of their regular duties. For a couple weeks there we were working 7 days a week in 18 hour shifts. The sustainability of that is hard to imagine for much longer. Then, adding on to that the vaccination program which may come about this fall, I think there is a huge need. So we are able to maintain what has happened so far but I think, as Dr. Jarris aptly said, the tank is empty at this point. We need to refuel.

Chairman TOWNS. Thank you, Dr. Birkhead. Dr. Archer.

Dr. Archer. In 2006 we were better able to. We had more staffing and had funding for some of the relationships on the plan. It is one thing to say you are going to interact with your business community because of these social distancing and other issues—and we had done training—but it is another thing then to support that if you don't have the people there anymore.

So I would say that I am afraid that many local health departments across the country have lost ground in the last few years. Yes, we can do almost anything for 2 or 3 weeks but we got to the point of exhaustion just during this incident.

Chairman TOWNS. Yes, OK. Mr. Allan.

Mr. Allan. Mr. Chairman, I think that we know what to do. To reiterate what has just been said, we just don't have the horses to do it over an extended period of time. If we had a higher severity situation where we had a lot more cases, a more severe disease, more contact tracing, and were dealing with a lot more fear—which was already substantial even in this circumstance—compounded by the confluence of things that Dr. Birkhead mentioned around a fall vaccination campaign, we are going to be severely strapped. We won't be able to do it.

Chairman TOWNS. Right. You know, it is not really making a lot of sense to have a plan if you can't implement it, is it?

Dr. Archer. Well, just think about regular seasonal influenza. We can't vaccinate one third of our population in a regular year when we have a year to prepare and plan for it.

Chairman TOWNS. Let me ask you this: Are you asking for money? Quite often people will need it but they won't ask for it. Are you asking for additional money?

Dr. Birkhead. Well, in my testimony I asked for two things. I supported the idea of the one-time $350 million. That is going to be desperately needed if we are going to vaccinate this fall. But I also asked for restoration of the cuts that have occurred in the
CDC and HHS hospital funding programs over the last 5 years. That is partly why we are at reduced levels at this point.

Chairman TOWNS. Dr. Archer.

Dr. ARCHER. Sometimes public health is not very good at asking for funds. We try to do what we can, and you are correct. We made a mistake, I believe, when we asked originally after 9/11 in the anthrax attacks for just under $1 billion. The country deserves a level of protection much more than that to truly have the infrastructure to not only protect against these things but also when our health care costs are going out of sight.

Our population in this country is down; 30 or 40 nations are above us in regard to life expectancy because we are not investing in prevention. So if we put the systems in place to truly work with our communities to prevent illness on a day-to-day basis, that we should be investing in. We could also turn that structure in these kinds of emergencies and we would have those relationships. So I actually would go out on a limb and say we need 5 to 10 times what we are currently getting to really make a big difference in the population's health.

Chairman TOWNS. Thank you. Mr. Allan.

Mr. ALLAN. Thank you, Mr. Chairman. I think that as Dr. Archer said, public health isn't very good at asking. Often we just we are out there trying to help the least among us. Certainly I am concerned about these vulnerable populations, the disabled and the poor, that are most susceptible often to disease.

I think that the stability of funding is important. We see sort of a seesaw effect and it is difficult to maintain staff to do whatever it is that needs to be done. It is not really about building widgets or counting widgets, as has been said. It is about having staff in place to surge, to respond during these events. There is lots of work in public health to do but to be able to put all hands on deck for this response is critical. Right now, the resources aren't there, particularly for the folks least able to fight off disease.

Chairman TOWNS. Thank you very much. I yield to the ranking member, Congressman Issa from California.

Mr. ISSA. Thank you very much, Chairman. Dr. Jarris, I didn't intend to ask this question but I just want to follow up on something you said in your opening statement. You said 150,000 units a week. I am just trying to do the math. That doesn't get you to 300 million in a year. I am assuming that whatever you can't make in the 1-year, you are not going to make the others. So there is no plan based on that volume to achieve 600 million doses, right?

Dr. JARRIS. If I mis-spoke, I apologize. Initially, there will likely be volume that comes off of the vaccine that is being produced. We are not quite sure how large that will be. After that, 15 to 20 million doses a week should be coming out and being distributed. So if we take the 600 million——

Mr. ISSA. 15 million?

Dr. JARRIS. Yes. I apologize if I mis-spoke.

Mr. ISSA. OK, that is a different number. The record may be more accurate than my hearing. I just wanted to follow up on that.

Dr. Sosin, pronounce it for me so I get it right.

Dr. SOSIN. It is Sosin, sir.
Mr. ISSA. Sosin, Thank you. I apologize. With my name I should be more sensitive to everyone’s name. Doctor, realistically, historically, in an outbreak, once we get past the first responders, don’t we always allocate our resources to less than the entire population, including the plan you have for smallpox? And I guess I am leading up to the point that we do not have enough smallpox vaccine to begin to do the entire population. That is not even in the plan, is it?

Dr. SOSIN. Actually stockpiled, we do have sufficient smallpox vaccine for the entire population. The challenges of administering that vaccine are really where the bottleneck and the most difficult challenges will lie. But your broader point, which is planning for catastrophic events——

Mr. ISSA. OK. Let us take anthrax, for example. How many doses do you have today in a stockpile? And more importantly, how many will you have 5 years from now with the current no orders?

Dr. SOSIN. I will have to get back to you on the specific numbers. We have both antibiotic treatments for anthrax as well as vaccine for anthrax and a strategy for increasing vaccine as well as development of a new generation vaccine for anthrax. So there is a lot of work in progress. And I will get you the specific numbers. The broader question you raise of planning for catastrophic events, which means the system fails inevitably runs into limitations of resources, and therefore prioritization and strategy to do the best we can and address the best we can within the limitations of resources.

Mr. ISSA. And back to the resources for just a second, Dr. Sosin. Since we spend about twice as much as the Europeans do on health care, I am going to assume that money alone does not fix the problem based on how we spend money on health care in America, just the fact that we already spend more than the nations we are being compared to. Is not the most important thing for us to have is a plan to ensure that our first responders, including all the health care professionals that will receive people, are able to be continuously inoculated, prepared, or, if we do not have something, the first to receive? Is that not sort of the crux, the most important crux of the plan is that we not lose those people which Dr. Jarris and others have said are already in short supply.

Dr. SOSIN. Clearly, there are a number of priorities for how we respond most effectively. First line responders are one of those priority groups, whether that is in the health care system, whether that is in emergency response and emergency management system. I think the comments made earlier about vulnerable populations, however, reflect also Government responsibility to assure that there is a safety net for those with the least access and the greatest need. So planning really has to be in the broadest sense. But there are strategic priorities set for early stages versus later stages of response.

Mr. ISSA. OK. And one followup to something I said in my opening comment. Since the anthrax stockpile is expiring and it has never been offered broadly to first responders, do you have a plan to deal with making that available to first responders around the country, including our health professionals, rather than destroy the stockpile which is currently in the plan?
Dr. SOSIN. There is ongoing discussions amongst the emergency responder community with the Department of Homeland Security, Department of Health and Human Services about the appropriateness, suitability of this vaccine in that setting. There have been advisory committees for immunization practices looking at and providing permissive guidance that without sufficient understanding of risk there may be a point in time where risk is sufficient to warrant pre-vaccination of those populations. So there is discussion about that. There is the ability to make that vaccine available before it expires. But that is active discussions going on right now.

Mr. ISSA. Let me just ask one final followup question, Mr. Chairman, if I may.

Chairman TOWNS. You may.

Mr. ISSA. Are our health care professionals, specifically doctors and nurses at our community centers around the country, are they not the most informed consent individuals? And if you have a distribution request and it is a voluntary taking by those individuals—remembering that our military is not voluntary, they get the shots whether they like it or not; they go to combat, they are going to have it—would that not be a group that by definition, the safeguards you are talking about protecting them from not having enough informed consent, is this not a group of people that we normally rely on to advise people and, therefore, if a doctor at the Cleveland Clinic or Cuyahoga Community Hospital wants that medicine and has the normal informed consent, are they not by definition the people who should be allowed to make that decision, not have it micromanaged in Washington?

Dr. SOSIN. Thank you, sir.

Mr. ISSA. You are most welcome.

Dr. SOSIN. My understanding is that the licensed vaccine is actually potentially commercially available. The company has indicated that they have capacity to produce and sell the vaccine additionally. These questions are really about the purchases that the Federal Government has made and is there a strategy for making that available to populations in need. I am not aware that the health care community, in the similar way as they were not terribly interested in smallpox vaccine, has indicated an interest in anthrax vaccine at the same time.

The emergency responder community, we hear, is mixed in terms of their perspective on whether that should be required or made available to them. And the Department of Homeland Security is establishing whether this is appropriate for their approved equipment list and therefore the funds can be used from Homeland Security to do it. So there is complexity there. But your broader question of whether the medical community should be in a position to utilize a licensed product, absolutely. That is the way our health system works.

Mr. ISSA. Mr. Chairman, that was not my question. The question is, before we throw this material away or actually spend money destroying it, will we make it available with ordinary, if you will, informed consent so that it not be literally thrown away while the alternative to go buy, is what the hospitals, including the first responders in Cleveland, who asked me about this when I was there.

Chairman TOWNS. Right. And that is an excellent question.
Let me just say before I yield to the gentleman from Rhode Island, you have a plan, but without the resources you do not have a plan. You cannot carry it out. And I think that you need to be honest about it and just sort of point it out and let us see if we can get some help for you. It does not make you a bad commissioner, a bad administrator because you do not have the resources. I think you have to fight to get the resources because this is serious. If you have a plan and you cannot implement it, it is no plan.

Dr. Archer. And one of those resources is the challenge, and the failed challenge I think, in this country in regards to vaccine production. We have problems with standard vaccines not always being there when we need them. We have to change our message to the public. There are ways to fix it if we actually sat down and talked about it. Having worked in Ford Motor Co., I could use the analogy that if we had to make cars, decide how many were made today 9 months ago, if you had to change the model every year, if you had to throw every car away that was not sold within 3 months, and if you had to share the keys with others. Because half the benefit of vaccines is not the individual but the herd immunity effect, if you looked at all those dynamics, no wonder we are having trouble producing vaccine at the level that we should be in this country. We need to address that and fix that.

Talking about who is going to be a priority whether it is first responders or whatever, the real problem is we have not fixed a production issue of vaccines in this country so that we can get them to everybody. Yes, there are challenges with smallpox, there are challenges with anthrax, but that does not spread like wildfire or like influenza. So it is a little different animal. We really do need to be able to vaccinate every American for normal seasonal influenza.

Chairman Towns. I agree. I agree with you.

Dr. Jarris. Mr. Chairman, may I comment?

Chairman Towns. Yes.

Dr. Jarris. I think you are right and the comments have been made appropriately that where we can mount a response, we cannot maintain it. So our plan is not adequate because the resources are not there.

At the time we testified before the committees a couple of weeks ago and we said we were requesting $350 million for State and local preparedness, that was a figure that is a very low figure. That figure would be equivalent to what we have gotten. We have had a single $600 million appropriation in the past. We got $250 million and $350 million to support State and local preparedness. So all we asked for was basically another sum of money to continue the level of planning and preparedness we did.

Frankly, we made a mistake because that was before we knew how serious this was and how serious the fall may be. So the $350 million in the House right now is probably not nearly enough and it is a start to get us to revise our plans.

We also asked for some money to purchase antivirals, to get to Mr. Issa’s point, for healthcare workers and critical responders. Our strategic national stockpile right now only has countermeasures, masks and antivirals, for treatment, it does not have masks and antivirals for prophylaxis for healthcare workers, public
health workers, and ambulance. So we asked for money for that also.

So, clearly, we need more money. As you say, it is not appropriate to put first responders, whether it be public health, fire, ambulance squads, in harm’s way without protecting them. And yet our current strategic national stockpile does not have antivirals for that prophylaxis. So we really do need more money and I am sorry we under-asked.

Chairman TOWNS. Right. Thank you very much.

I yield to the gentleman from Rhode Island who had asked this question. He might want to rephrase it now.

Mr. KENNEDY. No. I would really like, just as the chairman asked, to get some real numbers in terms of what would be ideal budgets. I serve on the Appropriations Health and Human Services Committee for HHS. We are going to be going into markup in the next couple of weeks. This is frightening.

All I know is that I would be derelict in my job as a Member of Congress, as a member of that committee if next fall I am sitting here in Congress and we have this flu, and by all accounts this flu is coming back, and this scenario that you are painting for us is happening, and I am sitting there after having sat in this hearing and someone said weren’t you in that hearing, didn’t you hear what they told you, and I did nothing about it.

For one thing, we have been told there are not going to be any more supplementals. So this has to be part of this year’s budget. It has to be part of this year’s appropriations. So we had better get to it. And knowing the glazed-over look in appropriators’ eyes when you talk about more money for this and that, if something is not burning up, things are not going to get funded. We have to really, as you all have said, seize the opportunity that we have right now in terms of the public’s attention on this and really make the most of it because we are not going to have this opportunity until next fall and that may be too late.

So we had better move now. And I just want to underscore your urgency about this and say, do not hold back. OK? You are not stepping on anybody’s toes. OK? You are going to be derelict in your own responsibilities to the administration which you work for and to your own obligation to public health if you do not make some really aggressive and ambitious budgets and put them forward in spite of whatever your higher-ups say. Frankly, I am going to demand it, I am going to push for it, as I know the chairman will, to get these answers.

The fact that you cannot even vaccinate one-third of your current population when you had a year to prepare for it terrifies me. We have just a few months to prepare for the H1N1 this fall and we cannot even prepare to get a third of the yearly, which is only a million and change, and we are talking about 600 million doses.

The scale of this thing is enormous and I do not think we have even wrapped our heads around how big a challenge this is. So we need to know the ratio of public health personnel to the population that is needed. We need to know the ratio of volunteers that we need, backup personnel that we need versus population. That is going to be needed. We need to have the numbers of prophylactic equipment and the like. All of those things need to be sized up.
And again I would ask you, what do we have in terms of plans for the faith community, for the private sector, for the public sector and the like that they can exercise? Are we using technology for the cell phones, for twitter, for email? What are we doing to be able to message people when it comes to this modern society, to be able to communicate with them so they are not just getting messages from these 24-hour news that often are inflammatory and full of misrepresentations in terms of news? How do we get facts out there and real information in terms of what to do and where to go so people feel empowered and not fearful? That is the key. That is what I want to ask you guys. How do we make people feel empowered here?

Dr. Sosin. Thank you, sir. Getting to your first points about having confidence in your Government, having confidence that you know what to do and therefore responding more effectively, that is absolutely critical. The numbers that Dr. Jarris shared about this event where we approached it very aggressively, we did use twitter and widgets and other kinds of tools to reach the broadest population we could, distributed from the Federal level, State and local levels through practitioners as well as directly to the public, communications just in time about what you can do and what you can expect, and what we know and what we do not know has been one of the successes of our response so far. Maintaining the pace, addressing the complexity, those will be challenges in a larger scale event for sure.

So, yes, we are responding to some of those communication challenges that empower the public, empower business, etc. We have definitely come a long way with respect to engaging business, engaging the faith community, engaging the public and we have a lot more work to do. I will point out that those plans discussed here have been evaluated in quite a lot of detail. Twelve departments and two offices of the White House participated in a joint review of the pandemic influenza plans and there is a volume of information on the pandemicflu.gov Web site on those evaluations.

Importantly, the kinds of activities that we have been talking about here that lie in the lane of public health were the strongest parts of those plans. The weakest parts of those plans were the broader interagency, intergovernmental coordination, interdisciplinary coordination with the emergency response community at-large, with the service sectors, etc.

So even the plans that we have reflect gaps and needs for more effort, not just sustainment of where we were 6 years ago.

Dr. Birkhead. I would just like to add that I agree completely. Public communication is critical. We cannot respond to a pandemic in this country without people understanding what their role is, what they need to do. We have invested a lot of effort in New York and I know in the other States in trying to do that. We have also worked with our business and faith communities. We have worked with businesses to develop continuity of operations plans so they can continue to operate in a pandemic, particularly if people can work from home, that kind of thing.

That does not always work but to try and think through. In a normal flu season we only vaccinate 100 million people because there is not a demand out there for it. I think we have gotten their
attention, as others have said, with this H1N1 and the challenge will be how to meet the demand that I suspect we will see if we did really roll out a vaccine and try to offer it to everybody. That will be the real challenge.

