



# PANDEMIC INFLUENZA U • P • D • A • T • E



*Public Health Prepares*

August 2006

## Fast Facts

Health and Human Services Secretary Mike Leavitt has announced a contract award with GlaxoSmithKline (GSK) to provide zanamivir (Relenza®) at a federally subsidized price to

- All 50 states
- The District of Columbia
- Five U.S. territories and three Freely Associated States of the Pacific

The contract will run for a period of two years with an initial contract award amount of \$16,833,000.

To continue this article visit [www.hhs.gov/news/pres/2006pres/20060720.html](http://www.hhs.gov/news/pres/2006pres/20060720.html)

## If You are Asked . . .

***“Did authorities recently detect H5N1 inside the borders of the United States?”***

The U.S. Departments of Agriculture and Interior announced that routine surveillance has indicated the presence of H5 and N1 avian influenza subtypes in samples from two wild mute swans in Michigan, but testing has ruled out the possibility of this being the highly pathogenic H5N1 strain that has spread through birds in Asia, Europe and Africa. Test results thus far indicate this is low pathogenicity avian influenza, which poses no threat to human health.

The swans were sampled as part of the expanded avian influenza surveillance program. They were showing no signs of sickness, which suggests that this is low pathogenicity avian influenza. Additionally, genetic analysis of the virus conducted at USDA's National Veterinary Services laboratories (NVSL) in Ames, Iowa, suggests that it is similar to a low pathogenicity strain that has been found previously in North America.

Read the complete article at [www.usda.gov/wps/portal/usdahome?contentidonly=true&contentid=2006/08/0294.xml](http://www.usda.gov/wps/portal/usdahome?contentidonly=true&contentid=2006/08/0294.xml)

## Public Health Prepares . . .

Researchers at the Centers for Disease Control and Prevention (CDC) have developed a new research method that may help identify the types of genetic changes necessary for the avian influenza virus (H5N1) to be more easily transmitted among people.

In this series of experiments, published in the July 31<sup>st</sup> issue of the Journal Proceedings of the National Academy of Sciences, genes from a human H3N2 influenza virus were added to genes from an H5N1 avian influenza virus to create new hybrid viruses. The new viruses were tested in ferrets because their susceptibility to flu viruses is similar to that of humans. The animals were then placed in close proximity, to see if infected ferrets passed the new viruses to uninfected animals and whether they transmitted it more easily than the original H5N1 virus.

In this model, human H3N2 viruses transmitted efficiently between the ferrets, but avian H5N1 viruses did not. When the hybrid viruses were tested it was found that these viruses also did not pass easily between ferrets.

Continue the article at [www.cdc.gov/od/oc/media/pressrel/r060731.htm](http://www.cdc.gov/od/oc/media/pressrel/r060731.htm)

### Pass This On . . .

Scientists at the Centers for Disease Control and Prevention (CDC) have released genetic blueprints for over 650 genes of influenza viruses into a database accessible to researchers worldwide. The action marks the beginning of collaboration between the CDC and the Association of Public Health Laboratories (APHL) that will allow for greater access to data on a variety of influenza virus samples obtained from patients in the United States, including avian influenza H5N1 if it should arrive here.

Through the new collaboration, CDC expects to provide genetic information for several hundred influenza viruses per year as a way to encourage more research on influenza. The sequence data will be available in nearly real time through GenBank, a public-access library for virus sequences managed by the National Institutes of Health, and through an influenza database housed at Los Alamos National Laboratories (LANL). The information added will include viruses from the annual flu season in the United States, any animal influenza viruses that infect humans and any novel strains that may emerge such as avian influenza H5N1. The new agreement will only apply to viruses isolated in the United States.

“CDC has long supported the timely and open sharing of influenza virus information to foster new research on influenza. We’re excited that this historic collaboration with APHL provides a way to make international exchange of this information possible,” said Dr. Nancy Cox, director of the CDC’s Influenza Division. “With more information, the world’s influenza experts can advance our understanding of the viruses circulating, potentially create new prevention strategies and treatments, and ultimately help us better protect the health of people around the world.”

Visit [www.cdc.gov/od/oc/media/pressrel/r060822.htm](http://www.cdc.gov/od/oc/media/pressrel/r060822.htm) to continue this article.

## Update on H5N1: Global Activity Humans and Birds

**Humans:** During outbreaks since 2004, there have been **241\*** confirmed cases in humans and **141** deaths. They occurred in the following nations: Vietnam 93 cases and 42 deaths; **Thailand\*** **24** cases and **16** deaths; **Indonesia\*** **60** cases and **46** deaths; **China\*** **21** cases and **14** deaths; Turkey 12 cases and 4 deaths; Iraq 2 cases and 2 deaths; Azerbaijan 8 cases and 5 deaths; Egypt 14 cases and 6 deaths; Djibouti 1 case and 0 deaths; Cambodia **6** cases and **6** deaths.

**Birds:** Since December 2003, avian influenza A (H5N1) infections in poultry or wild birds have been reported in the following regions/countries: ASIA (Cambodia, China, Hong Kong, India, Indonesia, Laos, Malaysia, Myanmar, Pakistan, Thailand, and Vietnam); CENTRAL ASIA and the MIDDLE EAST: Afghanistan, Azerbaijan, Georgia, Iraq, Iran, Israel, Jordan, Kazakhstan, Palestine Autonomous Territories, and Turkey; AFRICA: Egypt, Burkina Faso, Cameroon, Cote d'Ivoire, Niger, Nigeria, Djibouti, and Sudan; EUROPE: Albania, Austria, Bosnia/Herzegovina, Bulgaria, Croatia, Czech Republic, France, Denmark, Germany, Greece, Hungary, Italy, Poland, Romania, Russia, Siberia and Montenegro, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, and United Kingdom.

*\*Bold type highlights most recent changes.*

## Where to Find Out More . . .

The Food and Drug Administration (FDA) announced the appointment of Mark Goldberger, MD, MPH, as Medical Director for Emerging and Pandemic Threat Preparedness in FDA's Center for Biologics Evaluation and Research (CBER). Dr. Goldberger was selected after a national search of eligible candidates. In this newly created position, Dr. Goldberger will serve as a Senior Advisor for CBER's pandemic flu program, planning, coordinating and implementing activities related to the development and evaluation of products for emerging and pandemic threats.

He has served as an Epidemic Intelligence Service Officer at the Centers for Disease Control and Prevention (CDC), performing outbreak investigations and work on Swine Flu vaccine-associated Guillian-Barre syndrome.

To finish this article visit [www.fda.gov/bbs/topics/NEWS/2006/NEW01413.html](http://www.fda.gov/bbs/topics/NEWS/2006/NEW01413.html) .

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### **Pandemic Influenza Update: Reader's Feedback**

*The monthly Pandemic Influenza Update is prepared by CDC's Office of Enterprise Communications. Information in this newsletter is time sensitive and evolving. Readers are welcome to comment by email to: PANUPDATE@CDC.GOV.*

## Transmission of Virus

- Total course **5.5 days**
  - Latency **1.5 days**
  - Infectious to others, but no symptoms yet **0.5 days**
  - Infectious (with or w/o symptoms) **3.5 days**
- R0 approx 1.6
- Intergeneration period:  
Approx 2.6 days
- Respiratory droplets >> aerosol >> fomites:
  - Active 8-24 hrs; 15 min on tissues
- Infection rate 50-60%; about half asymptomatic yet infectious to others

