

# Avian Influenza

## Frequently Asked Questions

October 31, 2005



### **What is avian influenza, and is it something new?**

Avian influenza, or bird flu, was first identified in Italy over 100 years ago. It is a contagious viral flu that occurs in wild birds. Although these birds may not exhibit symptoms of illness, they can transmit it to other birds through infected feces, saliva, or contaminated surfaces where they have rested. Birds such as chickens don't have a natural immunity to the disease, so they're highly susceptible to it. Avian influenza is also referred to as H5N1, because that is its genetic subtype (Flu viruses are grouped into three types: A, B and C. A viruses are the only type that can cause pandemics. H subtypes give a virus the ability to cling to and enter cells, which is where the virus multiplies. The N subtype is what governs the release of a newly formed virus from the cells. There are up to 16 H types of influenza in birds. The H7N7 subtype caused widespread illness in birds and a few infections in people in the Netherlands a few years ago).

### **What are the signs that a bird has avian influenza?**

A loss of appetite or energy; coughing and sneezing; swelling in the eyelids, head, wattle and legs; diarrhea; sudden death.

### **How do humans get it?**

Humans also do not have natural immunity to avian flu. We can become infected from the droppings of infected birds or by touching contaminated surfaces where they have rested, or by handling infected birds or eating uncooked portions of infected birds. It is not passed on to us through their eggs or cooked meat.



There have been a few reports of humans getting avian flu from other persons. These are isolated events which have not been fully documented.

There are many types and subtypes of viruses and as they spread, they change (mutate). This is why the flu vaccine may change from year to year. When we receive our annual flu shot, it gives us a certain amount of immunity to whatever strain of flu the experts believe will surface that particular year. Avian flu is highly contagious, however, and it can mix and match with human influenza viruses. If a person who is already ill becomes infected with both an avian influenza strain and a human strain at the same time, the result can be a new virus for which none of us has immunity. This could be transmitted from person to person through air droplets (sneezes) and since there's no immunity or protection and no time to make a vaccine, a widespread outbreak would be quite dangerous.

### **Can I get avian flu from my cat or dog? Are they in danger or catching it?**

No



### **What is an epidemic? What is a pandemic?**

An epidemic is a widespread outbreak of disease. A pandemic is an epidemic that affects the world.

### **What would happen if I got avian flu?**

So far, avian flu has been difficult to catch. The people who have gotten it have spent time in very close contact with fowl, and cared for them or slaughtered them without taking proper precautions such as using masks and gloves. The symptoms are a little different in everyone. In general:

- There are about 10 days between exposure and appearance of symptoms
- sudden high fever

- cough, sore throat, body aches, chills
- eye infections have been reported in H7N7 cases
- severe breathing problems

### **Is there a vaccine that can prevent avian influenza?**

Not yet, but several laboratories are working on it. Vaccines, like medicines, must go through laboratory experimentation, evaluations, and then animal trials followed by human testing. Their effectiveness, safety and other issues must be thoroughly examined before they are released for use by the general public. Occasionally, drug approval can be placed on what's called a "fast track" by the FDA when an emergency need is perceived.

### **Is there a medicine that can cure it?**

No. There are two prescriptions that can treat flu symptoms, but they must first be taken within 48 hours of the appearance of symptoms and taken continuously over a period of 10 days. Experts are not in agreement concerning the effectiveness of these medications, however. One medicine is called Tamiflu and the second, a nasal spray, is called Relenza. They are known as antivirals, drugs that stop the replication of a virus. It is generally believed that they can halt the spread of influenza by making the patient non-infectious, but no one knows for sure that they would be effective against avian flu.

### **What causes a pandemic?**

A pandemic starts when three things happen:

- a new influenza virus subtype emerges
- it infects humans, causing them to be seriously ill
- it spreads easily and rapidly from human to human

The reason experts are concerned is that the first two conditions have already been met. The H5N1 is a new virus for which humans have no immunity. It has infected over 100 people and over half of them have died, which means it is a particularly virulent disease. As the disease spreads, there are more opportunities for the virus to mutate into a strain that is easily transmissible between people.

### **What happens in a pandemic? What could I expect to see?**

First, there would be warning signs. You would see clusters of patients with avian flu symptoms in different parts of the country. Health workers caring for these patients would start to show the same symptoms, indicating that the third criteria for a pandemic had been met: person to person transmission was taking place.



Because the flu can be transmitted by coughing or sneezing even before you know you have it yourself, avian influenza would spread very rapidly because of travel, the close proximity of schools, jails, nursing care facilities, and other facets of modern life.

Hospitals could be overwhelmed by the number of people seeking care, and there may be high rates of worker absenteeism which could interrupt the flow of services such as police, fire and rescue. Transportation and communications could suffer if there was a quarantine order; and leisure activities such as dining, movies and concerts would be discouraged, affecting the economy. Medicine and medical equipment could be in short supply. Pandemics last from 6 - 24 months.

### **What is isolation and quarantine?**

Isolation is the separation of sick people with a specific infectious disease from those who are healthy. It is a standard practice when patients have TB and other infectious diseases and usually

takes place in the patient's home or a medical facility like a hospital. In many cases, isolation is voluntary.

Quarantine is the separation and restriction of persons who have been exposed to an infectious agent but may not necessarily have acquired the disease. The reason for the quarantine is to stop the spread of the infectious disease and monitor symptoms to make assess whether has or has not occurred. Quarantine also can be voluntary, although the Secretary of the Florida Department of Health has the authority to declare a public health emergency and issue a quarantine.

**Can we protect ourselves from avian flu?**

You can be cautious. When traveling, avoid visiting places where avian influenza is more likely to be transmitted, such as where poultry is raised or birds are sold. Wash hands frequently using soap and water or alcohol-based hand sanitizers that can be carried with you. And, as always, stay home if ill with symptoms suggesting influenza, and make sure your family members do, too.