And you are right, we need to have the detailed plan of how many people we need to do that. We partly need to see when it is going to happen, how quickly it will roll out, will we really see 15 million doses a week coming out. There is a lot of detail there to give you a precise answer. But we need a lot more than we have right now.

Mr. ALLAN. Congressman Kennedy, I think the whole issue of this culture of preparedness, getting folks to think about this, Red Cross has worked on this for some time. There is fatigue when people have a sense that nothing happens. They think that public health is Chicken Little, you know. And I think from our end this is a wake up call and we are hoping to now capitalize. CDC has some great educational information that talks about, you know, clean hands save lives. Just a basic message is critical.

But there is lots of fear and there is a tremendous amount of rumors that occur in the middle of this that everyone here has dealt with that need to be dispelled as quickly as possible. And that individual preparedness and planning for families and understanding messaging are, I think, essential. It is nice that there is attention now being paid to public health and an understanding of the critical nature of what we do. So I am glad that this discussion is being held.

Dr. JARRIS. Congressman Kennedy, you are bringing up a very important point about communication and maintaining the credibility of Government. And what we saw in 1918, because of a lack of transparency, is people did lose faith in the Government. We saw some of the social fabric in this country, neighbor caring for neighbor, breaking down. So that is something that we very deliberately have to pursue.

One thing I would ask you all to keep in mind is that we do not have a separate work force in public health that we pull out of the closet for a pandemic or a hurricane. These are our every day work force and that is why we need to have that bench strength and those professionals, those nurses, laboratory staff, and epidemiologists on board every day so we can surge with them. Part of that system of public health that we so clearly need are experts in communication.

You mentioned that you are on the HHS Subcommittee. Very importantly, the communication was done so well because we had experts working on how to communicate with the public, who were monitoring the twitters, the blogs, the Webs, the newspaper articles, the television media to see where the direction was, what are people thinking, what are they reporting, so we could on a daily basis adjust our messaging, and on a daily basis the CDC’s Director’s talking points were sent to the State health officials, were sent to the local health officials who were on message.

One of the reasons I bring that up is that messaging is coordinated within the CDC and the National Center for Health Marketing, a terrible name and a very unfortunate name. But they are undergoing significant cuts in the budget. I believe it is $9 million in
the fiscal year 2009 budget and $3 million in the 2010 budget. It has a terrible name, marketing. We say what is that doing in public health. But what they are doing is understanding how to communicate expertly with the public. And much of our success was due to that Center’s work. So I would ask you to take a hard look at that. And maybe they can change their name. Thank you.

Dr. ARCHER. We will get back to you with the challenge you put out to us on the ratios in regards to public health folks and volunteers, etc. And I think that is critical. To give you an example, we have a full-time public information officer that is paid out of the CDC funds for preparedness. That person does not just serve our Kansas City but serves the whole region in regards to preparedness. Now they carry a 24/7 media pager. They will respond 90 percent of the time within 5 minutes.

If we do not get a call from the media in 2 days, we check the battery or try to figure out what is going on because they are constantly having interaction with the media. That allows us to change that message. When the message is wrong at the 6 o’clock news, we can usually get it changed by the 10 o’clock news because we have the interactions with the media. That is not present in all of our communities and we need that support. But that person burned out in this event and we had to send them home just to get some rest.

Mr. KENNEDY. Well, I hate to bring up burned out, but National Guard is already burned out. But I imagine you mentioned national security when you mention this. I imagine national security would be invoked in favor of bringing in National Guard to help you in some way. Maybe you could give us a response at some later date about what you think of deploying National Guard, proper training included.

Dr. ARCHER. We have the Medical Reserve Corps but that is done on a shoe string. We really need some of those protections the National Guard have in regards to actually paying people for training and those things. We could create a model that would really work and we would love to work with you on that.

Chairman TOWNS. Right. The gentleman’s time has expired. Let me recognize the Women’s Caucus and we have a lot of health care people involved. We just want to thank you very much for your attendance. Thank you very much Women’s Caucus.

At this time I yield to Congressman Bilbray.

Mr. BILBRAY. Thank you very much, Mr. Chairman. Coming from southern California, burned out takes on a different concept, especially after the couple of years that we have had.

What is the population of Vermont?

Dr. JARRIS. It is about 620,000 people, not including the cows.

Mr. BILBRAY. Wow. OK. I supervise the disaster preparedness system and the health care system for the county of San Diego, which is 3 million. I assume your disaster preparedness structure is probably State-wide and not regional.

Dr. JARRIS. Well, I am no longer with the State of Vermont. But yes, Vermont had a single structure for the whole State.

Mr. BILBRAY. Single structure. I figured so for that size. And Mr. Archer, you pointed out on this, and this is where how this all
works in, the network of how well integrated, you are all integrated into the disaster preparedness structure, right?

Mr. BILBRAY. Doctor, if you were going to be somebody who wanted to plant a virus in 500 people that would have the most impact on this country, if you were going to figure out a profession, 500 people, maybe two or three professions, have you guys looked at exactly what group of people have the potential to spread the problem fastest and easiest?

Dr. SOSIN. Sir, with respect to terrorism and biological terrorism, there is a governmental process of establishing risk and conducting a risk assessment that includes understanding of impact, of capabilities, of those who might attempt to do such things. That is not what I am here prepared to speak about today. But I will acknowledge that nature as a terrorist here with influenza, it is about the best reassorting virus to be able to pick up antiviral resistance and modify during the course of a season that you could ever devise in a laboratory. So we are up against something that is really quite daunting.

Mr. BILBRAY. I am just thinking about what we can do as an oversight committee rather than just complain about what the executive branch is not doing enough of, what we can do to be proactive on this. And last October it became obvious to me as somebody who had worked with public health that if there was ever 500 people who could come in close proximity to a lot of people all over this country, that all meet at one location and go out into the country, it would be the Members of Congress. I mean you talk about the vectors, paid for with taxpayer's money, get out there and kiss as many babies as you can, shake as many hands as you can.

And frankly, Mr. Chairman, this is one of the concerns that I have. There was a lot of discussion about the Members of Congress getting inoculation. Frankly, I think it should be a requirement that the Senators and House Members are required to be inoculated. Unless there is a medical reason for them not to be, with how much exposure we constitute to the general public, that is one of those things.

The other group that is probably the only group that is more than your duly elected Representatives of the House and Senate would be flight attendants and pilots. I do not know, there may be other professions. But boy, I think history has proven the flight attendant potential for spreading disease. But I think we need to talk about this in frank and open ways, back and forth, of what are we not doing, are we requiring those involved with commercial aviation to be inoculated, and are we talking about ourselves, making sure that we are not part of the problem.

But I want you to know that I listened to the Vice President. I did not fly last week. I was very concerned about that and made sure I stayed put.

Let us go on. Notifying the public. Mr. Kennedy raised this issue. What is the potential in your city, in St. Louis? Do you have reverse 911 now?

Dr. ARCHER. I am in Kansas City, MO.

Mr. BILBRAY. Kansas City. I am sorry.
Dr. Archer. We do not have reverse 911. We do have tremendous cooperation with all of our TV stations. So as long as they have power and can broadcast, we have that mechanism to get information out.

Mr. Bilbray. When you were in Vermont did they have reverse 911?

Dr. Jarris. No.

Mr. Bilbray. Anybody?

Mr. Allan. The city of Cleveland has a warning system within the city boundaries and some select, more financially well off suburbs have some capacity. But it is not uniform outside of the city.

Mr. Bilbray. But the city has the ability to call people's homes with a message telling them, being able to call into them?

Mr. Allan. Yes. With a message, it is a one-way type, right.

Mr. Bilbray. OK. Just explaining it, because we developed that because of our fires. We can actually tell street by street, neighborhood by neighborhood what the conditions were, be informed. I am sorry that Mr. Kennedy is not here because there is a place of being able to empower and the locals being able to be that bridge. There is a very real possibility with this new strain that we will not see the drop off during the summer. Has anybody even discussed that, that we may have this right through the summer?

Dr. Sosin. There is a lot of attention to the virus domestically as well as abroad, and in particular in the Southern Hemisphere which is entering its typical seasonal influenza season. So we are not standing down and I do not believe any of the folks at this table are really returning to business as usual. We do not typically see much virus activity. But as Dr. Jarris pointed out, this has not been a typical virus. So we are watching very carefully. This is still very early on in this outbreak and anything is possible with this virus.

Mr. Bilbray. Mr. Chairman, one last question. We are talking about what we can do. If you had FDA approve a post-exposure treatment that was genetically engineered to address 11 out of 16 different strains, if you had the ability to have an effective post-exposure treatment or had a vaccine that was multi-strain, if you had that lined up and ready in time for the next cycle, would that not be a major plus for you to be able to start tooling up? And this gets down to your issue of us changing our operations and getting the stuff available. Just comment on that.

Dr. Birkhead. Well I think we are not talking about post-exposure, but the vaccine we are talking about would be exactly what you are saying. And yes, that is what we need.

Mr. Bilbray. OK. I just want you guys to keep raising the issue that we have to also put pressure on FDA. When we talk about crisis alarm, they need to change their procedures and we need to change our procedures to make sure that we don't, like the British when they are fighting the Zulus, have everybody lined up in straight little rows while they are being wiped out because the regulations say that is what you have to do to get ammo. We need to change our procedures to make sure you have the assets that could be available to you, not just because of monetary but because of regulatory obstructions. Doctor, do you want to comment on that?
Dr. JARRIS. Yes. I think there is a very good example of where we could use assistance in this regard. There is a shelf life extension program currently that the Department of Defense, VA, the SNS—I think those are the organizations—use. In that program, the Tamiflu has been extended now for up to 10 years, the shelf life. The Tamiflu in the State stockpiles is not under a shelf life extension program. We worked very hard with the FDA and the manufacturers so that it went from 5 years to 7 years. That saved us $200 million in the States.

If we could develop a shelf life extension program so that we aren't discarding hundreds of millions of dollars worth of antivirals, that would be extremely valuable. It would be minimal cost for huge savings. That is clearly an intergovernmental affair.

Chairman TOWNS. The gentleman's time has expired. I will allow you to answer. Go ahead.

Dr. SOSIN. I just want to correct one issue. The issue with Tamiflu is the manufacturer went to FDA and said, look, our product actually can last 7 years, not 5 years, allowing for a process of relabeling and extending the expiration date. So that process actually is available to States who have received Tamiflu from the Federal supply. There is a process that has to be gone through. But the shelf life extension program is a broader issue about all expiring products.

Mr. BILBRAY. Thank you, Mr. Chairman. I just think that we need to be more proactive in looking at this and have as much passion about changing our regulations to make the resources as we are about spending money and throwing money at the problem. Here is one of those items that Mr. Issa was pointing out. Thank you.

Chairman TOWNS. Thank you very much. The gentleman's time is expired. The Congressman from Texas, Congressman Cuellar?

Mr. CUELLAR. Mr. Chairman, thank you very much for having this meeting. I want to thank the witnesses for being here. I chair the Subcommittee on Response and Preparedness of the Homeland Security Committee so I value what you all have been saying. I appreciate it. I will start off with my first question to Dr. Sosin.

Again, thank you for the work that you do there at CDC. My question refers to the time that you were dealing with bio-surveillance. I am from Laredo, TX, right at the U.S.-Mexico border. As you know, we have been hit pretty hard by the H1N1 cases that we have had. I know that the surveillance information is critical for those in leadership positions to make the best decisions regarding resource allocation, school closures, those types of decisions. Can you tell me how the information being put out by CDC by its various biosurveillance efforts is helping the States, territories, tribes, and localities to make those decisions? Then what sorts of lessons have we learned so far from the H1N1 situation? How do you see those being incorporated into the current system so that we are better prepared as a Nation if the disease gets worse, particularly this coming winter?

Dr. SOSIN. Thank you, sir. One thing I would like to start off by acknowledging is that surveillance and biosurveillance begins at the local and State level. What we are able to provide back to State and locals to help inform them is a broader, bigger national picture
that crosses jurisdictional boundaries. So it is a partnership from the ground up.

Biosurveillance, some of the efforts to get earlier cues of events that might be happening, to detect them and respond to them more quickly, that narrower piece really had a relatively smaller role to play in the early development of this outbreak. It was laboratory-detected very early on and a major focus at the public health level was to go out and investigate laboratory confirmed cases to better understand this outbreak. As the outbreak spread, our ability to understand what is going on broadly in communities where the laboratory was only one small piece of the broader outbreak, that information is becoming more valuable.

Certainly, probably the most useful piece of focus that we have made in biosurveillance in the past few years is how we integrate information from multiple different types of information streams and then present that to decisionmakers on a daily basis in briefings, in slide sets, and whatever else that we share broadly. We have had some success there as well.

So I think that the feedback on biosurveillance efforts is too early in this outbreak to tell you entirely. I think the focus on biosurveillance as syndromic influenza-like illness is too narrow. The focus on health information technology and electronic laboratory information, death certificate information and hospital or medical information, is a place where at the State, local, and Federal levels we need to continue to advance those developments.

Mr. C UELLAR. How are we doing on the transition, doctor, from developing vaccines in eggs—as you know, they are developed in eggs—to a cell-based solution? Where are we on that? We need a lot of eggs to develop vaccines, Mr. Chairman.

Dr. S OSIN. It is a process of development. There are new platforms for vaccine development. They are pretty early. They are not replacing egg development at this point in time. I can't give you particulars as it relates to the H1N1 vaccine development, how much would be egg and how much in cellular techniques. If that is something that you would like more information on, we can provide that to you.

Mr. CUELLAR. I would like to get that. Real quick because I am out of time, I have just a quick question to one of the other gentlemen. Again, understanding the strains—I think you articulated that pretty well—how much more do you think public health departments can handle right now with the H1N1 outbreaks occurring? You have those strains.

I guess whoever provided the pictorial here, I guess this is pretty much what we are looking at where we have that up. We are down here in this current situation and I guess to get up here it is going to take a lot of effort. I assume there is a lot of strain in what you all do. I think that is the message that we are getting loud and clear. Dr. Birkhead or anybody who wants to answer?

Dr. B IRKHEAD. No, that is right. I think public health departments across the country at the State and local level have been operating almost 24/7 now for the last month. It has eased up a little bit but it is not going away. We need to arrive at a new normal for going forward. But if this gears up at all in the fall and we are
having to do vaccination at the same time, it is not going to be sus-
tainable without more resources.

Mr. CUELLAR. I think the chairman was correct. I think we are
trying to get some input from you all. We might not grant all the
wishes but we certainly want to know what you think we ought to
be addressing.

Thank you to all of you. I appreciate your time and effort for
being here. Thank you, Mr. Chairman.

Chairman TOWNS. Thank you very much. I thank the gentleman
for his questions. Congressman Kucinich.

Mr. KUCINICH. Thank you very much, Mr. Chairman. Mr. Allan,
does Cuyahoga County currently have the ability to handle a pan-
demic? Do we have the health infrastructure to be able to do that?

Mr. ALLAN. I think, Congressman Kucinich, that Cuyahoga
County has a wealth of certainly health care capacity. I think that
in the H1N1 response, it is important to note that the current ac-
tivity relative to this virus is sort of uneven around the country
right now. Certainly in New York there is a lot of activity, as Dr.
Birkhead pointed out, and we have been reading in the news-
papers.

I think if we start to move forward on a pandemic of higher se-
verity, we are going to be stressing the system. The current level
of severity that we are dealing with was sporadic activity in Ohio
and in the greater Cleveland area is something that we think we
can maintain activity on in terms of control.

Mr. KUCINICH. You are saying we have the health infrastructure
to maintain public health support for a pandemic?

Mr. ALLAN. I am saying that in terms of a pandemic of this low
severity that we are seeing, we can deal with it locally. If it begins
to become more severe, we are going to have some serious prob-
lems.

Mr. KUCINICH. Well, you have said in your testimony that not
knowing if the virus will shift or drift, we are looking into the fall
of 2009 and beyond, you have a To Do list. Your To Do list notes
that if funding levels continue to drop as anticipated, we will be
unable to advance our detection, preparedness, and response. Now
detection is an essential part of being able to get ahead of a pan-
demic, right?

Mr. ALLAN. Right.

Mr. KUCINICH. Can you put a dollar figure on what Cuyahoga
County needs in order to adequately advance detection prepared-
ness and response capacity to a level that would be necessary if a
more severe virus were to emerge?

