



Rx: Health Care FYI #29

Subject: *Preparing for an Avian (Bird) Influenza Pandemic*
From: *Rep. Tim Murphy (PA-18)*

The problem: The United States at present is unprepared for an avian influenza pandemic. Without federal and state preparation, the Centers for Disease Control (CDC) estimate that a flu outbreak would kill at least 200,000 Americans and cost over \$166 billion.¹

What is avian influenza (bird flu)?

- Bird flu is an infection caused by avian influenza (bird flu) viruses. These flu viruses occur naturally among birds. Wild birds worldwide carry the viruses in their intestines, but usually do not get sick from them. However, bird flu is very contagious among birds and can make some domesticated birds, including chickens, ducks, and turkeys very sick and kill them.¹

What you need to know about the Avian Flu:

- **Common Influenza** is a concern when it infects the very young, the very old and the infirm. The common flu is usually not lethal; it stresses the system and makes people more susceptible to other diseases such as pneumonia.
- **Avian influenza (H5N1) can be lethal.** Similar to the 1918 “Spanish flu,” the avian flu is a primary cause of death. Victims suffer a virus induced response of the immune system—“a cytokine storm”—which leads to acute respiratory distress. In other words, in the process of fighting the disease, a person’s immune system severely damages the lungs, which likely results in death. They also suffer acute cyanosis, a blue discoloration of the skin and mucous membranes, vomiting, and bloody discharge from the nose.²
- Avian flu primarily infects animals. As of now, unless people come into direct, sustained contact with infected birds, it is unlikely they will acquire avian flu.
- The most likely scenario is that avian flu will **NOT** cause a pandemic. However, if a person-to-person transmission occurs then the likelihood of a pandemic increases dramatically.
- All reported human cases of avian flu are in Asia. Recent cases have been reported in Russia, Kazakhstan, Mongolia, China, South Korea, Japan, Hong Kong, Laos, Thailand, Vietnam, Cambodia, Malaysia and Indonesia with 121 confirmed cases and 62 deaths.³
- The National Institutes of Health recently reported successful trials of a H5N1 vaccine. However, the vaccine needed to be six times as potent as the seasonal vaccine and two doses were required.⁴

What you should do to protect yourself from the avian flu:

- People should be encouraged to get their annual flu shot. Currently, there is no approved vaccine for the bird flu, but the standard flu vaccine prevents common influenza in about 70%-90% of healthy persons younger than 65 years of age. This can prevent your immune system from weakening and decrease your risk of contracting a human-strain of bird flu, according to the CDC.⁵
- Practice good hygiene. Cover your nose and mouth when coughing or sneezing; simply wash hands regularly, use tissues to contain respiratory secretions and promptly dispose of them after use.⁶ It is estimated that one out of three people do not wash their hands after using the restroom, which spreads contagious diseases such as the flu, hepatitis A, meningitis, and infectious diarrhea.⁷

What issues Congress will need to address:

¹ Centers for Disease Control. Information About Influenza Pandemics. October 17, 2005.

² Garret, Laurie. The Next Pandemic. Foreign Affairs. July/August 2005.

³ Centers for Disease Control. Recent Avian Influenza Outbreaks in Asia and Europe. November 7, 2005.

⁴ Leavitt, Michael. Statement before the U.S. House Energy and Commerce Committee. The HHS Pandemic Influenza Plan. U.S. Department of Health and Human Services. November 8, 2005.

⁵ Centers for Disease Control. Questions & Answers: Flu Shot. September 7, 2005.

⁶ Centers for Disease Control. Respiratory Hygiene/Cough Etiquette in Healthcare Settings. December 17, 2003.

⁷ National Center for Infectious Diseases. An Ounce of Prevention Keeps the Germs Away.

- Improve vaccine distribution mechanisms to prepare for an avian flu outbreak. If the worst case scenario occurs, the federal government must be able to transfer available vaccines quickly and easily from one state to another. HHS is currently evaluating multiple mechanisms to distribute vaccines.⁸
- Improve lines of communication between federal, state and local public health officials and the military to preserve critical information in the event of a public health crisis such as an avian flu outbreak.
- Take steps to mitigate panic. A coordinated education effort is necessary to prevent the widespread panic that could result from news of a deadly avian flu outbreak. Local media outlets will be essential in communicating local information. Accurate information needs to be easily and readily accessible to local media.
- Ensure an ample vaccine supply. An adequate supply of vaccines is required in advance of a pandemic.
- Increase vaccine production. With slim profit margins for vaccines, companies fear bankruptcy if faced with lawsuits from vaccine complications. This concern is heightened in the case of the flu vaccine, which has a limited shelf-life. Manufacturers, which have been reduced from 26 in 1967 to only 5 in 2004, have had to absorb a \$12 million financial loss for the unused and returned vaccines in 2003.⁹
- Ensure a sufficient drug supply. Like vaccines, antiviral drugs take several months to produce from raw materials. HHS's National Vaccine Program Office has reported that in a pandemic, current manufacturing capacity and supply of antiviral drugs are likely to be well below global demand.²

The Federal Government's Role:

- The President called for \$7.1 billion to fund the National Strategy for Pandemic Influenza. \$2.8 billion for cell-based technology for making influenza vaccine, \$1.5 billion to build a 20 million-dose stockpile of an experimental vaccine based on the existing bird flu virus, \$1 billion for antiviral medicines, \$800 million to develop new flu treatments, and \$644 million to help local governments make their own preparations for a flu pandemic. The National Strategy is available at: www.pandemicflu.gov.
- CDC has reconstructed the influenza virus strain responsible for the 1918 pandemic in order to study the virus and research vaccines. CDC also administers the Strategic National Stockpile (SNS), which has large quantities of medicine and medical supplies to protect the American public if a public health emergency (terrorist attack, flu outbreak, earthquake) depletes local supplies. SNS information is available at: <http://www.bt.cdc.gov/stockpile/>.
- The National Disaster Medical System (NDMS) supports federal agencies in the management and coordination of the federal medical response to major emergencies and federally declared disasters. The NDMS plan is available at: <http://oep-ndms.dhhs.gov/index.html>.

Recommendations for Congress:

- Members of Congress should utilize local media to accurately inform how people and the government can best prepare for an avian flu outbreak.
- Promote electronic medical records to ensure access to medical information during an avian flu pandemic.
- Provide incentives for pharmaceutical manufacturers to promote cooperation, lower costs and increase stockpiles of vaccines and antiviral drugs to respond to flu pandemics.
- Provide Medicare and Medicaid incentives to health care providers to practice good hygiene in order to reduce infections and unnecessary hospitalizations. Treating infectious diseases will help mitigate avian flu pandemics.

⁸ Government Accountability Office. Influenza Pandemic. Applying Lessons Learned from the 2004-2005 Influenza Vaccine Shortage. November 4, 2005.

⁹ Offit, Paul. Why Are Pharmaceutical Companies Gradually Abandoning Vaccines? Health Affairs. May/June 2005.