



CDC PREPAREDNESS

ANNOUNCER: This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

NICOLE SMITH: I will share an overall summary of CDC's, and other federal partner's, pandemic influenza preparedness efforts.

The National Strategy for Pandemic Influenza, which was released by the White House in November 2005, has three goals. First, stopping, slowing, or limiting the introduction of a pandemic virus to the U.S. (assuming the pandemic doesn't start here); second, limiting the spread of the virus within the U.S. and reducing the burden of disease; and third, sustaining the infrastructure and mitigating the effects of a pandemic on the economy, as well as helping to ensure our society continues to function, should the pandemic be particularly severe. The National Strategy serves as the framework for our planning efforts in the U.S. and is supported by three "pillars":

- preparedness and communication;
- surveillance and detection; and,
- response and containment.

Developing and improving diagnostic tests and countermeasures are key activities. Influenza diagnostic tests play a critical role in the national strategy to detect and control pandemic influenza. Through contracts with biotechnology companies, we are supporting the commercial development of point of care diagnostic tests with greater accuracy and timeliness than current tests, and with the ability to distinguish between seasonal influenza and emerging influenza viruses with pandemic potential.

The availability of new sensitive and specific diagnostic tests will extend the opportunities for early detection of pandemic influenza, management and control of seasonal influenza, and will allow for additional options for directing clinical management during a pandemic. We have also been working to develop and distribute modified avian influenza viruses to manufacturers for the production of pre-pandemic vaccines. Our on-going research has provided information about the virulence of influenza (given how different proteins inhibit antiviral responses), and the properties of influenza virus transmissibility.

This chart shows ongoing activities that are planned to take products stemming from research, forward to FDA approval and commercial availability. It also shows some tests that may possibly be developed in the future, if they are found to be appropriate, based on their potential utility and feasibility.

Currently, researchers at various academic and industry institutions are working to identify new and promising technologies to improve the detection of seasonal and pandemic influenza. Much of this work is supported through research grants, including some from the National Institutes of Health and the Department of Defense.

To expand and enhance surveillance and response capabilities and capacities around the world, CDC has provided updated reagents and protocols for typing and subtyping influenza A strains to public health laboratories in the US, as well as to labs in other countries. CDC staff have also conducted training programs in disease surveillance, field epidemiology, and outbreak response to prepare rapid response teams in Africa, Asia, Central Asia, and Latin America to ensure that countries have the ability to respond quickly and appropriately to pandemic threats. These courses have resulted in the creation of hundreds of local responders in countries at high risk for avian influenza.

In the US, CDC has trained officials from all of the state health departments in rapid response procedures, in collaboration with the Council of State and Territorial Epidemiologists, and has provided funding and materials to allow states to train additional local public health staff in each state. We have also trained more than 300 epidemiologists at CDC to be ready to respond to outbreaks of pandemic influenza, if needed.

A pandemic has the potential to overwhelm the health and medical capacity of a community. For this reason, it's essential that we work to enhance healthcare preparedness and capacity now. CDC is participating in a variety of partnerships and working groups. Through these collaborations, CDC is helping to develop surge capacity strategies for healthcare preparedness to help hospitals and other health care institutions to adjust clinical care algorithms in order to maximize the quality of care that can be provided under conditions of scarce resources.

CDC is also engaged in developing strategies for expanding home health care by supporting the Department of Transportation in the development of guidance for 9-1-1 call centers and Emergency Medical Services, and by partnering with academic and medical centers to develop phone triage and drive-through patient assessment tools for adults.

CDC is also developing home health guidance for families that are turned away from an overburdened health care system. With respect to the allocation of scarce resources, we are working with other federal agencies and professional organizations to develop countermeasure guidance and prioritization schemes that can be used in settings where mass critical care is needed but resources are limited. We're also enhancing surveillance systems to identify clusters of illness among health care workers, to identify adverse events associated with counter measures, and to monitor the integrity of the health care sector.

In addition, we continue to develop and promote strategies to reduce transmission and prevent infection. Community Mitigation is another important element in reducing transmission and will be addressed by our fourth panelist, Dr. Averhoff.

To improve the timeliness and accuracy of public health information and education, we are promoting pandemic influenza risk communication concepts through interactive

training sessions for key internal and external federal partners, state public health professionals, and community leaders. For example, we have developed a pandemic influenza module for the Crisis and Emergency Risk Communications, or CERC, curriculum, and we have conducted 10 regional pandemic influenza CERC training courses for an estimated 700 communications professionals involved in pandemic response. Since January 1, 2006, CDC staff have accepted more than 200 presentations to groups in the US and internationally on pandemic influenza, and that number is an underestimate given that it reflects only those presentations that have been reported and tracked through our centralized speakers bureau.

We're also developing public service announcements, media talking points, and print materials to support a public information campaign to explain the differences between pandemic, avian, and seasonal influenza in preparation for the first case of H5N1 in the US, human to human transmission of H5N1, as well as for other scenarios that may occur during the different pandemic phases and stages.

We are also continuing to post information on the pandemicflu.gov website, including interim guidance material, such as for the use of masks and respirators in the health care setting, and various checklists and planning tools.

To assist with planning efforts, the Department of Health and Human Services and CDC have developed a series of checklists that identify important, specific activities that individuals and organizations can do to prepare. Checklists have been created for different sectors, as well as for individuals. Here you see the checklists that have been developed. In general, each checklist includes action steps:

- to plan for the impact on organizations and their operations;
- to plan for the impact on people involved with the entities;
- to establish policies to maximize infection control;
- to allocate resources to protect health and safety;
- to communicate and educate staff and clients; and,
- to coordinate with external organizations.

These checklists are available on the pandemicflu.gov website.

Here you see just a small sample of the wide-variety of organizations and agencies with whom we are working. They represent not only the public health and health care sectors, but also faith-based and community organizations, other federal agencies, education sector members, and business.

CDC has been participating in a broad range of exercises at the international, national, regional, state, and local levels, and in working with the different sectors represented on the slide you just saw. International exercises have focused on cross-border surveillance and communication issues.

The Secretary's Quarterly Review Exercise, which was recently held, included senior

HHS officials who reviewed the agency's readiness for a pandemic, with a particular emphasis upon support for containment activities overseas, primary activities following the introduction of an influenza pandemic virus into the US, and recovery efforts. We've also assisted with developing and conducting table tops for sector-specific issues, such as with media representatives to better incorporate media issues into planning and with state/local authorities to understand how they would manage an incoming flight with a passenger infected with avian influenza. While much of our focus is on assisting others with their preparedness efforts, CDC has used a variety of training and exercise methods to assess our own preparedness, including validation of our Influenza Pandemic Operation Plan (or OPLAN), beginning last fall. These methods include briefings and seminars, table top discussions, workshops and functional drills, and full scale exercises. Each session has been summarized in an after-action report to document issues and identify lessons learned.

CDC is in the process of conducting a series of pandemic influenza exercises in 2007. The first of these was a 24-hour Functional Exercise held in late January, during which CDC tested our pandemic influenza plans and procedures. This was an internal exercise and involved approximately 240 "players". In April, we will conduct our second functional exercise that will last for 48 continuous hours. The goals of the exercise include testing CDC's ability to detect and report outbreaks with pandemic potential. The provision of countermeasures, including associated risk communications and health guidance will also be assessed. The 3rd exercise, scheduled for June, will further test our abilities to respond to pandemic influenza and may incorporate an additional element - the assumption that part of CDC's workforce will be affected by the pandemic or that CDC may need to help provide surge capacity for critical state/local public health agency functions. We hope this will yield valuable information about our response capacity given staffing shortages.

Our exercises have included activities related to the allocation of assets in the Strategic National Stockpile because another important aspect of pandemic influenza planning is the stockpiling of antiviral medications and other countermeasures. Antiviral medications will be used for treatment of symptomatic patients and targeted prophylaxis for containment. HHS' goal is to procure 81 million antiviral drug regimens – 75 million to treat 25% of the US population, and an additional 6 million to be used to support containment efforts. This strategy requires the federal government to procure 50 million regimens for the Strategic National Stockpile, and allows for states to procure up to 31 million regimens. HHS will subsidize 25% of the costs of these state purchases.

CDC's Strategic National Stockpile has made significant progress in procuring pandemic influenza countermeasures. As of March 30, 2007, the Strategic National Stockpile contains:

- approximately 21.6 million regimens of Oseltamivir with an additional 9.2 million regimens on order; and
- approximately 3.1 million regimens of Zanamivir with an additional 3.3 million regimens on order.

For non-pharmaceutical countermeasures, we have:

- approximately 93.7 million N95 respirators with another 11.2 million on order; and
- approximately 50.2 million surgical masks with an additional 1.2 million on order.

One final element of federal planning includes the Public Health Emergency Preparedness Cooperative Agreement and supplemental funding that has been awarded to grantees. In fiscal year 2006, \$325 million dollars were awarded to grantees to conduct pandemic influenza activities - specifically, to identify preparedness gaps, enhance preparedness, conduct exercises, and regional planning.

We've made significant progress in pandemic influenza planning. However, it's a long-term commitment and we have much work ahead.

MODERATOR: Nicole, you have covered a lot of ground in detailing CDC's preparedness efforts. What lies ahead for the CDC plan?

NICOLE SMITH: Dan, as I mentioned, we have much work ahead. We will work with our partners to continue to enhance preparedness and response capacity for pandemic influenza at the international, national, state, local, territorial, and tribal levels. We will further develop the Strategic National Stockpile in order to address pediatric dosing requirements and at-risk populations. We'll also expand the use of exercises. Exercises require many resources, but the experience and knowledge that they provide are invaluable. We know we are not prepared if we have not exercised and if we have not used the experiences of the exercises to improve our plans. And finally, an essential element of all planning is to share progress and lessons learned with partners. And this satellite broadcast is an excellent opportunity for us to highlight the work being done in state and local jurisdictions and to share tools that may assist in planning activities.

MODERATOR: A tall order, but it looks like we're up to it and we're making our progress.

NICOLE SMITH: Yes.

MODERATOR: You mentioned exercises as an important component and I know there is one coming up this month—it'll be very interesting to find out just how well that goes.

ANNOUNCER: To access the most accurate and relevant health information that affects you, your family and your community, please visit www.cdc.gov.