Mr. ALLAN. Well, we were back in 2005 somewhere around $2.2
to $2.5 million in terms of our funding level for the county. That
involved both the city and the county. That allowed us to advance
our plans, I think substantially. We have seen cuts, which means
now we are losing people. That means the To Do list is still sitting
there. In fact, as people step away, the To Do list may get longer
for us to accomplish.

So from our end, we think a relatively modest investment nation-
ally in public health relative to other national issues can go a long
way. If we look at a situation where we are going to be having to
vaccinate folks to a new virus, also dealing with seasonal flu vac-
cination, dealing with a potential escalation of severity in the fall, that confluence of things right now we are not prepared to address.

Mr. KUCINICH. What about if there were an increase in incidents? Would you have the infrastructure at this moment to be able to keep up with testing suspected carriers of a virus?

Mr. ALLAN. Well, that testing in Ohio specifically ties back into some rapid detection work that is being done in the hospitals. Then the activity all flows through the State health department. So it is a question of capacity of the State health department. If we saw a significant increase, I know that there were some early delays as people were dealing with the volume. But it is a question of State level capacity. We have one lab in Ohio and it all goes through Columbus.

Mr. KUCINICH. One lab?

Mr. ALLAN. One lab to handle this incident, yes.

Mr. KUCINICH. Do you have direct contact with the CDC?

Mr. ALLAN. Our contact occurs through the State health department.

Mr. KUCINICH. I think, Mr. Chairman, it would be interesting to canvass the State health departments to see about their contact with the CDC. Because if something is getting out of control in an area, in a county as large as Cuyahoga, it seems to me that the large counties, which in some cases are bigger than some States, should have a quicker connection to CDC since we are talking about the fact that a virus by its very nature can spread in any direction at any time.

Did you want to say something, Dr. Birkhead?

Dr. BIRKHEAD. Yes. Let me just comment from New York State and New York City's point of view. We do have direct access to the scientists at CDC. With the school situations going on and now looking also at more hospitalized cases, we have been able to have conference calls directly with the folks at CDC.

Mr. KUCINICH. You know, Mr. Chairman, I think one of the things that we might want to do is to ask the CDC about these large metropolitan areas. Instead of going through States, large metropolitan areas should have the ability to contact the CDC directly. My time has run out, but I want to make sure metropolitan areas will have the ability to respond appropriately to any threat of a pandemic.

Chairman TOWNS. Thank you very much. Congressman Lynch.

Mr. LYNCH. Thank you, Mr. Chairman. Thank you for holding this hearing along with the ranking member. I want to thank the witnesses for their willingness to help the committee with its work. Dr. Sosin, thank you for your service to our country. I appreciate that.

We had a hearing here last week centrally dealing with the vulnerability of some of our employees. I happen to chair that subcommittee. Right now, we have a situation where we have a lot of our folks on the borders—Customs and Border Patrol folks, ICE, Transportation Security officers—and they are on our country's borders as well as at our major ports of entry. I would say on average many of these officers probably screen and some of them come in direct physical contact with 3,000 passengers or travelers per shift.
Up until recently, even through this crisis, H1N1 pandemic, they were instructed by their supervisors at the Department of Homeland Security and other agencies that they were not to wear masks. They basically had these masks, not very threatening, but apparently the Department of Homeland Security felt that the public might be overly alarmed if the border patrol officers and transit security officers wore something like this. These are N95 masks, just for the record. They were told, as a matter of fact, to take off these masks when a few of them took the initiative to protect themselves. And this is where the CDC comes in.

The Department of Homeland Security said they were relying on a determination by CDC that masks like this and repeated applications of Purell were medically unnecessary for our border security folks and transportation security officers even though they are in physical contact—they are wanding, checking passports, and coming into physical contact—on a regular basis with these folks. Again, they use the term “medically unnecessary.” Meanwhile, we have instructions from CDC saying folks should cover their mouths, wash their hands, and avoid unnecessary travel to Mexico.

So now I have hundreds, actually thousands of border folks, security officers—and the Laredo facility is part of this, the busiest checkpoint in our country—and even though we have that concern out there, meanwhile our people, the U.S. transit security officers and border patrol people, are looking across the Laredo checkpoint and the Mexican folks on the other side, the Mexican security officers all have these masks on. But we are being told that it is medically unnecessary.

The World Health Organization has already taken it to a Level V, which means a global pandemic is imminent. I just find it mystifying why we have the World Health Organization saying we are at Level V going to Level VI on a global pandemic, we have schools shutting down all over the place, and in the meantime we have these officers who are actually screening 3,000 travelers a day. The epicenter of this thing was in Mexico City. Infection counts in Texas, California, and Arizona are off the charts. They are something like 400 percent of the national average.

And here we are not letting our folks wear these masks because it might alarm the public. I am just wondering, where is the sense of that policy?

Dr. Sosin. Thank you, sir. This is challenging decisionmaking. It is not strictly a science-based decision.

Mr. Lynch. Apparently.

Dr. Sosin. The specifics of the Department's of Homeland Security decisions and the interactions with CDC are ongoing and evolving. So that is one piece. The challenge here is establishing level of risk versus level of response that is feasible and appropriate. Whether it is ever appropriate to forbid people to use protective equipment or not is an issue that I do not want to touch on. But whether it should be required or recommended is the challenge that CDC has been trying to produce in its guidance.

Let me say that the crux of the CDC position, as reflected in the National Institute for Occupational Safety and Health, which is a part of CDC, is that when in doubt, we offer guidance which protects the worker. When in doubt whether influenza can spread
through airborne mechanisms and we have a severe situation, we err on the side of protecting the worker. The challenge here—the WHO phases are not severity based—and the challenge in this entire outbreak has been whether this is more severe than what we see in seasonal flu and therefore whether we should take more extreme measures than we typically take in seasonal flu.

As you know, the Border Patrol or border agents do not wear masks during flu season. So that question of, are they at risk of more severe illness than they would be under comparable circumstances, has been the most challenging part of this. We continue to watch for evidence of severity, for evidence of uniqueness and needs for protection. We continue to offer guidance which is at minimum permissive of that type of protection and, when felt to be appropriate, specific guidance to use.

All I can say is that this continues to be a discussion. I know over the last 2 days decision briefs about health care workers, which is another work force of great concern, and the use of respirators like those in 1995 continue to be worked through so that we have practical, feasible, manageable guidance which also protects the worker.

Mr. Lynch. OK. I appreciate your attempt to answer that question. I really do. And it is not your decision so I am not laying it on you.

Mr. Chairman, could I ask Dr. Jarris to take a crack at that?

It seems that I have a Level V pandemic which, according to the World Health Organization, is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of plan mitigation measures is very short. OK, so I have the World Health Organization telling me this. We have people sick all over the place. I would hate to be the 3,000th person that this security officer frisks and wands because he is likely to be contaminated at this point and he is contaminating all the way down the line. This is Government bureaucracy at its worst. We just need to move the ball forward here and inject a little bit of common sense into the situation.

Dr. Jarris. Congressman, I think your question is a very valid one. It is an example of the types of things we have been wrestling with for the last 3 weeks and why we have not gotten sleep in the last 3 weeks. There are many, many examples of issues like this where we, as Dr. Sosin said, because it started in North America we did not have the 2-months to figure out how this transmitted from one person to another. Was it aerosol? Was it a droplet? We simply did not know that. We did not know how transmissible it was. Was the border guard at risk or not at risk? What did it take to actually transmit this? We did not know that. How severe was it?

Initially, given what was going on in Mexico, we weren't very concerned. It looked as if it was not that severe. But we still do not quite know that. So we were in a situation of trying to make decisions in the face of tremendous uncertainty, always balancing what is the prudent thing to do against what is the disruption to society.

Two weeks ago I was in a committee in which we were being encouraged to close the border. In retrospect, I think we would have
said that probably was not the right thing to do. But there cer-
certainly were people feeling strongly that, well, why wouldn’t we do
that. So this is what we are struggling with.

This is an indication of why we now need to go back, given that
we have had these plans which have been obviously imperfect, and
we can give you many other examples of imperfect situations, and
dedicate the time and the resources this summer to figure out what
are we going to do in the fall if this comes back bigger, what are
we going to do in the fall if this comes back more serious, and we
need to be prepared. We need to address some of the issues of: How
do we look at CDC guidance, OSHA guidance, and NIOSH guid-
ance, and which one actually applies in a given situation because
they may be different.

Mr. LYNCH. Right. I appreciate your remarks and I appreciate
the perspective that you provide. You do say, properly I think, that
we have to figure this out by the fall. I think everybody on the
panel has said we could have a situation in the fall. Meanwhile,
our Border Patrol people and transit security officers cannot use
masks. It seems rather silly to me. But we will see how that goes.

Mr. Chairman, I have abused my time and I want to yield at this
point. Thank you very much.

Chairman TOWNS. Thank you very much. Let me thank all of you
for your testimony. I appreciate your thoughts and insight, and I
appreciate the interest of all the Members who attended today.

Before we adjourn, I would like to emphasize the continuing need
for attention to be given to the issue of State and local pandemic
readiness. As we have seen in recent weeks, an outbreak can strike
at any time and potentially take a heavy toll. We must be prepared
in order to protect the lives of our citizens. We do not wait for a
house fire before we make sure that our fire department has fire
engines and water hoses. Likewise, we cannot wait for a pandemic
before we make sure our public health departments have trained
responders and a mechanism in place to provide vaccines and
treatments.

The question becomes one of the next steps. The House passed
funding for State and local pandemic preparedness in the fiscal
year 2009 Supplemental Appropriation Act just last week. Con-
gresswoman Tammy Baldwin has recently introduced a bill, House
of Representatives 805, of which I am a proud cosponsor. This bill,
Strengthening of America’s Public Health System, would provide
Federal support for improving public health agencies’ infectious
disease surveillance and reporting.

What kind of sustained support can the Federal Government pro-
vide given today’s harsh economic circumstances? How can States,
localities, the Federal Government, and other entities leverage the
resources that we already have in order to increase our public re-
sponse capabilities?

Please, please let the record demonstrate my submission of a
binder with documents relating to this hearing. Without objection,
I enter this binder into the committee record.
The record will remain open for 5 days for any additional comments. Thank you very much.
Without objection, the committee stands adjourned.
[Whereupon, at 4:30 p.m., the committee was adjourned.]
[Additional information submitted for the hearing record follows:]
Wednesday, May 20, 2009
2:00 PM
2154 Rayburn House Office Building

“State & Local Pandemic Preparedness”
Exhibits for the Record

Committee on
Oversight & Government Reform
U.S. House of Representatives
# INDEX OF BRIEFING MATERIALS

<table>
<thead>
<tr>
<th>Exhibit for Committee Record</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Local Health Agencies, Hurt by Cuts, Brace for Flu”, NYT (4/30/09)</td>
<td>1</td>
</tr>
<tr>
<td>“Many States Do Not Meet Readiness Standards”, Washington Post (5/1/09)</td>
<td>2</td>
</tr>
<tr>
<td>“U.S. Remains Unready for Pandemic”, National Journal (5/9/09)</td>
<td>3</td>
</tr>
<tr>
<td>“Staff Shortages In Labs May Put Patients at Risk”, WSJ (5/13/09)</td>
<td>4</td>
</tr>
<tr>
<td>“Two More New Yorkers With Swine Flu Die”, NYT (5/27/09)</td>
<td>5</td>
</tr>
<tr>
<td>Antivirals – State Allocations, PandemicFlu.gov</td>
<td>6</td>
</tr>
<tr>
<td>“Settings &amp; strategies for antiviral drug use during an influenza pandemic &amp; rationales”, HHS Interim Guidance</td>
<td>7</td>
</tr>
<tr>
<td>17 National Critical Infrastructure/Key Resources, DHS</td>
<td>8</td>
</tr>
<tr>
<td>H1N1 Flu Update: U.S. Human Cases Map, CDC</td>
<td>9</td>
</tr>
<tr>
<td>“Impact of Budget Cuts on State Public Health, ASTHO”</td>
<td>10</td>
</tr>
<tr>
<td>“Survey of Local Health Departments’ Budget Cuts and Workforce Reductions”, NACCHO</td>
<td>11</td>
</tr>
<tr>
<td>NACCHO Letter to Chairman Towns and Ranking Member Issa, (5/29/09)</td>
<td>12</td>
</tr>
<tr>
<td>ASTHO and NACCHO Letter to Obey, Lewis, and Tiahrt, (6/3/09)</td>
<td>13</td>
</tr>
<tr>
<td>Hearing Notice</td>
<td>14</td>
</tr>
</tbody>
</table>
Local Health Agencies, Hurt by Cuts, Brace for Flu

The New York Times

April 30, 2009

Local Health Agencies, Hurt by Cuts, Brace for Flu

The recession has drained hundreds of millions of dollars and thousands of workers from the state and local health departments that are now the front line in the country’s defense against a possible H1N1 pandemic.

Health officials in affected states said they had thus far been able to manage the testing and treatment of infected residents and mount vigorous public education campaigns. But many said they had been able to do so only by shifting workers from other public health priorities, and some questioned how their depleted departments might handle a pandemic.

"I’m very concerned," said Robert M. Pesotnik, executive director of the National Association of County and City Health Officials. "Local health departments are barely staffed to do the work they do on a day-to-day basis. A large increase in workload will mean that much of the other work that is being done now won’t be done. And depending on the scale of an epidemic, capacity may be exceeded."

At a news conference on Monday, Dr. Richard E. Besser, the acting director of the federal Centers for Disease Control and Prevention, said the public health system was in "a tough situation."

"We hear about tens of thousands of state public health workers who are going to be losing their jobs because of state budgets," Dr. Besser said. "It is very important that we look at that resource because this outbreak was identified because of a lot of work going on around preparedness."

Mr. Pesotnik’s group estimates that local health departments lost about $300 million in financing and 7,000 workers in 2008, a year when more than half of all agencies shed employees. There were about 160,000 health department workers in 2008, according to the group. Mr. Pesotnik said he expected to lose at least another 7,000 jobs this year.

State public health agencies lost an additional 1,500 workers through layoffs and attrition from July 2008 to January 2009, according to the Association of State and Territorial Health Officials. The group anticipates 2,600 job losses in the coming fiscal year.

South Carolina’s Department of Health and Environmental Control, which also staffs local health departments, has lost $30 million in state money and a third of its 6,000 employees over the last decade, said Thom W. Berry, a spokesman. The department is currently investigating several "probable" cases of swine flu.

In New York City, which has the highest concentration of confirmed flu cases, federal grants for emergency preparedness have fallen to $83 million, from $28 million a year ago, said Andrew S. Rein, the city health department’s executive deputy commissioner.

In California, which has 14 confirmed cases, the Department of Public Health recently absorbed a 10 percent budget cut ordered by Gov. Arnold Schwarzenegger to help close a huge budget gap. It did so without laying off workers, instead reducing grants to local health departments, said Dr. Bonnie Sorenson, the chief deputy director of policy and programs. During the flu scare, about 100 state health workers have been diverted from other duties, Dr. Sorenson said.

On Tuesday, Mr. Schwarzenegger declared a state of emergency that calls for all California agencies to assist the health department. It gave the department special powers to enter into contracts, suspend competitive bidding and waive certification requirements for laboratories. The federal disease control agency has shipped equipment and chemicals used to test for swine flu to California so the state can hasten its laboratory work without sending samples elsewhere.

"The bottom line is, we are prepared," Mr. Schwarzenegger said this week.

The White House asked Congress on Tuesday to provide $1.5 billion in emergency financing to battle the swine flu outbreak, but it is not clear how that money might flow downstream.

Public health officials said Congress had missed an opportunity by excising nearly $900 million in proposed financing for pandemic flu preparation from this year’s stimulus bill. It was to be the final installment of President George W. Bush’s request for $7 billion in federal spending on vaccines, medical equipment and planning. Congress last allocated money for pandemic planning by state and local governments in 2006 — about $600 million over two years, said Dr. Paul E. Jarris, executive director of the Association of State and Territorial Health Officials.

"The entire system is lining up to decrease resources at the time we need them most," Dr. Jarris said. "We have to realize that we’re at the starting line. The stress will come if this escalates."

Jeffrey Levi, executive director of the Trust for America’s Health, said the financial strain made "it more important that we hunk out" with a mild outbreak.

Dr. Alvin D. Jackson, the state health director in Ohio, which has one confirmed case of swine flu, said his agency’s state appropriation had declined by about $10 million over the last two years. Dr. Jackson said his budget to prepare communities and hospitals for an influenza pandemic had dropped to $35 million, from $55 million in 2004.

"Right now we’re O.K.,” he said. "We feel that we can do an excellent job protecting our citizens. But looking forward, we do understand that some additional resources would be appreciated."

In Cleveland, Dr. Terry Allan, the Cuyahoga County health commissioner, said the decline in state and federal money had prompted a 25 percent cut in spending on pandemic preparedness over the last two years. That had cost the department at least 10 workers, Dr. Allan said, and further cuts are expected.

"Those are people we would have had available to expand and build on our plans for social distancing, for mobilizing antivirals," Dr. Allan said. "Our plan is not adequate. It’s barely started."
Many States Do Not Meet Readiness Standards

By Kimberly Kindy
Washington Post Staff Writer
Friday, May 1, 2009

More than two dozen states, including Maryland, as well as the District, have not stocked enough of the emergency supplies of antiviral medications considered necessary to treat victims of swine flu should the outbreak become a full-blown crisis, according to federal records.

The medications are part of a national effort to be prepared for a pandemic, and the stockpiling program is being tested for the first time by the rapid spread of the H1N1 strain of the influenza virus. If a health crisis wiped out drug supplies in pharmacies and hospitals, or if families were unable to get to their doctors, local and state officials could quickly distribute stockpiled medications.

The Strategic National Stockpile, created during the Clinton administration a decade ago to provide a federally coordinated response to disasters, maintains a massive collection of antibiotics, vaccines, gas masks and other supplies in a dozen stockpile locations. The program was expanded in 2004 to include drugs needed in a pandemic and is designed to link with stockpiles kept by state governments, pharmaceutical companies and federal agencies.

But the District, Maryland and 26 other states are 10 million dosages short of the levels that the federal government has determined they should have in their stockpiles for a pandemic. The drugs -- in this case, Tamiflu and Relenza -- would be used to treat the illness, not to prevent it.

Federal agencies, which under the plan are expected to create their own stockpiles, are also falling short. The Postal Service, whose carriers could be needed to deliver medications in a pandemic, has no antiviral medications stocked.

The federal government has met its goal of accumulating 50 million courses of the antiviral medications. Officials said this week that the rollout of those drugs to states has gone smoothly. More than $6 billion has been invested in efforts to fight a pandemic, and President Obama this week asked for an additional $1.5 billion from Congress. The Department of Health and Human Services said yesterday that it will purchase an additional 13 million treatment courses.

"We have anticipated this within the United States," Health and Human Services Secretary Kathleen Sebelius said yesterday afternoon. "We are very aggressively addressing cases here, containment here, trying to move rapidly."

Along with the federal doses, the plan called for states together to create a cache of 30 million doses, but they have fallen short of that figure by one-third. Maine, for example, which has three confirmed cases of swine flu, has stockpiled no medications.

Many States Do Not Meet Readiness Standards

The District and Maryland fell short by hundreds of thousands of doses. Virginia is one of 15 states that has stockpiled more doses than called for in the federal guidelines. In the District, health officials stockpiled about 76 percent of the recommended doses, and in Maryland, the figure was about 70 percent, although officials there said they think they will be fully stocked by this fall.

The combined federal-state stockpile would provide enough medication to treat 25 percent of the population. Health officials believe that treatment at such levels would be sufficient to stop a pandemic.

Some states, however, were reluctant to invest in their share for two reasons: The drugs have a shelf life of four years, and they were proving ineffective for avian flu, which seemed to pose the greatest risk.

Some officials cited financial constraints, despite a 25 percent federal funding match for the antiviral medications.

"We purchased as much as we could with the funds we had," said Dena Iverson, spokeswoman for the District's health department.

Federal agencies were asked last year to create their own stockpiles. But the response has been uneven.

The Defense Department has stockpiled 8 million treatment courses for military service members and their families. The Postal Service, however, has no stockpile for its 330,000 mail carriers.

Even the agency in charge of the pandemic program, Health and Human Services, is behind schedule with its stockpiling effort. Last year, Robinson said, his department asked for $2 million for antiviral medications for its workers, but none have been purchased.

Staff writers Spencer S. Hsu, Lori Aratani and Ann Scott Tyson and news researcher Alice Crites contributed to this report.

View all comments that have been posted about this article.

Post a Comment

View all comments that have been posted about this article.

You must be logged in to leave a comment. Login | Register

Comments that include profanity or personal attacks or other inappropriate comments or material will be removed from the site. Additionally, entries that are unsigned or contain "signatures" by someone other than the actual author will be removed. Finally, we will take steps to block users who violate any of our posting standards, terms of use or privacy policies or any other policies governing this site. Please review the full rules governing comments and discussions. You are fully responsible for the content that you post.

© 2009 The Washington Post Company

HEALTH CARE

U.S. Remains Unready For Pandemic

IN MANY WAYS, THE U.S. REMAINS DANGEROUSLY UNDERPREPARED TO COPE WITH ANY HEALTH EMERGENCY OF TERRIFYING PROPORTIONS.

Saturday, May 9, 2009
by Marilyn Weden Swaffin, Randy Barnett, and Neil Munro

The anthrax, SARS, and avian flu scares of recent years frightened the federal government into making much-needed progress toward coping with any major health emergency — even one of terrifying proportions. But progress isn’t readiness. And because Uncle Sam suffers from what amounts to attention deficit disorder, the nation remains dangerously underprepared in many ways. “We are, by nature, people who have very short memories,” said Georges Benjamin, executive director of the American Public Health Association. “We will address an emergent problem, but even after 9/11, anthrax attacks, and Hurricane Katrina ... there is a pattern in which we invest and then cut that investment, and another event happens, so we have to play catch-up.”

So if swine flu continues to fade from the headlines, and history is any guide, we can expect the sense of urgency surrounding pandemic preparedness to fade as well — even though some experts predict that a more virulent form of the virus will hit this fall. Avian flu remains a global threat, moreover, carrying the potential to kill 60 percent of those it infects.

Among the most commonly cited gaps in U.S. readiness: Most vaccines are now made abroad, raising serious doubts about the availability of sufficient supplies for Americans during a truly global outbreak; domestic stockpiles of antiviral medications and vital equipment, such as ventilators, are widely viewed as inadequate; local public health agencies are underfunded; and federal emergency plans have tended to work better on paper than in reality.

The swine flu that hit first in Mexico is a reminder that U.S. supplies of antivirals are widely viewed as inadequate.

Still, experts see considerable improvement. Jeffrey Levi, executive director of the Trust for America’s Health, a nonprofit public health advocacy group, notes that the Health and Human Services Department recently reached its goal of stockpiling enough antiviral medication to treat infections in 25 percent of the U.S. population and that it has purchased 104 million respirators, 51.6 million surgical masks, 20 million syringes, and 4,000 ventilators.

All state governments have adopted pandemic preparedness plans, along with blueprints for how they

would receive and distribute emergency vaccines, antidotes, pharmaceuticals, and medical supplies from federal stockpiles, Levi said on National Journal's Health Care expert blog this week.

As the immediate threat from swine flu seemed to recede, he added, "A real-time experience with a novel virus outbreak tests all our plans — from communications to policies around school closure and ramping up laboratory and care capacities. We should re-evaluate during this interim period to see what areas need improvement and, possibly, increased investment."

Pandemics are as old as civilization and certainly nothing new to the United States. The so-called Spanish flu of 1918 killed 70 million to 100 million people worldwide, including more than 500,000 Americans. Since the early 1980s, AIDS has caused more than 25 million deaths around the globe, including nearly 600,000 in this country. So, why aren't we better prepared?

### Lessons From Health Crises

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>Spanish Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td>1918-19</td>
</tr>
<tr>
<td>HARD-HIT</td>
<td>India, China, sub-Saharan Africa, U.S., Indonesia</td>
</tr>
<tr>
<td>WORLDWIDE CASES</td>
<td>Estimated 500 million</td>
</tr>
<tr>
<td>U.S. DEATHS</td>
<td>675,000</td>
</tr>
<tr>
<td>LESSON LEARNED</td>
<td>Cities with good relations among local agencies fare better. Closing borders can stop the spread.</td>
</tr>
</tbody>
</table>

**SOURCES:** Centers for Disease Control and Prevention; World Health Organization; UNAIDS; Journal of the American Medical Association

### Attention Deficit Disorder

Although the national public health network appears to be functioning well, its funding is anything but steady and reliable. Washington habitually throws money at a crisis, then turns its back as soon as the threat has passed. "A profound amnesia [sets in] about a second after the last case is reported," says Howard Markel, a physician and medical historian at the University of Michigan.

Public health officials say that this pattern makes it very difficult to sustain a high level of readiness. "We've struggled with the perception that you create a public health emergency response system and put it on the shelf, and then hit a switch when you need it," says Paul Jarris, executive director of the Association of State and Territorial Health Officier.

A look at grants funded over the past decade by the Centers for Disease Control and Prevention shows that emergency preparedness money has flowed in fits and starts. In fiscal 2000, the agency inked $42 million in cooperative agreements for public health emergency preparedness. In both 2001

and 2002 — post 9/11, in other words — that figure skyrocketed to $1 billion a year. By fiscal 2004, the
groats dropped to $850 million, only to jump again in 2006 to $991 million as avian flu threatened. But
the threat never materialized, and CDC’s grants sagged to $696 million in 2008.

Federal money for local public health systems is down more than 20 percent from a high-water mark
of $934 million in 2005, according to Robert Pestronk, executive director of the National Association
of County and City Health Officials. State and local governments have responded to the recession with
their own cuts. Some 10,000 public health workers have lost their jobs. “We’ve taken a one-shift
workforce and put them on three shifts,” he says.

Pestronk decries the loss of know-how. “To make [a pandemic response] happen well, you need
people who have done it before,” he said. He expects to see another 7,000 public health and
emergency-response jobs disappear by the end of 2009.

Public health officials were hopeful when the Obama administration tagged $1 billion in stimulus
money for local health care and wellness. But the authorization for the cash was narrow — mostly for
prevention of chronic diseases — and provided nothing for health emergencies. An additional $870
million targeted to pandemic preparedness was stripped out of the stimulus bill by Sen. Susan Collins,
R-Maine, because she thought the funding would not actually stimulate the economy and should go
through the normal appropriations process.

The White House has since asked for $1.5 billion to address the swine flu epidemic, but that money
would primarily pay for making vaccines and stockpiling antiviral drugs. Those goals are important, but
they miss a major point, Jarris says. “It’s not enough to have vaccine. Somebody has to [administer]
that vaccine.” This week, House Appropriations Committee Chairman David Obey, D-Wis., added
$350 million for state and local preparedness agencies to President Obama’s request.

Markel isn’t satisfied. He has a simple question for the federal officials keeping what he views as too
tight a grip on the purse strings: “How do you want to protect yourself?” Markel wants lawmakers and
the president to keep in mind that “germs have hopes and dreams, just like we do. They want to infect
us.”

**Enough for Only One in Four**

The federal government met its goal of stockpiling enough antiviral medications to treat 25 percent
of the U.S. population. What about the other 75 percent?

“You could make a case that more antivirals could be used,” said Mike Leavitt, who was HHS
secretary in the George W. Bush administration. The goal was based on estimates that even in a
severe flu pandemic no more than one-quarter of the population would fall ill. But a larger supply might
help keep people well, Leavitt suggests.

“The thought is that you could try to prophylactically deal with patients,” he said, “If someone was sick
in a household you would provide Tamiflu [the more common of the two flu drugs] to the person and
also anyone giving them care and the family. You would do everything you can to contain it. You
would use more antivirals than for those who are sick.”

Kim Elliott, deputy director of the Trust for America’s Health, argues that another 109 million treatment
courses are needed. She notes that HHS officials were wrong in assuming that private health care
providers would buy doses to have on hand for an emergency. “With the economy being what it is,
and influenza on the back burner, they didn’t do it,” she said.

HHS recently reached its goal of stockpiling enough antiviral
medication to treat 25 percent of the U.S. population.

Donald Thompson is the senior program director for medical and public health program at the Center
for Infrastructure Protection at George Mason University’s School of Law. He contends that if a killer
flu devastates the nation, many people, such as health care workers, would need antivirals for
extended periods. “They’ll be taking it constantly. Plus, law enforcement officials [will need] it, and [so

will people to keep government going," he said.

About 80 percent of the U.S. antiviral stockpile consists of Tamiflu, made by Swiss-based Roche. The remainder is Relenza, produced by British-based GlaxoSmithKline. Those companies have beefed up their production capacities but have not erased fears about the adequacy of their supplies -- and their products. Contamination could send millions of doses to the garbage can, and some flu strains can prove drug-resistant. Tamiflu wasn't terribly effective against garden-variety flu this winter.

"Our biggest problem is that there need to be different types of antivirals," said Bruce Gellin, director of HHS's National Vaccine Program Office. "Resistance develops, and then they are no longer useful.... Part of the flu vaccine needs a person's immune system to produce protective antibodies -- would be produced elsewhere. Neither company has a swine flu vaccine ready to go.

"We're not doing great in the sense that it's not a big industry," said Paul Offit, chief of infectious diseases at the Children's Hospital of Philadelphia and author of The Cutter Incident: How America's First Polio Vaccine Led to the Growing Vaccine Crisis, which chronicles the decline of the U.S. vaccine industry after the deaths of a number of healthy children inoculated for polio.

Making vaccines is a "real risk," George Mason University's Thompson said. "Industry doesn't exist just in case. They have to make enough to keep their doors open, to do research. The realities of business today are painful, so it's going to be a real struggle."

One problem, Burr said, is that the United States has fallen behind technologically. Leading European vaccine makers have progressed from growing the flu vaccine in chicken eggs to faster, less cumbersome cell-based processes. U.S. producers are still using eggs. It would likely take two doses of vaccine to inoculate an individual against swine flu, so that means 600 million vaccines -- and eggs -- to vaccinate the U.S. population.

Burr notes that BARDA has helped companies begin researching cell-based vaccines. He predicts major strides, but not in time for a huge inoculation campaign this fall. Leavitt is likewise worried about how many doses producers can make quickly. "The country's invested over $1 billion in new capacity," he said. "Much of it won't come online until 2011. You could argue that if we had a full-blown pandemic, we wouldn't have full capacity to create 300 million courses in six months."

At the moment, the drugmakers are churning out next year's seasonal flu vaccine. If they are to prepare for a return of swine flu, they either have to stop what they are doing to begin working on a swine flu vaccine or combine production of a swine flu vaccine with the three existing seasonal flu strains.

"I've been told it's very, very difficult to add a fourth strain because production is far along," Elliott warned.

All Together Now — or Not

The latest swine flu outbreak has caused plenty of fear, and responses to it are strongly criticized in some quarters. But most public health officials say that the system has handled the crisis well so far. That shouldn't come entirely as a surprise. Since the September 11, 2001, terrorist attacks, emergency-response workers across the country have planned and drilled for all manner of catastrophes, including pandemic influenza.

"The investment that was made in the local, state, and federal system since 9/11 has yielded value in spades," says Pestonk of the county and city health officials' association.

The most valuable link in the chain, he says, is the improved relationships and communication among emergency workers, public health officials, and local and federal agencies: "It's important for people to know one another before they have to work together."

In the current outbreak, Richard Besser, acting chief of the CDC, has won high marks for his performance both in front of TV cameras and behind the scenes. "Dr. Besser is to be commended," Jarris says. "He has done a tremendous job in coordinating the federal, state, and local response."

But much of the progress has come from having strong contingency plans in place. There's still room for improvement, though, when it comes to implementation, says Lawrence Gostin, professor of global health law at Georgetown University and director of the World Health Organization's Collaborating Center on Public Health Law and Human Rights. He finds much to fault in the recent response to the swine flu threat.

HHS created a National Strategy for Pandemic Influenza in 2005. State and local governments followed suit. So did hospitals. "These plans were all about what the country should do in the event of flu, in terms of school closures, hygiene measures, transportation systems, closures of sporting and other events. They said, 'This is what you should and shouldn't do now,'" Gostin said. "And yet everyone in the country is running around without clarity or consistency.... There's been a fragmented response.... Why plan all these things if we're not going to implement them?"

Inconsistencies have been especially apparent in decisions about school closures, he said. "San Antonio [in Texas] closed down all of its school districts, whereas Dallas nearby hasn't closed any. Maybe just one school. Some places are asking people to stay away from public areas, and others aren't. Some are telling people not to fly, and others aren't. It's a complete mess at the moment."

The problem, in Gostin's view, is a lack of federal leadership. "It's regrettable that we [didn't] have a head of HHS and particularly a [permanent] head of CDC," he said. Congress quickly confirmed Kathleen Sebelius as HHS secretary after the swine flu outbreak began. "That's no way really to run a health system to wait and rush an appointment in a time of crisis. You want to have key people in place right away," Gostin said.

In a 2008 report card on each state's emergency preparedness, the Trust for America's Health found weaknesses in planning as well as in communications technology. Scores varied widely, with Louisiana, New Hampshire, North Carolina, Virginia, and Wisconsin earning especially high marks. Arizona, Connecticut, Florida, Maryland, Montana, and Nebraska got the worst grades.

Global Coordination

International cooperation is far better than it was a decade ago, but political and funding obstacles still constrain it.

The World Health Organization and its various affiliates, such as the Washington-based Pan American Health Organization, have spent much time and money preparing for novel outbreaks, including

severe acute respiratory syndrome, or SARS, and the new swine flu. "Countries have realized they need international cooperation," said Pan American spokesman Daniel Epstein.

Since 2005, WHO has established local coordinators to help detect and counter disease outbreaks, he said, adding, "We now have an international system in place that can track -- almost in real time -- cases of a communicable disease." In recent weeks, the Pan American Health Organization used its control center to respond to the Mexican outbreak and look for others. The agency deployed 16 experts to work with Mexican authorities.

The multinational effort worked well, Epstein said. Logistics, rather than local political pushback, has been the major difficulty, he noted. "It has been really a model of cooperation."

Gostin, who sits on WHO’s expert committee on international health regulations, disagrees. Over the past few weeks, he said, Mexico’s underfunded public health system was overwhelmed, and its agricultural and tourist industries pressured the national government to play down the health threat. Gostin argues that WHO should have the legal authority to require governments to promptly report unusual diseases. Political resistance from affected countries is a common problem -- hampering, for example, international efforts to track early SARS infections in 2003 in several Asian countries, including China, where the disease was most evident.

Epstein has a more conventional wish list: funding for additional surveillance, more research on vaccines and antiviral drugs, and better balancing of government alarms and reassurances. "The trick is balancing [public] communications about what we know and what we don’t know," he said. "We have to be honest and open: ‘We don’t know how deadly this virus will be ... but we are working hard to contain it, and you as an ordinary citizen can take measures to help us contain it.'"

**Speeding Identification**

Since 9/11, the federal government has spent several billion dollars on pandemic-related research and billions more on related basic science. The budget for the National Institute of Allergy and Infectious Diseases rose from $1.7 billion in 2000, to $4.3 billion in 2007.

The benefits of this infusion were on display during the SARS crisis, when scientists at two federal centers were able to quickly dissect the genome of the viruses and jump-start development of treatments.

Since then, the underlying technology has advanced further, giving scientists more data, faster computers, and quicker results. Benjamin of the American Public Health Association says, "It’s certainly a lot better than it was before," but he added that the government needs to work on even speedier identification of diseases.

Future breakthroughs will help health officials better estimate the deadliness, contagiousness, and likely mutations of new diseases, predicts Robert Baltimore, an infectious disease expert at the Yale School of Medicine. Currently, he said, "when a new strain of virus occurs ... we’re limited in our ability to prognosticate how dangerous it is going to be."

A major obstacle, experts say, is the dearth of vaccine manufacturing in the United States. To revitalize that industry, companies would have to have financial incentives and some protection from liability lawsuits, Georgetown’s Gostin said. Without those incentives, "vaccine manufacturers are just not interested," leaving the United States dependent on producers elsewhere, he said.

**Surge Capacity**

Stockpiled vaccines can’t do much good if there aren’t enough syringes to deliver them. The United States has done a poor a job of making sure it has enough equipment to tackle a full-blown pandemic, Thompson said.

Leavitt said that one of the biggest problems in a flu pandemic might be a shortage of ventilators, because flu can cause severe pneumonia. "We don’t have enough -- or enough people who know how to operate them," he said. "In a pandemic, they’re a critical asset."

Ventilators are expensive, Leavitt noted -- about $8,000 to $10,000 apiece -- and it would be hard for the federal government to stockpile and move them around the country. HHS has issued specifications...
for a less expensive ventilator, he said. Meanwhile, state and local health departments need to decide whether to stock up on costly ventilators that they may never use.

Health care analysts also raise questions about supplies of face masks, latex gloves, and even hospital beds. Thompson estimates that hospitals should have a 20 percent surge capacity to enable them to quickly ramp up in a pandemic, but as hospital stays have become shorter, the number of beds nationwide has declined. In 2007, the U.S. had 651,000 community hospital beds, down from 927,000 in 1990, according to the American Hospital Association.

Leavitt counters that the number of hospital beds is not very important, provided that states and localities have plans to transform school gyms and public places into sick wards, if necessary.

Legal Powers

Disagreement abounds about whether and when the federal government should be allowed to quarantine sick people, quarantine people who have been exposed to the sick, restrict transportation, or destroy infected property during a public health emergency. But most experts agree that the U.S. government is ill-prepared to deal with these issues when the time comes.

"More than four years ago, the CDC proposed fundamental revision of quarantine powers. And yet, three years later -- after SARS, after avian influenza, and now swine flu -- we don't have final regulations," Gostin complained. "If [the government] did try to act and exercise power, it's doubtful whether it would be lawful."

In 1991, when smallpox was festering in Boston, a panicked local health board ordered residents to roll up their sleeves and get vaccinated. Many did so willingly. Others refused, even though they knew that the city could hit them with a $5 fine or throw them in jail for 15 days. Resisters were forcibly held down or knocked out by special police squads so that physicians could administer the vaccine, according to a Boston Globe account.

CDC has proposed fundamental revisions to governments' power to quarantine.

"I'm not sure CDC has any legitimate power now," Gostin said. "I think that no matter what CDC tried to do, it would be challenged legally."

Just last week, Andrew Speaker, who had tuberculosis when he flew to Europe for his wedding in 2007, filed a lawsuit arguing that the CDC invaded his privacy and ruined his reputation when it quarantined him.

Currently, Gostin said, public health officials' powers are based on laws passed in 1844, and the Supreme Court has ruled that the government must follow due process when confining someone for health reasons.

"There is limited capacity to quarantine," Leavitt agreed. When you start working through [emergency-simulation] exercises, this is where it breaks down. People on planes. Where do you put them? When do you release them? You need to think about [people] crossing borders with cars."

Countless questions remain unanswered about how the U.S. could -- and should -- respond if influenza returns this fall with a ferocity unlike anything this country has experienced since the 1918 Spanish flu killed seven out of every 1,000 Americans.
Staff Shortages in Labs May Put Patients at Risk

By LAURA LANDRO

The swine-flu outbreak has focused a spotlight on a looming risk for hospitals and their patients: a shortage of technicians to run critical lab tests.

Vanderbilt University Hospital's lab had to pull staffers from other parts of the hospital and ask technicians to work double shifts to test incoming patients for swine flu earlier this month. "It was all hands on deck for a week," says Michael Laposata, chief pathologist at the large medical center in Nashville, Tenn.

Swine flu has had minimal impact in the U.S. so far. But in the event of a major infectious-disease outbreak, labs at smaller hospitals around the country "would never have enough expertise or resources to mount a response," Dr. Laposata says. "It's a major patient-safety issue, right behind taking out the wrong kidney or giving 10 times the dose of a drug."

Like the growing shortages of primary-care doctors and nurses, the shrinking ranks of skilled lab workers pose a potential threat to the safety and quality of health care, medical experts warn. Hospitals say it currently can take as much as a year to fill some job openings. And the American Society for Clinical Pathology, which certifies lab professionals, says average job-vacancy rates currently top 50% in some states. The group is lobbying for federal and state funds to keep some academic training programs alive and raise awareness of the problem.

Besides testing for deadly viruses and infections, lab technicians, who currently number about 300,000 nationwide, perform such vital tests as diagnosing heart attacks and identifying cancerous tumors. There is no firm evidence to link the growing shortage of lab professionals to an increase in errors or a national slowdown in getting results to patients. But to heed off that eventuality, hospitals and professional groups are taking new steps to increase funding for training and to lure new recruits.

"We're holding everything together with Band-Aids and glue today, but five years from now it's going to be another story," says Susan Caese, lab director for Three Rivers Community Hospital in Grants Pass, Ore., which is owned by Aetna Health Systems. She says the hospital has been working with a local community college to provide the hands-on lab training for graduates of a two-year medical lab technician program. The hospital also lets its lab technicians with two-year degrees take online courses toward a bachelor's degree.

Cara McKenna, president of the American Society for Clinical Pathology, says younger workers haven't been attracted to the field, which requires the same level of education as nursing but doesn't pay as well. Starting salaries for lab technicians range from about $27,000 to $36,000, depending on the graduates' level of education. And requirements for
licensing and certification of lab technicians vary from state to state, which can make it hard to relocate, says Dr. McKenna, who is also associate professor of pathology at the University of Michigan Medical School.

**Training in Obscurity**

Lab workers toil in obscurity deep in the bowels of most hospitals, and most people don’t know much about the field, says Carol Wells, director of the clinical laboratory sciences program at the University of Minnesota in Minneapolis. “Everyone knows what a nurse does, but no one sees the workers in the laboratory, who are highly trained and execute the tests that are responsible for about 70% to 80% of all diagnostic and treatment decisions made by physicians.” Dr. Wells says. “If we disappeared for a day or two, health care would grind to a halt.”

Lab-science-training programs are expensive to run, and while some new degree programs have been started, a third of the training programs at colleges around the country have closed down over the past decade. That bodies poorly for hospitals seeking to fill job openings. The federal government estimates that 138,000 new lab professionals will be needed by 2012 to replace technicians expected to retire, but only 50,000 will be trained by that time.

Quest Diagnostics, which employs about 8,500 lab professionals, making it one of the nation’s largest lab companies, currently has about 1,200 job openings nationwide. Some vacancies can take months to fill in areas of the country where training programs have closed, says David W. Norgard, vice president of human resources at Quest. The company often recruits on campuses, pitching lab work as a scientific career for which an advanced degree is not necessary.

Agnes Tyl, 36 years old, is currently enrolled at Western Illinois University, where she is preparing for a second career as a lab technician. Ms. Tyl previously took some science courses in college, but ended up getting a degree in interior design. After finding no jobs in that field, she returned to school, where she spends time peering into a microscope to look for abnormalities in blood cells. “I really see the opportunity to grow and be involved in new technology that will help in patient care,” Ms. Tyl says.

**Counting Blood Cells**

Lab technicians, who usually work under the direction of a pathologist, perform tests such as analyzing blood, urine and other bodily fluids and tissues for diseases. To diagnose a suspected heart attack, they measure substances that signal cardiac stress or damage. They count the number and types of blood cells to determine the presence of anemia, leukemia and other blood disorders.

Much of the work is painstaking: Histotechnicians, for example, must prepare sections of body tissue by cutting it into thin slices, mounting it on slides and staining the tissue so it can be viewed under a microscope. Patients who want to learn more about what lab professionals do can visit labtestsonline.org, sponsored by various industry groups.

Some labs have had to change their work practices to get by with fewer technicians. Rather than have workers perform only one type of test, for instance, some labs are training technicians in different areas such as hematology and chemistry. By learning to run each other’s instruments, technicians can move between areas when the workload requires it. Automation also is reducing the need for additional lab personnel, but experts say the human touch is still essential.

“Tests are automated, but that doesn’t mean a lab monkey can do them,” says Dr. Wells of the University of Minnesota. “These machines have to be carefully monitored, and if they spit out a result that doesn’t make sense, only a skilled lab technician can catch a possible discrepancy and investigate what went wrong,” she says.
Several Minnesota institutions are making use of a $3.2 million Department of Labor grant to improve the supply of lab professionals. Minneapolis-based Allina Hospitals and Clinics, with 11 hospitals and 65 clinics, is offering "fast track" training programs to attract college graduates who have a science degree. The program requires them to work a year in a lab and then become certified as medical technologists after two or three years, says Jane Ranken, Allina's system manager for work-force planning.

Job Vacancies

Some hospitals are pitching a career in lab sciences as an option for workers who have been laid off or downsized in other fields. At Affiliated Community Medical Centers in Willmar, Minn., which runs 11 clinics, some vacant lab jobs have taken as long as six months to fill, causing some backups in labs. Lab manager Judith Raske says she visits career classes at high schools, and job fairs for laid-off workers in other fields, to pitch the notion of a career in lab sciences.

"Young people have no idea what these jobs entail because no one sees the lab professionals," she says.

Write to Laura Landro at informedpatient@wsj
May 27, 2009

Two More New Yorkers With Swine Flu Die

By ANEMONA HARTOCOLLIS

Two more New Yorkers have died with confirmed cases of swine flu, the city's health commissioner said on Tuesday, bringing the city's total number of deaths related to the virus to four. Emergency room visits and hospitalizations also continued to rise.

The commissioner, Dr. Thomas R. Frieden, said the two latest casualties, a 41-year-old woman in Queens and a 34-year-old man in Brooklyn, were linked to the H1N1 virus by lab tests completed on Monday and Tuesday. Both patients had underlying health conditions that put them more at risk, he said. He added that he could not say officially whether the flu had caused their deaths until autopsies were finished. Both died on Friday.

Officials have cited underlying conditions as a factor in all four deaths in the city, but they have not revealed those conditions, citing medical confidentiality.

Five more public schools were closed on Tuesday because of suspected swine flu cases, while more than a dozen that had been closed were reopened.

"It's good that they're back because they were missing a lot of school days, but in a way it's frightening," said Elizabeth Rosa, 33, a home attendant, after seeing off her daughter, Jaslyn, 11, and son, Kristian, 8, at the entrance of Public School 19 in Corona, Queens. "When I kissed them goodbye I thought, 'Is it going to be O.K.? Is the school safe?'"

Dr. Frieden, speaking at a news conference at the health department, noted that both patients who died were relatively young. Health officials have said that there is some evidence that people born before 1957 may have been exposed to a similar virus and may have some immunity to the novel strain of flu that is circulating.

Hospitals that normally get about 200 visits to the emergency room each day are getting 2,000 per day, he said, and more than 25,000 people have gone to emergency rooms over the past month. The numbers are highest in Queens, but are increasing in Brooklyn and, to a lesser extent, in the Bronx and Manhattan.

Over the last five days, he said, 20 to 25 people a day have been hospitalized with the flu. Before the weekend, the city had recorded only 57 hospitalizations for flu during the entire preceding 30 days.

Dr. Frieden said the numbers of emergency room visits are rising over the past week, perhaps driven by the publicity surrounding the deaths, but also by the pervasiveness of the virus through the general population.

6/9/2009
To put the current situation in perspective, Dr. Frieden said that in a regular flu season, 400,000 to 1 million New Yorkers get the flu, and about a third of them never even realize it.

Of those who have gone to the emergency room, fewer than 1 in 50 needed to be admitted to the hospital, Dr. Frieden said. "The vast majority of people going to the hospital emergency department probably shouldn't be going," Dr. Frieden said. Similarly, he said, a spot check of schools with high absenteeism showed that two-thirds of the children who were kept home were not sick.

The pressure on emergency rooms could be seen on Tuesday at Maimonides Medical Center in Brooklyn, where many sick parents came in with sick children. The hospital created a flu clinic in an area that usually accommodates patients who have been admitted and are waiting for a bed. It was filled on Tuesday with people in masks being evaluated for flu.

Last year in May, the Maimonides emergency room saw an average of 263 patients a day. On Monday, emergency room doctors saw 480 patients.

"The consensus among these physicians," said Dr. Steven J. Davidson, the chairman of the hospital's emergency medicine department, "is that the influenza is mild but the patients are unusually scared."

While the ailments that may have made the four New Yorkers who died more vulnerable to the flu have not been identified, federal and city health officials have released a list of conditions that increase the risk from flu. They include being older than 65 or younger than 2; respiratory ailments like asthma or emphysema; a weakened immune system because of pregnancy, diabetes or immune-suppressing drugs like steroids; tuberculosis; heart disease; kidney disease; and morbid obesity.

With reports of new flu cases tapering off around the country — except in New York, New Jersey and New England — federal health officials said on Tuesday that they would concentrate on tracking the swine flu's progress in the Southern Hemisphere and preparing for a surge of cases in the fall.

Outside of the Northeast, reports of people with flu symptoms who visited doctors and hospitals dropped to normal levels for late May, said Dr. Anne Schuchat, director of immunization and respiratory disease for the Centers for Disease Control and Prevention.

