



Pacific Maritime Association

Accident Prevention Department

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Key Facts About Avian Influenza

The following information is from the Center for Disease Control website at www.cdc.gov

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.

How are bird flu viruses different from human flu viruses?

There are many different subtypes of type A influenza viruses. These subtypes differ because of certain proteins on the surface of the influenza A virus (hemagglutinin [HA] and neuraminidase [NA] proteins). There are 16 different HA subtypes and 9 different NA subtypes of flu A viruses. Many different combinations of HA and NA proteins are possible. Each combination is a different subtype. All known subtypes of flu A viruses can be found in birds. However, when we talk about “bird flu” viruses, we are referring to influenza A subtypes chiefly found in birds. They do not usually infect humans, even though we know they can. When we talk about “human flu viruses” we are referring to those subtypes that occur widely in humans. There are only three known A subtypes of human flu viruses (H1N1, H1N2, and H3N2); it is likely that some genetic parts of current human influenza A viruses came from birds originally. Influenza A viruses are constantly changing, and they might adapt over time to infect and spread among humans.

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 diseases (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 avian influenza viruses from one ill person to another has been reported very rarely, 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, visit the World Health Organization website. 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 the risk to humans from the H5N1 virus in Asia and Europe?

The H5N1 virus does not usually infect humans. However in 1997, the first case of the spread of this virus from a bird to a human was seen during an outbreak of bird flu in poultry in Hong Kong, Special Administrative Region. The virus caused severe respiratory illness in 18 people, 6 of whom died. Since that time, there have been other cases of H5N1 infection among humans. Recent human cases of H5N1 infection that have occurred in Cambodia, Thailand, and Vietnam have coincided with large H5N1 outbreaks in poultry. The World Health Organization (WHO) also has reported human cases in Indonesia. Most of these cases have occurred from contact with infected poultry or contaminated surfaces; however, it is thought that a few cases of human-to-human spread of H5N1 have occurred.

So far, spread of H5N1 virus from person to person has been rare and has not continued beyond one person. However, because all influenza viruses have the ability to change, scientists are concerned that the H5N1 virus one day could be able to infect humans and spread easily from one person to another. Because these viruses do not commonly infect humans, there is little or no immune protection against them in the human population. If the H5N1 virus were able to infect people and spread easily from person to person, an influenza pandemic (worldwide outbreak of

disease) could begin. No one can predict when a pandemic might occur. However, experts from around the world are watching the H5N1 situation in Asia very closely and are preparing for the possibility that the virus may begin to spread more easily and widely from person to person.

Is there a vaccine to protect humans from H5N1 virus?

There currently is no commercially available vaccine to protect humans against the H5N1 virus that is being seen in Asia and Europe. However, vaccine development efforts are taking place. Research studies to test a vaccine to protect humans against H5N1 virus began in April 2005, and a series of clinical trials is underway.

What is the risk to people in the United States from the H5N1 bird flu outbreak in Asia and Europe?

The current risk to Americans from the H5N1 bird flu outbreak in Asia is low. The strain of H5N1 virus found in Asia and Europe has not been found in the United States. There have been no human cases of H5N1 flu in the United States. It is possible that travelers returning from affected countries in Asia could be infected if they were exposed to the virus. Since February 2004, medical and public health personnel have been watching closely to find any such cases. **Vessels arriving from the noted countries in Asia generally have a transit time in excess of the H5N1 virus's incubation period of 7 to 10 days and any person who contracted the disease would be visibly sick and detectable on arrival.**

What does CDC recommend regarding the H5N1 bird flu outbreak?

In February 2004, CDC provided U.S. health departments with recommendations for enhanced surveillance ("detection") in the U.S. of avian influenza A (H5N1). Follow-up messages, distributed via the Health Alert Network, were sent to the health departments on August 12, 2004, and February 4, 2005; both alerts reminded health departments about how to detect (domestic surveillance), diagnose, and prevent the spread of avian influenza A (H5N1). The alerts also recommended measures for laboratory testing for H5N1 virus. CDC currently advises that travelers to countries with known outbreaks of influenza A (H5N1) avoid poultry farms, contact with animals in live food markets, and any surfaces that appear to be contaminated with feces from poultry or other animals. CDC does not recommend any travel restrictions to affected countries at this time.

What is CDC doing to prepare for a possible H5N1 flu pandemic?

CDC is taking part in a number of pandemic prevention and preparedness activities, including:

- Providing leadership to the National Pandemic Influenza Preparedness and Response Task Force, created in May 2005 by the Secretary of the U.S. Department of Health and Human Services.
- Working with the Association of Public Health Laboratories on training workshops for state laboratories on the use of special laboratory (molecular) techniques to identify H5 viruses.
- Working with the Council of State and Territorial Epidemiologists and others to help states with their pandemic planning efforts.

- Working with other agencies such as the Department of Defense and the Veterans Administration on antiviral stockpile issues.
- Working with the World Health Organization (WHO) and Vietnamese Ministry of Health to investigate influenza H5N1 in Vietnam and to provide help in laboratory diagnostics and training to local authorities.
- Performing laboratory testing of H5N1 viruses.
- Starting a \$5.5 million initiative to improve influenza surveillance in Asia .
- Holding or taking part in training sessions to improve local capacities to conduct surveillance for possible human cases of H5N1 and to detect influenza A H5N1 viruses by using laboratory techniques.
- Developing and distributing reagents kits to detect the currently circulating influenza A H5N1 viruses.

What does it mean when a vessel enters a port flying a solid yellow flag called the “Q” or Quebec Flag?

The solid yellow flag as defined by the “*International Code of Signals*” was used to indicate quarantine before it was made the flag for Q. Also, it's worth noting that display of the yellow Q flag today means that **the ship does not have disease** aboard; it signifies "I request free pratique," which means I ask that the authorities in the port give me a clean bill of health.

The CDC has regulations at 42 CFR 71 that require ships captains to report any deaths or ill crew persons immediately to the quarantine station at or nearest the port at which the ship will arrive. There is no routine requirement for a report. A report ONLY has to be made if someone is sick. CDC sends out letters periodically reminding companies of the requirement to notify them if there are sick crewmembers on board.

Federal agencies - Coast Guard, Customs and INS – are all on the look out for the H5N1 virus and know to notify CDC if they detect anything. Several of these agencies have published information notices concerning the of “A (H5N1) avian influenza”.

The CDC has a good website at www.cdc.gov with detailed information regarding Avian Flu.

The Center for Disease Control (CDC) is responsible Federal agency. They may be contacted through the Quarantine Station on that attached list.

Employers should take note of the above.

West Coast CDC Quarantine Station Contact List

San Francisco International Airport

PO Box 280548 SFIA San Francisco, CA 94128-0548

(650) 876-2872 (650) 876-2796 (fax)

24 Hour contact Ms. Susan Dwyer Officer in Charge Cell 650-333-9322

Pager 650-570-0212 Email sad1@cdc.gov

Quarantine Medical Officer: (San Francisco) Dr. Tony Martin

Los Angeles International Airport:

380 World Way, Box N19 Los Angeles, CA 90045

(310) 215-2365 (310) 215-2285 (fax)

24 Hour contact. Mr. