



**Testimony before the
Committee on Education and Labor
U.S. House of Representatives**

**CDC's Response to a Novel 2009-H1N1
Influenza Virus**

Anne Schuchat, M.D.

**Acting Deputy Director for Science and Program,
Centers for Disease Control and Prevention
Assistant Surgeon General, U.S. Public Health Service
U.S. Department of Health and Human Services**

**For Release and Delivery
Expected at 10:00am
May 7, 2009**

Good morning, Chairman Miller, Ranking Member McKeon, and other distinguished members of the Committee. I am Dr. Anne Schuchat, Acting Deputy Director for Science and Public Health Program, Centers for Disease Control and Prevention.

I thank you for the opportunity to update you on current efforts CDC is taking to respond to the ongoing novel H1N1 influenza outbreak, highlighting our efforts regarding schools and workplaces. I am pleased to be speaking to you today with our colleagues from the US Department of Education and the Occupational Safety and Health Administration.

Our hearts go out to the people in the United States, in Mexico, and around the globe who have been directly impacted. We know that our nation's 7.6 million workplaces and over 126,000 schools and other childhood settings have been facing the challenges of this outbreak. We share the concern of people around the country and around the globe; and are responding aggressively at the federal, state, local, tribal, and territorial levels to understand the complexities of this outbreak and to implement control measures. It is important to note that our nation's current preparedness is a direct result of the investments and support of the Congress for state and local pandemic preparedness, and the hard work of state and local officials across the country.

It is important for all of us to understand that flu viruses – and outbreaks of many infectious diseases -- are extremely unpredictable. As with any public health investigation, our response has evolved as our investigation proceeds and we learn more about the situation. We have seen an increase in the number of cases and the number of states affected, and we can expect more people and states to be affected. We are carefully monitoring the severity of illness caused by this virus – and while preliminary evidence is encouraging, we understand that this, too, could change. Our goal in our daily communication – to the public, to the Congress, and to the media –

is to continue to be clear in what we do know, explain uncertainty, and clearly communicate what we are doing to protect the health of Americans. It has also been a clear priority to communicate the steps that Americans can take to protect their own health and that of their community. As we continue to learn more, these communications and our guidance to public health officials, health care providers, schools, businesses, and the public has changed and will continue to evolve.

Influenza arises from a variety of sources; for example, swine influenza (H1N1) is a common respiratory disease of pigs caused by type A influenza viruses. These and other animal viruses are different from seasonal human influenza A (H1N1) viruses. From laboratory analysis already performed at CDC, we have determined that there is a novel H1N1 virus circulating in the U.S. and Mexico that contains genetic pieces from four different virus sources. This particular genetic combination of H1N1 influenza virus is new and has not been recognized before in the United States or anywhere else worldwide. As a result of our investment in pandemic preparedness, we have been able to move within two short weeks to identify a novel virus, understand its complete genetic characteristics, and compare the genetic composition of specimens from US patients to others around the globe to watch for mutations. We have also quickly developed and (working with FDA) deployed test kits for use in a widening network of laboratories. These steps, along with capacity in place as a result of effective planning, have allowed for the rapid diagnostic and epidemiologic capabilities that have contributed to a clearer understanding of the transmission and severity of illness caused by the virus. These scientific accomplishments have provided the basis for an evolving set of responses that greatly enhance our nation's ability to address this threat.

CDC has determined that this virus is contagious and is spreading from human to human. It appears to spread with similar characteristics as seasonal influenza. Flu viruses are thought to spread mainly from person to person through coughing or sneezing by people with influenza. Sometimes people may become infected by touching something with flu viruses on it and then touching their mouth or nose. There is no evidence to suggest that this virus has been found in swine in the United States, and there have been no illnesses attributed to handling or consuming pork. Currently, there is no evidence that one can get this novel H1N1 influenza from eating pork or pork products. Of course, it is always important to cook pork to an internal temperature of 160 degrees Fahrenheit in order to ensure safety.

I want to reiterate that as we look for cases, we are seeing more cases. We fully expect to see not only more cases, but also more cases of severe illness. We have ramped up our surveillance around the country to try and get a better understanding of the magnitude of this outbreak.