Although Dr. Schuchat would not say that the flu had peaked for the season, she said the country was "at a transition point" and officials would look ahead to the next season, which usually begins in November.

Since the flu was identified in New York in late April, the city has closed 42 schools in 31 buildings, Dr. Frieden said. Schools have generally been closed for five days.

Since then, 25 have reopened, including about 20 on Tuesday. Most of the newly reopened schools had more than 85 percent attendance on Tuesday, although more than a quarter of the students at Public School 35 in Hollis, Queens, were absent. The handful of schools that reopened on Friday also appeared to have resumed normal routines, with more than 90 percent in attendance, according to the Department of Education's Web site.

A spokeswoman for the department, Marge Feinberg, said that the overall attendance rate in the city was 82

percent on Tuesday, compared with 87 percent on May 4, before the flu had struck many students. The attendance rate in Queens was 82.6 percent on Tuesday, compared with 88.5 percent at the beginning of May.

Five additional schools are to be closed on Wednesday until Monday: Q831, a special education program at P.S. 832 in St. Albans, Queens; P.S. 233, a special education school inside P.S. 186 in Bensonhurst, Brooklyn (the rest of the building is open); P.S. 369 in Boerum Hill, Brooklyn (only the special education part of the building); P.S. 68 in Wakefield, the Bronx; and the Audubon School (P.S. 128) in Washington Heights.

Reporting was contributed by Ann Farmer, Donald G. McNeil Jr., Jennifer Medina and Matthew R. Warren.
Antivirals - State Allocations

<table>
<thead>
<tr>
<th>Entity</th>
<th>Population</th>
<th>Initial Allocation (2006)</th>
<th>Pro Rate Distribution</th>
<th>States Stockpile #1M</th>
<th>States Stockpile #2M</th>
<th>% of Pre Rate Allocation Ordered (Subsidy Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>4,903,726</td>
<td>671,156</td>
<td>472,860</td>
<td>533,553</td>
<td>112.8%</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>648,280</td>
<td>96,608</td>
<td>68,065</td>
<td>77,030</td>
<td>113.2%</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>5,579,222</td>
<td>831,428</td>
<td>585,780</td>
<td>67,712</td>
<td>112.6%</td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td>3,277,774</td>
<td>406,500</td>
<td>286,397</td>
<td>382,398</td>
<td>133.5%</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>73,591,206</td>
<td>3,813,664</td>
<td>2,606,899</td>
<td>2,752,151</td>
<td>102.4%</td>
<td></td>
</tr>
<tr>
<td>Chicago</td>
<td>2,869,121</td>
<td>427,563</td>
<td>301,238</td>
<td>200,545</td>
<td>66.6%</td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td>4,547,633</td>
<td>677,699</td>
<td>477,470</td>
<td>215</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>2,486,960</td>
<td>519,635</td>
<td>345,107</td>
<td>22,829</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td>818,166</td>
<td>121,925</td>
<td>85,902</td>
<td>121,164</td>
<td>141.0%</td>
<td></td>
</tr>
<tr>
<td>District of Columbia</td>
<td>557,630</td>
<td>83,098</td>
<td>58,546</td>
<td>45,000</td>
<td>76.9%</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>16,999,181</td>
<td>2,333,259</td>
<td>1,784,796</td>
<td>66,000</td>
<td>3.7%</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>8,676,460</td>
<td>1,292,967</td>
<td>910,968</td>
<td>474,022</td>
<td>52.0%</td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td>1,248,795</td>
<td>198,045</td>
<td>151,111</td>
<td>172,467</td>
<td>138.6%</td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td>1,367,034</td>
<td>232,719</td>
<td>143,529</td>
<td>8,567</td>
<td>6.0%</td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>9,779,966</td>
<td>1,457,434</td>
<td>1,026,829</td>
<td>516,018</td>
<td>50.3%</td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>6,199,571</td>
<td>923,875</td>
<td>602,812</td>
<td>650,912</td>
<td>102.0%</td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>2,941,978</td>
<td>438,420</td>
<td>308,887</td>
<td>312,631</td>
<td>101.2%</td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>2,724,785</td>
<td>406,054</td>
<td>285,084</td>
<td>296,004</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td>4,118,189</td>
<td>613,763</td>
<td>432,281</td>
<td>216,224</td>
<td>50.0%</td>
<td></td>
</tr>
<tr>
<td>LA County</td>
<td>9,871,506</td>
<td>1,471,076</td>
<td>1,036,440</td>
<td>1,036,440</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>4,493,665</td>
<td>669,657</td>
<td>471,804</td>
<td>471,804</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>1,309,205</td>
<td>195,151</td>
<td>137,457</td>
<td>0</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>5,512,310</td>
<td>821,458</td>
<td>578,754</td>
<td>216,727</td>
<td>36.4%</td>
<td></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>6,420,357</td>
<td>958,777</td>
<td>674,093</td>
<td>59,662</td>
<td>7.9%</td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>10,682,364</td>
<td>1,553,498</td>
<td>1,058,758</td>
<td>1,076,948</td>
<td>102.7%</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>5,064,172</td>
<td>754,675</td>
<td>531,703</td>
<td>340,640</td>
<td>64.1%</td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>2,882,994</td>
<td>429,571</td>
<td>302,652</td>
<td>338,594</td>
<td>111.9%</td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>5,719,204</td>
<td>852,260</td>
<td>600,477</td>
<td>600,477</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>918,137</td>
<td>136,826</td>
<td>90,460</td>
<td>8,174</td>
<td>8.5%</td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>1,737,479</td>
<td>258,923</td>
<td>182,433</td>
<td>71,952</td>
<td>29.4%</td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td>2,242,207</td>
<td>334,139</td>
<td>235,416</td>
<td>135,514</td>
<td>57.6%</td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>2,108,705</td>
<td>192,046</td>
<td>125,305</td>
<td>68,000</td>
<td>30.7%</td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>9,642,412</td>
<td>1,287,913</td>
<td>806,293</td>
<td>806,293</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>1,878,562</td>
<td>279,948</td>
<td>197,236</td>
<td>77,409</td>
<td>39.2%</td>
<td></td>
</tr>
<tr>
<td>New York (Excludes NYC)</td>
<td>19,212,435</td>
<td>2,862,082</td>
<td>2,617,172</td>
<td>2,444,836</td>
<td>132.1%</td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>8,421,190</td>
<td>1,554,946</td>
<td>846,167</td>
<td>677,882</td>
<td>79.7%</td>
<td></td>
</tr>
<tr>
<td>North Dakota</td>
<td>633,400</td>
<td>94,391</td>
<td>66,503</td>
<td>57,000</td>
<td>85.7%</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>11,437,680</td>
<td>1,704,471</td>
<td>1,200,877</td>
<td>1,368,850</td>
<td>115.7%</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>3,506,469</td>
<td>522,543</td>
<td>368,155</td>
<td>54,015</td>
<td>14.7%</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>3,994,330</td>
<td>531,165</td>
<td>374,220</td>
<td>28,523</td>
<td>7.1%</td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>12,370,761</td>
<td>1,865,521</td>
<td>1,298,844</td>
<td>1,298,792</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>3,877,891</td>
<td>577,991</td>
<td>407,151</td>
<td>407,151</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>1,076,091</td>
<td>160,361</td>
<td>112,981</td>
<td>11,990</td>
<td>10.5%</td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td>4,146,946</td>
<td>616,256</td>
<td>435,899</td>
<td>459,960</td>
<td>106.6%</td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td>764,995</td>
<td>112,909</td>
<td>80,310</td>
<td>80,310</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td>5,845,208</td>
<td>875,067</td>
<td>613,796</td>
<td>613,796</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>22,053,374</td>
<td>3,293,999</td>
<td>2,320,793</td>
<td>1,023,141</td>
<td>44.9%</td>
<td></td>
</tr>
</tbody>
</table>

http://www.pandemicflu.gov/plan/states/antivirals.html

5/12/2009
<table>
<thead>
<tr>
<th>State</th>
<th>Population</th>
<th>Antivirals 9M2009</th>
<th>Antivirals 3M2009</th>
<th>Antivirals 3M2008</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah</td>
<td>2,352,119</td>
<td>350,518</td>
<td>346,856</td>
<td>52,033</td>
<td>21.1%</td>
</tr>
<tr>
<td>Vermont</td>
<td>619,343</td>
<td>92,296</td>
<td>65,027</td>
<td>71,036</td>
<td>10.9%</td>
</tr>
<tr>
<td>Virginia</td>
<td>7,305,284</td>
<td>1,097,093</td>
<td>773,304</td>
<td>827,861</td>
<td>11.8%</td>
</tr>
<tr>
<td>Washington</td>
<td>6,131,298</td>
<td>913,701</td>
<td>643,764</td>
<td>417,902</td>
<td>65.9%</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1,811,740</td>
<td>295,945</td>
<td>390,189</td>
<td>227,561</td>
<td>15.6%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>5,474,390</td>
<td>815,792</td>
<td>574,783</td>
<td>263,729</td>
<td>11.8%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>502,111</td>
<td>74,626</td>
<td>52,718</td>
<td>53,718</td>
<td>10.0%</td>
</tr>
<tr>
<td>American Samoa</td>
<td>57,884</td>
<td>8,626</td>
<td>6,077</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Guam</td>
<td>163,593</td>
<td>24,179</td>
<td>17,176</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Northern Mariana</td>
<td>76,129</td>
<td>11,345</td>
<td>7,993</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Islands (Mainland)</td>
<td>108,143</td>
<td>16,216</td>
<td>11,425</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Virgin Islands</td>
<td>108,143</td>
<td>16,216</td>
<td>11,425</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Federated States of</td>
<td>108,143</td>
<td>16,216</td>
<td>11,425</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Micronesia</td>
<td>56,429</td>
<td>8,400</td>
<td>5,825</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Palau</td>
<td>16,717</td>
<td>2,938</td>
<td>2,971</td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>Totals**</td>
<td>295,257,065</td>
<td>40,000,000</td>
<td>31,000,000</td>
<td>22,829,951</td>
<td>NA</td>
</tr>
</tbody>
</table>


** Includes all treatments, including those that are freely available.
Table. Settings and strategies for antiviral drug use during an influenza pandemic and rationales.

<table>
<thead>
<tr>
<th>Setting and target population</th>
<th>Antiviral strategy</th>
<th>Rationale</th>
<th>Pandemic response goals addressed by antiviral strategy</th>
<th>Estimated number of regimens (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial pandemic outbreaks overseas and in the U.S.</td>
<td>Treatment; PEP, targeted prophylaxis</td>
<td>-- Effective containment of the initial outbreak of a novel influenza virus strain may prevent the pandemic -- Quenching efforts overseas and in the U.S will slow pandemic spread and provide more time for preparedness</td>
<td>Slow pandemic spread</td>
<td>6</td>
</tr>
<tr>
<td>Exposed travelers entering the U.S. early in a pandemic</td>
<td>PEP</td>
<td>-- Contributes to a risk-based policy to reduce the entry of infected persons and delay U.S. outbreaks</td>
<td>Slow pandemic spread</td>
<td></td>
</tr>
<tr>
<td>Persons with pandemic influenza illness</td>
<td>Treatment</td>
<td>-- Reduces influenza complications, hospitalization, and death -- Reduces duration of illness and transmission of infection -- Meets patient and provider expectations for medical care</td>
<td>Reduce health impacts</td>
<td>79*</td>
</tr>
<tr>
<td>Outbreak control in closed settings (e.g., nursing homes, prisons)</td>
<td>PEP</td>
<td>-- High risk of illness and death when outbreaks occur in closed settings -- Documented success of PEP for seasonal outbreaks -- Consistent with accepted public health practice -- Protects those in whom vaccination may be less effective</td>
<td>Reduce health impacts</td>
<td>5</td>
</tr>
</tbody>
</table>

**Recommendations for antiviral drugs primarily from private sector stockpiles**

<table>
<thead>
<tr>
<th>Setting and target population</th>
<th>Antiviral strategy</th>
<th>Rationale</th>
<th>Pandemic response goals addressed by antiviral strategy</th>
<th>Estimated number of regimens (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare and emergency service workers</td>
<td>Outbreak (pre-exposure) prophylaxis for workers with high-risk exposure PEP given exposure of other workers</td>
<td>-- Reduces infection and absenteeism in a critical workforce -- Protects those at highest occupational risk -- Reduces chance of transmitting infection to high-risk patients with illnesses other than influenza</td>
<td>Reduce health impacts Minimize societal disruption</td>
<td>103</td>
</tr>
<tr>
<td>Persons who are severely immuno-compromised</td>
<td>PEP</td>
<td>-- High risk for severe complications and mortality from pandemic influenza, if infected -- Antiviral drugs are the only option for disease prevention</td>
<td>Reduce health impacts</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL NUMBER OF ANTIVIRAL DRUG REGIMENS FOR FULL IMPLEMENTATION:** 195

* A prior estimate of 75 million regimens has served as the basis for public sector stockpiling. The 79 million regimen estimate was calculated using updated planning assumptions.
<table>
<thead>
<tr>
<th>State</th>
<th>Confirmed and Probable Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>66</td>
<td>0</td>
</tr>
<tr>
<td>Alaska</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Arizona</td>
<td>488</td>
<td>2</td>
</tr>
<tr>
<td>California</td>
<td>153</td>
<td>2</td>
</tr>
<tr>
<td>Colorado</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>Connecticut</td>
<td>59</td>
<td>0</td>
</tr>
<tr>
<td>Delaware</td>
<td>86</td>
<td>0</td>
</tr>
<tr>
<td>Florida</td>
<td>122</td>
<td>0</td>
</tr>
<tr>
<td>Georgia</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Hawaii</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>Idaho</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Illinois</td>
<td>794</td>
<td>0</td>
</tr>
<tr>
<td>Indiana</td>
<td>195</td>
<td>0</td>
</tr>
<tr>
<td>Iowa</td>
<td>71</td>
<td>0</td>
</tr>
<tr>
<td>Kansas</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>Kentucky</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Louisiana</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td>Maine</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Maryland</td>
<td>79</td>
<td>0</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>175</td>
<td>0</td>
</tr>
<tr>
<td>Michigan</td>
<td>171</td>
<td>0</td>
</tr>
<tr>
<td>Mississippi</td>
<td>39</td>
<td>0</td>
</tr>
<tr>
<td>Missouri</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Montana</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Nebraska</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>Nevada</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>New Jersey</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>New Mexico</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>New York</td>
<td>284</td>
<td>1</td>
</tr>
<tr>
<td>North Carolina</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>North Dakota</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Ohio</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>Oregon</td>
<td>94</td>
<td>0</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>55</td>
<td>0</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>South Carolina</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>South Dakota</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Tennessee</td>
<td>86</td>
<td>0</td>
</tr>
<tr>
<td>Texas</td>
<td>556</td>
<td>3</td>
</tr>
<tr>
<td>Utah</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>Vermont</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Virginia</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>Washington</td>
<td>611</td>
<td>1</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>766</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5,770 cases</td>
<td>8 deaths</td>
</tr>
</tbody>
</table>
Accelerating Job and Program Cuts Threaten the Public's Health

Background

The Association of State and Territorial Health Officials (ASTHO) surveyed 67 state and territorial health agencies about how the current economic environment is affecting their budgets and ability to protect the public's health. The survey was fielded once in Nov/Dec 2008 and again in Jan/Feb 2009. This is a summary of the 45 responses (42 states, two territories and DC) received between Nov 25 and Dec 16, 2008 and 22 responses (22 states) received between Jan 27 and Feb 5, 2009.

Extent of Budget Reductions

- 29% of health departments surveyed had a FY08 budget that was smaller than FY07.
- 50% made cuts to the FY09 budget between November 2008 and February 2009.
- 71% expect FY09 budgets to be smaller than FY08 budgets.
- 100% of health departments that experienced cuts in FY08 expect further cuts.
- 22% of departments expect at least a 10% budget reduction for FY09.

States are responding to budget cuts by eliminating programs, decreasing services, reducing administrative costs, and cutting back staff via layoffs and attrition.

- Two states have already lost 15% of their workforce through attrition; one of these expects to lose another 15% in FY09.
- The vacancy rates at state health departments range from 2% to 18%. 44% of states have a vacancy rate of 10% or higher.
- At least 40% of states expect to lose staff through layoffs or attrition in FY09.
IMPACT OF BUDGET CUTS ON STATE PUBLIC HEALTH

Sources of Revenue

Respondents reported that their state FY2008 budget came from the following sources:

- Federal - 49%
- State - 34%
- Other - 18% (patient and regulatory fees, tobacco settlement funds, etc.)

