



AVIAN/BIRD FLU FACT SHEET

BIRD FLU:

What is avian influenza (bird flu)?

Bird flu is an infection caused by avian (bird) influenza (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.

Do bird flu viruses infect humans?

Bird flu viruses do not usually infect humans, but several cases of human infection with bird flu viruses have occurred since 1997.

Almost all human cases have been traced to close contact with infected poultry. The process of raising chickens and preparing chickens in Asia -- home slaughter, plucking feathers, preparing it for the table -- introduces a number of ways in which a person can become infected. There have been very limited examples of human-to-human transmission. Extended, prolonged contact with poultry and their secretions is the most likely route of infection.

Contact with bird feces is another way people could become infected. Eating raw, contaminated (poultry) blood has been suggested as one of the ways people have become infected in Vietnam. Thoroughly boiling or cooking poultry will destroy the virus.

What are the symptoms of bird flu in humans?

Symptoms of bird flu in humans have ranged from typical flu-like symptoms (fever, cough, sore throat, and muscle aches) to eye infections, pneumonia, severe respiratory compromise (such as acute respiratory distress), and other severe and life-threatening complications. The symptoms of bird flu may depend on which virus caused the infection.

How does bird flu spread?

Infected birds shed flu virus in their saliva, nasal secretions, and feces. Susceptible birds become infected when they have contact with contaminated excretions or surfaces that are contaminated with excretions. It is believed that most cases of bird flu infection in humans have resulted from contact with infected poultry or contaminated surfaces. The spread of bird flu viruses from one ill person to another has been reported very rarely among those with prolonged contact with the ill person, and transmission has not been observed to continue beyond one person.

How is bird flu in humans treated?

Studies done in laboratories suggest that the prescription medicines approved for human flu viruses should work in preventing bird flu infection in humans. However, flu viruses can become resistant to these drugs, so these medications may not always work. Additional studies are needed to prove the effectiveness of these medicines.

What is the risk to humans from bird flu?

The risk from bird flu is generally low to most people because the viruses occur mainly among birds and do not usually infect humans. However, during an outbreak of bird flu among poultry (domesticated chicken, ducks, turkeys), there is a possible risk to people who have contact with infected birds or surfaces that have been contaminated with excretions from infected birds. The current outbreak of avian influenza A (H5N1) among poultry in Asia and Europe (see below) is an example of a bird flu outbreak that has caused human infections and deaths. In such situations, people should avoid contact with infected birds or contaminated surfaces, and should be careful when handling and cooking poultry. For more information about avian influenza and food safety issues, please visit the World Health Organization website at: <http://www.who.int/foodsafety/micro/avian/en/>. In rare instances, limited human-to-human spread of H5N1 virus has occurred, and transmission has not been observed to continue beyond one person.

What is an avian influenza A (H5N1) virus?

Influenza A (H5N1) virus – also called “H5N1 virus” – is an influenza A virus subtype that occurs mainly in birds. It was first isolated from birds (terns) in South Africa in 1961. Like all bird flu viruses, H5N1 virus circulates among birds worldwide and is very contagious among birds. The distinguishing feature of this H5N1 virus from other bird flu viruses is its common tendency to cause severe and even fatal disease among several species of birds.

What is the H5N1 bird flu that has been reported in Asia and Europe?

Outbreaks of influenza H5N1 occurred among poultry in eight countries in Asia (Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam) during late 2003 and early 2004. At that time, more than 100 million birds in the affected countries either died from the disease or were killed to try to control the outbreak. By March 2004, the outbreak was reported to be under control. Beginning in late June 2004, however, new outbreaks of influenza H5N1 among poultry were reported by several countries in Asia (Cambodia, China [Tibet], Indonesia, Kazakhstan, Malaysia, Mongolia, Russia [Siberia], Thailand, and Vietnam). It is believed that these outbreaks are ongoing. Most recently, influenza H5N1 has been reported among poultry in Turkey and Romania. Human infections of influenza A (H5N1) have been reported in Cambodia, Indonesia, Thailand, and Vietnam.

What is the risk to humans from the H5N1 virus in Hawaii?

At this time, H5N1 virus has not been identified outside of the areas reported above. Risk is highest for those who travel to the affected areas and experience significant exposure to infected poultry and their secretions.

How is infection with H5N1 virus in humans treated?

The H5N1 virus currently infecting birds in Asia that has caused human illness and death is resistant to amantadine and rimantadine, two antiviral medications commonly used for influenza. Two other antiviral medications, oseltamivir and zanamivir, have shown activity against the H5N1 virus in laboratory testing, but additional studies still need to be done to prove their effectiveness.

Is there a vaccine to protect humans from H5N1 virus?

There currently is no commercially available vaccine to protect humans against the H5N1 virus. However, efforts to develop vaccine are underway in research laboratories. Research studies to test a vaccine to protect humans against H5N1 virus began in April 2005. For more information about the H5N1 vaccine development process, visit the National Institutes of Health

website at <http://www3.niaid.nih.gov/news/newsreleases/2005/avianfluvax.htm>.

What does Hawaii State Department of Health recommend regarding the H5N1 bird flu outbreak?

Travelers to affected countries should consult the Centers for Disease Control & Prevention (CDC) Travel Health website at:

http://www.cdc.gov/travel/other/avian_influenza_se_asia_2005.htm for specific travel

recommendations. Airline flight crews and airport personnel who may be meeting passengers arriving from affected countries may consult:

http://www.cdc.gov/travel/other/avian_flu_ig_airlines_021804.htm for recommendations specific to their roles.

Is the potential danger of bird flu being exaggerated?

No. The issue is important and has been of concern for all public health officials, scientists, and physicians since at least 1997 with the first H5N1 outbreak. Highly pathogenic, H5N1 is a clear danger to poultry, and its threat to wild birds is real. Although the number of human cases has been small so far, the potential for the virus to change into a more serious threat to humans is also real. Therefore, some level of public awareness, including media coverage, is appropriate.

How big a threat is this to healthy adults?

The sick and the elderly are the usual vulnerable targets for the annual flu, because they are less able to fight an infection. According to the World Health Organization data, currently healthy young adults and children are being infected by H5N1. There are not enough cases to completely understand H5N1 infection in humans. However, the current circulating H5N1 virus has not changed to a form that easily passed among humans. Therefore, the risk is greatest for people in the affected areas who have significant, prolonged exposure to infected poultry.