Let me provide for you an update in terms of the public health actions that are underway in the United States and abroad. On the investigation side, we are working very closely with state, local, tribal and territorial public health officials around the country. We're providing both technical support on the epidemiology as well as laboratory support for confirming cases. We are also working with the World Health Organization, the Pan American Health Organization, and the governments of Mexico and Canada on this outbreak. There is a tri-national team that is working in Mexico to better understand the outbreak, and answer critical questions such as why cases in Mexico initially appeared to be more severe than those that were first seen in the U.S.

We are assisting Mexico to establish more laboratory capacity in-country, a critical step in identifying more cases on which to base our epidemiological investigation into the spread and severity of this new virus.

In terms of travel advisories, CDC continues to evaluate incoming information from the World Health Organization, the Pan American Health Organization, and other governments to determine the potential impact of the outbreak on international travel. On Monday, April 27th, CDC issued a travel health warning for Mexico, and this remains in effect. With this warning, we recommend that travelers postpone non-essential travel to Mexico for the time being. CDC is also evaluating information from other countries and will update travel notices for other affected countries as necessary. As always, persons with flu or flu-like symptoms should stay at home and should not attempt to travel.

CDC has and will continue to develop specific recommendations for what individuals, communities, clinicians, and others professionals can do. It is important that people understand that there is a role for everyone to play during an outbreak. At the individual level, it is important for people to understand how they can prevent respiratory infections. Very frequent hand-washing is something that we talk about time and time again and that is an effective way to reduce transmission of disease. If you are sick, it is very important to stay at home. If your children are sick, have a fever and flu-like illness, they should not go to school. And if you are ill, you should not get on an airplane or any public transport to travel. Taking personal responsibility for these things will help reduce the spread of this new virus as well as other respiratory illnesses.

The path of this outbreak may change; and we need to be prepared for a possible return of this virus in the fall. It is important that we (in partnership with state and local officials) continue to think about what might be needed if this outbreak deepens in communities across the US. We have encouraged communities, businesses, schools, and local governments to make specific plans to manage this outbreak if cases appear in their communities, and advised parents to prepare for what they would do if faced with temporary school and child care center closures. We also have additional community guidance so that clinicians, laboratorians, and other public health officials will know what to do should they see cases in their community. All of these specific recommendations, as well as other regular updates, are posted on the CDC web site – www.cdc.gov/H1N1flu.

As places where many people gather across the U.S., schools, childhood settings including Head Start, family child care and child care programs, and workplaces are essential for mitigating this outbreak. Including students and adults who work in schools, approximately 20% of the US population spends considerable time in one of the more than 90,000 school buildings on any given school day. Millions of adults work in school and childhood settings, and many millions more are parents or guardians of school-aged children. Schools and childhood settings play a critical role in protecting the health of their students, staff, and the community from contagious diseases such as this novel H1N1 influenza. I'd like to recognize the work and collaboration of our partners at US Department of Education, state and local education agencies, and other education partners as we have been learning about this new virus, providing the best science we can in an uncertain situation, and working hard to keep our nation's children safe.

While CDC has made scientific recommendations about how schools can deal with this virus, the responsibility for decisions regarding school dismissal resides at the state, local, tribal, and territorial level, and CDC applauds the collaborative efforts of school superintendents, Head Start and child care Directors, County Executives, mayors, governors, emergency management officials, and public health officials who are on the front lines of this epidemic. We are mindful that science is a critical component in decision-making about how communities respond – and that there are also many other considerations that communities must evaluate in making appropriate decisions. The emergency preparedness work that communities have done before this outbreak – such as exercising their emergency plans -- has been essential in their response now. This includes the 600 local education agencies that have been working with our colleagues at the Department of Education through their Readiness and Emergency Management for Schools Program. Without considerable advance planning by communities and ongoing updating and exercising of school emergency plans, we would've been much less prepared for this outbreak, and we are grateful for all of the work our Education colleagues have done in this regard.

During public health emergencies like the current novel influenza A (H1N1) epidemic, protecting workers is a top priority, both as members of the community, and as workers with special roles in ensuring the functioning of critical infrastructure. Workers can contract influenza through general community exposures or workplace-specific transmission. CDC is working to minimize both pathways.

Some workers – especially healthcare workers and emergency responders – are at special risk for infection because their jobs, by definition, bring them into repeated, close contact with individuals ill with novel H1N1. These workers represent a particularly high priority for

prevention, both because of the potential for added risk and because it will be particularly problematic if they become unavailable through illness or reluctant to perform their duties. Other workers are in critical infrastructure positions – they keep society functioning by maintaining utilities, public safety, and food and water supply. Many of these workers may not experience a greater risk of workplace transmission than other workers, but their functions are crucial, so keeping them on the job is a priority.

CDC's National Institute for Occupational Safety and Health is leading the Agency's efforts to minimize effects of the epidemic on working populations by developing and disseminating guidance regarding precautions to prevent work-related transmission of the illness. Guidance is informed by the hierarchy of controls used to reduce exposure: engineering, administrative and work practices, and personal protective equipment. Engineering controls include isolation, ventilation and physical barriers. Administrative and work practice controls include social distancing, telecommuting, hand hygiene, cough etiquette, and training. Personal protective equipment or PPE include gloves, glasses, gowns, and respiratory protection. If exposure should occur, guidance also addresses the use of antiviral treatment to prevent or treat disease. Finally, should a vaccine become available, recommendations for immunization will be developed and disseminated. Guidance materials are being developed focused on the needs of specific worker populations and workplace settings; and to provide general information useful to all businesses. All of these workplace-related guidance materials are available at <http://www.cdc.gov/niosh/topics/H1N1flu/>.

We will continue to provide support to states and communities throughout this outbreak. In addition to the epidemiologic and laboratory support that CDC provides, CDC maintains the nation's Strategic National Stockpile of medications that may be needed for this or other outbreaks. As part of our pandemic preparedness efforts, the U.S. Government has purchased extensive supplies of antiviral drugs -- oseltamivir and zanamivir -- for the Strategic National Stockpile. Laboratory testing on the viruses so far indicates that they are susceptible to oseltamivir and zanamivir. Acting quickly after we identified this virus and its potential impact on our population, we have released one-quarter of the states' share of antiviral drugs and personal protective equipment, to be used pursuant to emergency use authorizations issued by the FDA Commissioner, to help the states prepare to respond to the outbreak. As of Sunday, May 3rd --within weeks of a new virus having been identified -- this deployment of the stockpile was completed for all states and areas.

Whenever we see a novel strain of influenza, we begin our work in the event that a vaccine needs to be manufactured. Simultaneous efforts are underway within CDC, FDA, New York Medical College, and St. Jude, as well as international partners, to develop a vaccine seed strain specific to this virus -- the first step in vaccine manufacturing. This is something CDC often initiates when we encounter a new influenza virus that has the potential to cause significant human illness. We have already isolated and identified the virus and steps are underway so that should a vaccine be needed, we can work towards that goal very quickly with interested manufacturers. HHS discussions to consider the needed pathways to provide rapid production of vaccine after the appropriate seed strain has been provided to manufacturers are currently ongoing. As this

progresses, HHS operating divisions and offices including CDC, NIH, FDA, and ASPR/BARDA will work in close partnership.

In closing, we are simultaneously working hard to understand and control this outbreak while also keeping the public and the Congress fully informed about the situation and our response. We are working in close collaboration with our federal partners, including our sister HHS agencies and other federal departments, as well as with other organizations that have unique expertise that helps us provide guidance for multiple sectors of our economy and society. While events have progressed with great speed, this will be a marathon, not a sprint. Even if this outbreak yet proves to be less serious than we might have initially feared, we can anticipate that we may have a subsequent or follow-on outbreak several months down the road. Steps we are taking now are putting us in a strong position to respond.

The Government cannot solve this alone, and as I have noted, all of us must take constructive steps. Schools, childhood settings, and workplaces are critical to this effort. If you are sick, stay home. If children are sick, keep them home from school. Wash your hands. Take all of those reasonable measures that will help us mitigate how many people actually get sick in our country.

Finally, it is important to recognize that there have been enormous efforts in the U.S. and abroad to prepare for this kind of an outbreak and a pandemic. The Congress has provided strong leadership and support for these efforts. Our detection of this strain in the United States came as a result of that investment and our enhanced surveillance and laboratory capacity are critical to understanding and mitigating this threat. While we must remain vigilant throughout this and

subsequent outbreaks, it is important to note that at no time in our nation's history have we been more prepared to face this kind of challenge. As we face the challenges in the weeks ahead, we look forward to working closely with the Committee to best address this evolving situation.