Examples of State Actions

- **State A** - Limited eligibility for Maternal and Child Health services and its WIC program.
- **State B** – Cut the scope of its childhood vaccination program.
- **State C** - Eliminated its HIV prevention program.
- **State D** - Eliminated its Hepatitis C and Valley Fever prevention programs, slowed down its vital records process, and reduced epidemiological investigations, laboratory tests, children’s vaccines, and oversight of the WIC program.

**Every dollar spent on routine childhood vaccination in the U.S. saves over $16 in medical and societal costs.**

- **State E** - Reduced cancer reporting, immunization, food safety inspections, flu vaccine purchases, HIV and STD medication purchases, lab testing capacity, and support for local public health clinics, dental clinics, federally qualified health centers and women’s health services.
- **State F** - Reduced vaccine purchase and distribution by $6 million, cut the public hospital budget by over $2.4 million, reduced a homeless services contract by 10%, cut $8 million from substance abuse services, reduced tobacco control activities, limited HIV/AIDS services, cut environmental studies, reduced an early intervention program for at-risk children, and cut back nurses’ scholarships, EMS services, oral health and school health services for children, suicide prevention and stroke monitoring.
- **State G** - Eliminated its teen pregnancy prevention program.

The United States saved about $6.8 billion in health care, public assistance and other costs in 2004 alone, due to the decline in teen birth rates. Eliminating teen pregnancy prevention programs will increase the teen pregnancy rate and reverse this success.

### Public Health Services Cut as State Budgets Shrink

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of States Already Making Cuts to the Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization</td>
<td>5</td>
</tr>
<tr>
<td>Laboratory services</td>
<td>5</td>
</tr>
<tr>
<td>HIV and STIs</td>
<td>1</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>4</td>
</tr>
<tr>
<td>Tobacco prevention and control</td>
<td>4</td>
</tr>
<tr>
<td>Clinical services in public health clinics</td>
<td>3</td>
</tr>
<tr>
<td>Health care facility licensing/inspection</td>
<td>3</td>
</tr>
<tr>
<td>Oral health services</td>
<td>3</td>
</tr>
<tr>
<td>Cancer programs</td>
<td>2</td>
</tr>
<tr>
<td>Community health services</td>
<td>2</td>
</tr>
<tr>
<td>Cystic Fibrosis treatment</td>
<td>2</td>
</tr>
<tr>
<td>Epidemiological investigations</td>
<td>2</td>
</tr>
<tr>
<td>Food safety inspections</td>
<td>2</td>
</tr>
<tr>
<td>Loan repayment program</td>
<td>2</td>
</tr>
<tr>
<td>Patient safety initiatives</td>
<td>2</td>
</tr>
<tr>
<td>Rabies prevention</td>
<td>2</td>
</tr>
<tr>
<td>School health services</td>
<td>2</td>
</tr>
<tr>
<td>Teen pregnancy prevention</td>
<td>2</td>
</tr>
<tr>
<td>Vital records</td>
<td>2</td>
</tr>
<tr>
<td>Women, Infants and children (WIC Program)</td>
<td>2</td>
</tr>
<tr>
<td>Arthritis program</td>
<td>1</td>
</tr>
<tr>
<td>Chronic disease prevention</td>
<td>1</td>
</tr>
<tr>
<td>Day care center inspections</td>
<td>1</td>
</tr>
<tr>
<td>Early intervention for developmental delay</td>
<td>1</td>
</tr>
<tr>
<td>Environmental health studies</td>
<td>1</td>
</tr>
<tr>
<td>Family health and nutrition</td>
<td>1</td>
</tr>
<tr>
<td>Family planning services</td>
<td>1</td>
</tr>
<tr>
<td>Fetal Infant Mortality review</td>
<td>1</td>
</tr>
<tr>
<td>Food for elderly</td>
<td>1</td>
</tr>
<tr>
<td>Health care services for homeless</td>
<td>1</td>
</tr>
<tr>
<td>Infectious disease</td>
<td>1</td>
</tr>
<tr>
<td>Injury prevention</td>
<td>1</td>
</tr>
<tr>
<td>Kidney disease treatment</td>
<td>1</td>
</tr>
<tr>
<td>Maternal and child health programs</td>
<td>1</td>
</tr>
<tr>
<td>Pharmaceutical assistance for aged and disabled</td>
<td>1</td>
</tr>
<tr>
<td>Physical Therapy services</td>
<td>1</td>
</tr>
<tr>
<td>Primary care and rural health</td>
<td>1</td>
</tr>
<tr>
<td>Public health hospitals</td>
<td>1</td>
</tr>
<tr>
<td>Public health nursing</td>
<td>1</td>
</tr>
<tr>
<td>Residential services for children</td>
<td>1</td>
</tr>
<tr>
<td>Speech and hearing services for children</td>
<td>1</td>
</tr>
<tr>
<td>Substance abuse treatment</td>
<td>1</td>
</tr>
<tr>
<td>Suicide prevention</td>
<td>1</td>
</tr>
</tbody>
</table>

This list includes public health programs cut between July 2008 and February 2009. It does not include cuts made after February 6, 2009 or planned cuts to the FY09 budget. 71% of state health departments expect cuts.

Based on state health department responses to AASTHO’s Budget Cuts Survey, conducted 11-25-08 to 03-09-09. Contact Katie Sellers (ksellers@astho.org) for more information on the survey.
NACCHO Survey of Local Health Departments’ Budget Cuts and Workforce Reductions

Background

The National Association of County and City Health Officials (NACCHO) surveyed 2,412 local health departments (LHDs) nationwide in the months of November and December 2008 to assess the impact of current economic conditions on LHDs’ budgets and workforce. The survey, to which 1,079 LHDs distributed across 46 states responded, found that a majority of respondents are experiencing adverse impacts and expect those to continue.

NACCHO estimates a total loss of approximately 7,000 local public health workers nationwide and expects that number to increase in 2009.

Jobs Provided by Local Health Departments are Dwindling

In 2008, more than half of LHDs had either laid off employees or lost them through attrition and have been unable to replace them due to budget limitations. Almost one-third predict layoffs in 2009 (see Figure 1). Among the largest LHDs, 95 percent reduced their staff in 2008, and 46 percent expect to lay-off staff in 2009 (see Figure 2). In addition, many small LHDs have cut costs by reducing staff hours or placing employees on temporary furlough rather than laying off staff.

Certain states have been particularly affected by cuts in LHD staff (see Figure 3). Over 90 percent of LHDs in Arizona, California, Georgia, Idaho, Michigan, Pennsylvania, South Carolina, Vermont, and Virginia report laying off staff or losing positions through attrition. When survey results are extrapolated to all LHDs, NACCHO estimates a total loss of approximately 7,000 local public health workers nationwide and expects this number to increase in 2009.

Figure 1. Budget and Staff Cuts of LHDs: 2008 and 2009

Figure 2. Actual and Expected Decreases in Staffing at LHDs — by Jurisdiction Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>46 LHDs</td>
<td>64%</td>
<td>44%</td>
<td>79%</td>
<td>57%</td>
<td>80%</td>
<td>64%</td>
<td>81%</td>
<td>68%</td>
</tr>
<tr>
<td>250-499 Staff in 2008</td>
<td>40%</td>
<td>35%</td>
<td>47%</td>
<td>39%</td>
<td>49%</td>
<td>41%</td>
<td>47%</td>
<td>42%</td>
</tr>
<tr>
<td>500-999 Staff in 2008</td>
<td>67%</td>
<td>60%</td>
<td>74%</td>
<td>65%</td>
<td>76%</td>
<td>67%</td>
<td>74%</td>
<td>67%</td>
</tr>
<tr>
<td>1,000+ Staff in 2008</td>
<td>85%</td>
<td>75%</td>
<td>88%</td>
<td>80%</td>
<td>90%</td>
<td>80%</td>
<td>88%</td>
<td>80%</td>
</tr>
<tr>
<td>State</td>
<td>Percentage of LHs</td>
<td>Estimated Employee Losses</td>
<td>Expected Staff Reductions</td>
<td>Number of Observations</td>
<td>Response Rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>----------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
<td>--------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All States</td>
<td>32%</td>
<td>32%</td>
<td>2,624</td>
<td>67%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AZ</td>
<td>100%</td>
<td>100%</td>
<td>10</td>
<td>67%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>100%</td>
<td>100%</td>
<td>2</td>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>100%</td>
<td>100%</td>
<td>1</td>
<td>71%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>100%</td>
<td>100%</td>
<td>26</td>
<td>58%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>100%</td>
<td>25%</td>
<td>6</td>
<td>38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>100%</td>
<td>50%</td>
<td>3</td>
<td>63%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>100%</td>
<td>86%</td>
<td>16</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VT</td>
<td>100%</td>
<td>14%</td>
<td>7</td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>95%</td>
<td>81%</td>
<td>20</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TN</td>
<td>50%</td>
<td>75%</td>
<td>20</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WI</td>
<td>89%</td>
<td>50%</td>
<td>16</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>89%</td>
<td>71%</td>
<td>18</td>
<td>53%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TX</td>
<td>88%</td>
<td>50%</td>
<td>17</td>
<td>71%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OK</td>
<td>75%</td>
<td>0%</td>
<td>8</td>
<td>43%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RI</td>
<td>66%</td>
<td>38%</td>
<td>61</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>65%</td>
<td>42%</td>
<td>40</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KY</td>
<td>63%</td>
<td>35%</td>
<td>27</td>
<td>48%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL</td>
<td>60%</td>
<td>24%</td>
<td>48</td>
<td>57%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MI</td>
<td>59%</td>
<td>30%</td>
<td>12</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td>58%</td>
<td>31%</td>
<td>12</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>55%</td>
<td>40%</td>
<td>30</td>
<td>42%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WI</td>
<td>53%</td>
<td>40%</td>
<td>32</td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL</td>
<td>30%</td>
<td>14%</td>
<td>8</td>
<td>62%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MN</td>
<td>48%</td>
<td>24%</td>
<td>46</td>
<td>62%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR</td>
<td>49%</td>
<td>25%</td>
<td>40</td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>46%</td>
<td>25%</td>
<td>13</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UT</td>
<td>43%</td>
<td>45%</td>
<td>7</td>
<td>58%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MI</td>
<td>40%</td>
<td>16%</td>
<td>15</td>
<td>29%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>39%</td>
<td>27%</td>
<td>33</td>
<td>45%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>39%</td>
<td>25%</td>
<td>23</td>
<td>35%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WY</td>
<td>38%</td>
<td>25%</td>
<td>16</td>
<td>70%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WY</td>
<td>32%</td>
<td>30%</td>
<td>30</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MI</td>
<td>31%</td>
<td>0%</td>
<td>26</td>
<td>34%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WV</td>
<td>31%</td>
<td>15%</td>
<td>26</td>
<td>53%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>30%</td>
<td>25%</td>
<td>34</td>
<td>39%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>27%</td>
<td>16%</td>
<td>84</td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>23%</td>
<td>15%</td>
<td>47</td>
<td>46%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ND</td>
<td>20%</td>
<td>5%</td>
<td>10</td>
<td>36%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KS</td>
<td>15%</td>
<td>10%</td>
<td>46</td>
<td>46%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: States with fewer than five LHs reporting have been omitted.
Local Health Departments’ Budgets are Eroding

Nationally, 27 percent of LHDs are working under a current budget that is less than the previous year, and 44 percent expect to do so next year (see Figure 4). The impact falls disproportionately on LHDs serving large jurisdictions, of which two-thirds expect next year’s budget to be lower than this year’s. For LHDs in large jurisdictions that experienced budget declines this year, the mean budget reduction was $1.6 million (see Figure 5). When survey results are extrapolated to all LHDs, the total budget cuts over the past year are approximately $300 million.

The burden of declining budgets is also falling disproportionately on LHDs in certain states (see Figure 6). More than 50 percent of the LHDs in nine states (Arizona, California, Florida, Georgia, Oklahoma, Pennsylvania, South Carolina, Vermont, and Virginia) have already experienced cuts. More than 80 percent in 19 states anticipate cuts next year (Arizona, California, Florida, Georgia, Idaho, Pennsylvania, South Carolina, Vermont, Virginia, and Washington).

Most LHDs are funded through a patchwork of sources and are experiencing decreased funding from many of them. LHDs report decreased funding from state general revenues, federal funds passed through by state health agencies, and local funding sources, such as levies, sales tax, and property tax revenues. In addition, economic declines affecting housing and jobs in other sectors result in decreased fee revenues from such services as on-site sewage permits and restaurant inspections. An LHD in California reports, “We are experiencing declining revenues from state budget cuts, but also from county tax revenues that are in decline due to the economic crisis. At the same time, we have increasing costs due to bargained labor agreements and other operational costs.”

Local Health Departments are Forced to Cut Services at Time of Increased Need

The statistics on budget declines do not tell the whole financial story for LHDs. Many LHDs have maintained their budgets or experienced relatively small overall budget cuts by spending down reserves and increasing fees. These measures do not, however, provide LHDs with the stable funding needed to provide quality public health services to their communities. Even relatively small decreases in funding or staffing result in reduction or elimination of programs. A medium-sized LHD in Minnesota that experienced a small reduction in staff reports, “We are disbanding our senior health clinics, where we provided foot care and blood pressure checks to seniors, discontinuing child passenger safety seat checks in our office, and discontinuing public health nursing outreach at the WIC clinic.”

Cuts in LHDs’ budgets and services are taking place at a time of increased need for public health services. A Gulf Coast LHD reports, “Hurricane Ike simultaneously created more need in our county and taxed our existing resources. Our geographic location places us in an area vulnerable to hurricanes and affected by huge population growth. We struggle to provide basic services with current funding, and the prospect of additional cuts is ominous for our department and our community.” A small LHD in the Midwest reports, “We continue to be asked to cut our budget by approximately two percent each year, and it is nearly impossible to do this without cutting staff or hours of staff. We are small and rural with only seven staff now. Cutting really hurts us. And due to the economy, the need is greater than ever to provide immunization and other services to the uninsured.”

NACCHO Survey of Local Health Departments’ Budget Cuts and Workforce Reductions
Conclusion
The job losses and budget cuts experienced by LHDs exemplify the vast, interrelated consequences of the U.S. economic downturn. LHDs are the governmental agencies that work every day in their communities to prevent disease, promote wellness, and protect health. The current erosion of their capacities is deeply alarming, particularly at this time when the rates and costs of preventable chronic diseases due to poor nutrition, physical inactivity, and smoking are increasing. Similarly, reduction in staff and budgets threatens LHD’s abilities to detect outbreaks of infectious disease and mobilize responses quickly.

LHDs are also part of the fraying “safety net” that provides or arranges healthcare for the uninsured and those who otherwise would have no access to care. The loss of LHDs’ many essential services will, therefore, have widespread adverse consequences on the health of the communities they serve, most of which are already experiencing multiple stresses associated with a poor economy. Sustaining local governmental public health services is an essential element of a comprehensive approach to economic recovery.

FOR MORE INFORMATION CONTACT:
Donna Brown, JD, MPH
Government Affairs Counsel
dbrown@naccho.org

Figure 6: Percentage of LHDs Reporting Declining Budgets — by State

<table>
<thead>
<tr>
<th>Current Budget Compared to Prior Year</th>
<th>Next Year’s Budget Compared to Current Year</th>
<th>Number of LHDs Completing Survey</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE LHDs</td>
<td>72%</td>
<td>70%</td>
<td>44%</td>
</tr>
<tr>
<td>SC</td>
<td>100%</td>
<td>100%</td>
<td>5%</td>
</tr>
<tr>
<td>VT</td>
<td>100%</td>
<td>100%</td>
<td>7%</td>
</tr>
<tr>
<td>WA</td>
<td>54%</td>
<td>54%</td>
<td>7%</td>
</tr>
<tr>
<td>CA</td>
<td>86%</td>
<td>86%</td>
<td>7%</td>
</tr>
<tr>
<td>CA</td>
<td>85%</td>
<td>95%</td>
<td>20%</td>
</tr>
<tr>
<td>IA</td>
<td>63%</td>
<td>100%</td>
<td>6%</td>
</tr>
<tr>
<td>LA</td>
<td>62%</td>
<td>89%</td>
<td>36%</td>
</tr>
<tr>
<td>AL</td>
<td>50%</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>OR</td>
<td>50%</td>
<td>38%</td>
<td>8%</td>
</tr>
<tr>
<td>TN</td>
<td>43%</td>
<td>70%</td>
<td>21%</td>
</tr>
<tr>
<td>CO</td>
<td>43%</td>
<td>100%</td>
<td>5%</td>
</tr>
<tr>
<td>IA</td>
<td>39%</td>
<td>95%</td>
<td>18%</td>
</tr>
<tr>
<td>MI</td>
<td>35%</td>
<td>64%</td>
<td>26%</td>
</tr>
<tr>
<td>OR</td>
<td>31%</td>
<td>69%</td>
<td>13%</td>
</tr>
<tr>
<td>OH</td>
<td>30%</td>
<td>37%</td>
<td>61%</td>
</tr>
<tr>
<td>IL</td>
<td>29%</td>
<td>37%</td>
<td>49%</td>
</tr>
<tr>
<td>WI</td>
<td>26%</td>
<td>29%</td>
<td>42%</td>
</tr>
<tr>
<td>AZ</td>
<td>25%</td>
<td>25%</td>
<td>8%</td>
</tr>
<tr>
<td>WY</td>
<td>23%</td>
<td>46%</td>
<td>28%</td>
</tr>
<tr>
<td>TX</td>
<td>24%</td>
<td>39%</td>
<td>33%</td>
</tr>
<tr>
<td>MO</td>
<td>24%</td>
<td>48%</td>
<td>29%</td>
</tr>
<tr>
<td>CO</td>
<td>24%</td>
<td>32%</td>
<td>23%</td>
</tr>
<tr>
<td>ND</td>
<td>24%</td>
<td>39%</td>
<td>17%</td>
</tr>
<tr>
<td>CT</td>
<td>53%</td>
<td>48%</td>
<td>31%</td>
</tr>
<tr>
<td>CO</td>
<td>22%</td>
<td>41%</td>
<td>54%</td>
</tr>
<tr>
<td>MD</td>
<td>22%</td>
<td>41%</td>
<td>54%</td>
</tr>
<tr>
<td>WA</td>
<td>21%</td>
<td>43%</td>
<td>89%</td>
</tr>
<tr>
<td>MT</td>
<td>21%</td>
<td>47%</td>
<td>19%</td>
</tr>
<tr>
<td>IN</td>
<td>16%</td>
<td>29%</td>
<td>48%</td>
</tr>
<tr>
<td>IA</td>
<td>13%</td>
<td>31%</td>
<td>34%</td>
</tr>
<tr>
<td>OH</td>
<td>15%</td>
<td>32%</td>
<td>34%</td>
</tr>
<tr>
<td>UT</td>
<td>14%</td>
<td>63%</td>
<td>7%</td>
</tr>
<tr>
<td>NV</td>
<td>13%</td>
<td>39%</td>
<td>52%</td>
</tr>
<tr>
<td>ID</td>
<td>13%</td>
<td>55%</td>
<td>40%</td>
</tr>
<tr>
<td>WI</td>
<td>12%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>MT</td>
<td>12%</td>
<td>40%</td>
<td>46%</td>
</tr>
<tr>
<td>ND</td>
<td>9%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>KS</td>
<td>8%</td>
<td>12%</td>
<td>52%</td>
</tr>
<tr>
<td>AR</td>
<td>4%</td>
<td>8%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Note: States with fewer than five LHDs reporting have been omitted.

NACCHO is the national organization representing local health departments. NACCHO supports efforts that protect and improve the health of all people and all communities by promoting national policy, developing resources and programs, seeking health equity, and supporting effective local public health practice and systems.
May 29, 2009

The Honorable Edolphus Towns
Chairman
Oversight and Government Reform Committee
2157 Rayburn House Office Building
Washington, DC 20515

The Honorable Darrell E. Issa
Ranking Member
Oversight and Government Reform Committee
2157 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Towns and Ranking Member Issa:

On behalf of the National Association of County and City Health Officials (NACCHO) – and the more than 2,800 local health departments across the nation that work every day to prevent disease, promote wellness, and protect health – I am writing to thank you for your leadership in holding a hearing on May 20th on “State and Local Pandemic Preparedness.” We very much appreciate your attention to this critical public health issue and thank you for inviting testimony from two of our members, Terry Allen, Health Commissioner of Cuyahoga County Board of Health in Parma, Ohio and Dr. Rex Archer, Director of the Kansas City, Missouri Health Department.

As you both noted at the hearing, the recent H1N1 influenza outbreak has reminded us all of the critical importance of federal, state, and local preparedness and the essential need for a strong public health infrastructure. As the panel of witnesses testified, over the last month, local health departments mounted an effective response to the H1N1 influenza outbreak, demonstrating concretely that prior investments in both pandemic influenza preparedness and all-hazards preparedness have greatly improved local readiness. They have accomplished this response by relying on the planning, training, and exercising that has already taken place, and by diverting staff ordinarily assigned to other public health duties. However, this response has stretched the current capacities of many to the limit, and we are gravely concerned about the ability of state and local public health systems to respond effectively to a longer, or more severe, epidemic.

At the exact same time that our nation is facing the H1N1 influenza virus threat and other significant health challenges, such as growing numbers of uninsured, the nation’s local health departments are experiencing shrinking workforces and budgets. As our witnesses testified, a recent NACCHO survey showed that at least 7,000 local public health department jobs were lost in 46 states across the country last year, and far more are expected this year. With an increased demand, coupled with diminished capacity, our nation quickly could face a public health crisis of serious proportions, with traditionally underserved areas being hardest hit. Of particular concern is how, with a significantly diminished public health workforce, our nation will deliver – in a timely, organized way – influenza vaccines to hundreds of millions of individuals in need.

Without a stable, adequate, sustained investment in federal, state, and local public health agencies and their preparedness efforts, the nation will find itself stretched beyond its capacities to handle a more significant influenza outbreak, or other public health emergency. The good news is that much of this challenge can be addressed through the allocation of sufficient and steady funding provided directly to federal, state, and local...
health departments. To that end, we urge you to work with your colleagues on the House Appropriations Committee to secure the following allocations, which we believe will help bolster our nation’s efforts to prepare for – and respond to – H1N1 and other health hazards, while also managing all the day-to-day demands facing state and local health departments:

We recommend the final supplemental appropriations bill include the following figures, included in the House version of the supplemental:

- The House-passed figure of $350 million for state and local pandemic preparedness efforts. State and local health agencies and laboratories have been feeling the brunt of the economic downturn, yet the demands on these departments are only increasing. State and local health departments have been active throughout the H1N1 outbreak in disease surveillance, laboratory testing and identification, communicating with the public, and distributing antivirals, among other activities. These funds are needed to continue planning for response to a potential increase in the strength of the virus in the fall/winter of 2009/2010.

- A minimum of $1.5 billion in flexible funding, to be allocated to the HHS Public Health and Social Services Emergency Fund. The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) will use the funds to continue to build domestic vaccine capacity, replenish and build antiviral stockpiles, and expand domestic and international biosurveillance capacity. In addition, it is important that HHS be the primary agency with control over these funds, as the department has served as the lead agency in implementing the National Strategy on Pandemic Influenza since November 2005.

- The House-passed $200 million to support global efforts to track, contain, and slow the spread of a pandemic. The nation’s ability to contain the disease is only as strong as the efforts of other nations in fighting what would by definition be a global pandemic. Influenza viruses do not heed national borders, and it is essential to build surveillance and vaccination capacity worldwide, especially among developing nations.

In addition, we urge you to consider the following pressing needs not included in either version:

- Purchase and administration of H1N1 pandemic vaccine. Federal officials recently announced plans to procure a vaccine for H1N1, which will take three to six months to produce for the entire U.S. population. We have urged the conferees to arrive at an appropriate level for this critical activity. The UK, Belgium, France, and other European nations have already begun ordering stockpiles of H1N1 vaccine from manufacturers for large percentages of their populations. Pharmaceutical companies will therefore need assurances from the U.S. government that there will be funding for a guaranteed purchase for American stockpiles.

We are also concerned that the $1.5 billion in the current supplemental will not be nearly enough to cover the costs of buying, distributing, and giving shots to individuals. Distributing and administering a vaccine on a rolling basis as it becomes available, monitoring for adverse effects of the vaccine, keeping track of who has received the expected two doses of the vaccine, and running public health information and communication campaigns are enormous tasks that will fall to local and state health departments.
We have urged the conferees to work with HHS and state and local health officials to determine how much funding will be needed for this critical responsibility.

- Contingency fund for state and local response. A no-year contingency fund to be activated in the case of a public health emergency will fund the ongoing response to H1N1 by state and local health departments. The response includes reinforcing the state and local public health workforce to sustain and enhance influenza surveillance, case detection, epidemiological investigation, and laboratory testing; implement broad scale measures to mitigate the spread of the virus; organize medical care and other community resources; deploy medical countermeasures from the strategic national stockpile; communicate with the public and providers; and manage other community-wide response efforts. Local and state health departments have planned well and they know what to do. But implementation will require harnessing resources well beyond the day-to-day capacities of state and local health departments.

- $122 million to complete state antiviral stockpiles for treatment of people who become ill and re-label short-dated supplies within the stockpile. Federal funding should be allocated to replenish and build the Strategic National Stockpile (SNS) with antivirals and respirators. The SNS must maintain a mix of existing antivirals to provide treatment for a variety of influenza strains and should be an agile supply source as the development of new antivirals evolves. Over eight million courses of antivirals are still needed to meet the original stockpile goal of 75 million treatment courses.

- At minimum, an additional $563 million for states and localities to purchase personal protective equipment and antivirals for prophylaxis of public health, healthcare and critical infrastructure workers. HHS released guidance in 2008 calling for an additional 169 million courses of antivirals to be stockpiled to prevent illness among workers who are involved in the pandemic response. Many private sector companies and healthcare facilities have begun stockpiling, but additional courses are needed to supplement their efforts. Congress should also insure that sufficient funding is provided to acquire and stockpile personal protective equipment as recommended in the pandemic preparedness plans.

Thank you again for holding the May 20th hearing. Through your leadership, federal policymakers are becoming more aware of the challenges facing local health departments and the investment necessary to ensure that the nation is adequately prepared for – and can respond adequately to – the H1N1 influenza virus as well as other health challenges and hazards. As always, if we can be of any assistance, please do not hesitate to contact Eli Briggs, NACCHO’s Government Affairs Specialist (202/507-4194, ebriggs@naccho.org).

Sincerely,

[Signature]

Robert M. Pesstronk, MPH
Executive Director

cc: Terry Allen, Health Commissioner of Cuyahoga County Board of Health
    Dr. Rex Archer, Director of the Kansas City, Missouri Health Department
June 3, 2009

Chairman David Obey
Committee on Appropriations
U.S. House of Representatives
2359 Rayburn House Office Building
Washington, DC 20515

Ranking Member Todd Tiahrt
Subcommittee on Labor HHS Education
U.S. House of Representatives
1016 Longworth House Office Building
Washington, DC 20515

Ranking Member Jerry Lewis
Committee on Appropriations
U.S. House of Representatives
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairman and Ranking Members,

On behalf of the state and local public health departments across the country, thank you for including $350 million for state and local response to H1N1 influenza in the FY 2009 supplemental appropriations bill. In addition, we are pleased that the President recognized the need for a flexible contingency fund in his June 2, 2009 request letter that will allow our Nation to ramp up our preparedness efforts as needed during this fiscal year in preparation for a potential escalation of the virus in the fall winter. In previous pandemics, the virus has come in several waves, diminishing in virulence over the summer and coming back in a mutated, more severe strain in the fall. Because of the unpredictability of influenza viruses, it is essential that state and local health departments have the necessary resources to respond to an outbreak and keep the public safe. We strongly support the inclusion of a robust contingency fund. ASTHO and NACCHO have been collecting financial information from the field during the recent outbreak, and have projected some preliminary cost estimates of a full blown response over a 12 week period. Our organizations will continue to refine cost models and resource needs, but given the rapid pace of the supplemental appropriations bill, we are providing the below information as the current best estimates at this time. We expect that most of these costs would likely occur after October 1, 2009, during the normal flu season, and therefore would occur in FY 2010.

State and Local Pandemic Preparedness and Response

Based upon the recent experience in April and May 2009, local and state health departments cannot escalate their response in the autumn without more resources. The basis for the initial request of $350 million in supplemental funds for local and state pandemic influenza preparedness was to sustain their ability to modify, refine and improve plans based upon the experience of the initial wave of the novel H1N1 epidemic. Based upon our current national response, there is a clear need for state and local public health agencies to prepare for a larger-
scale epidemic and/or Pandemic and provide much more operational clarity. The state and local health department response includes influenza surveillance, case detection, epidemiological investigation, laboratory testing, public health information campaigns, medical surge capacity, managing community-wide response efforts, and implementing broader scale measures to mitigate the spread of the virus. Of critical importance to the health and safety of our nation, a robust and sustainable plan must be developed to operationalize a national H1N1 vaccine campaign of up to 600,000,000 injections.

The current epidemic stressed our diminished public health workforce after only a few weeks. State and local health departments do not have the personnel and financial capital to continue this level of response over a three to six month period should H1N1 return as a more severe epidemic or pandemic. State Public Health Agencies alone spent over $80 million on the response to the novel H1N1 virus between April 21 and May 15, 2009. An extended and severe outbreak would cost public health agencies up to $3.0 billion for a twelve week response, without including the cost of vaccines, vaccine administration, antivirals or death management.

State and Local Mass Vaccination Program

In the autumn, it appears that a vaccine will be available. Distributing and vaccinating on a rolling basis as it becomes available, monitoring for adverse effects of the vaccine, and keeping track of who has received the vaccine, are enormous tasks that will fall to local and state health departments. These labor-intensive jobs are just part of the response that will be required if the number of seriously ill people increases dramatically. Much of the labor provided in the Health Agency overseen vaccine clinics will be obtained from contracted nurses who will require additional pay to maintain weekend, evening and overtime hours of operation. ASTHO and NACCHO calculate that the cost to state and local public health agencies for administering the novel H1N1 vaccine will be $15 per dose, excluding the cost of vaccine and medical supplies. Accordingly, the cost to vaccinate the entire U.S. population, assuming two doses per person, will be at least $9 billion. This estimate does not include the cost of tracking the vaccines administered, maintaining reminder/recall systems to ensure second doses are administered, or following up with individuals who experience an adverse event.

State and local health departments have planned well. It is now time to transition from planning to implementation and operation of the critical state and local role in protecting our population through vaccination. State and Local Public Health Agencies do not have the workforce or systems in place to carry out the large-scale response that every person in the nation will expect and demand. In 2008, state and local health departments lost 11,000 jobs and cuts are projected to continue this year. Health departments are stretched to the limit working 24 hours a day, 7 days a week to monitor and respond to the current outbreak with a reduced workforce.

1 Source: ASTHO's H1N1 cost estimate survey, conducted May 14-20, 2009. 34 states and the District of Columbia responded to the survey. An average per capita expenditure was calculated and applied to the population of the U.S. to create the estimate.
It is essential that the state and local public health workforce be reinforced to enable the enhanced influenza surveillance, case detection, epidemiological investigation, laboratory testing, disease mitigation, medical surge capacity, and vaccine administration in the event that this novel virus returns with increased lethality in the fall of 2009, as occurred in 1918. This investment is needed to strengthen our public health infrastructure at a time when more and more people in the U.S. are relying on our health departments to provide critical, front line services that protect the public’s health.

Funds are requested for those activities that can reasonably be expected to be accomplished in the fall/winter flu season of 2009.

Again, we applaud the Committee’s foresight in taking this potential health threat seriously. We look forward to working with you and your staff as this legislation moves through Congress. Please contact either of us directly if our organizations can provide additional information.

Sincerely,

Paul E. Jarris, MD, MBA
Executive Director
ASTHO

Robert Pestronk, MPH
Executive Director
NACCHO

Enclosures:
HEARING NOTICE

To: Members of the Committee on Oversight and Government Reform

From: Edolphus Towns, Chairman

Date: May 13, 2009

On Wednesday, May 20, 2009, at 2:00 p.m. in Room 2154 Rayburn House Office Building, the Committee will hold an oversight hearing entitled, "Pandemic Preparedness: Resource Constraints Affecting State and Local Responders."

The hearing will examine resource and logistical issues affecting the readiness of States and localities to respond to future pandemics. Witnesses will include representatives of State, county, and city health departments who will discuss State and local preparedness plans and the resources required to implement those plans in order to ensure an effective and sustainable response to a pandemic.

For further information regarding this hearing, please contact Jason Powell at ext. 5-5051.

***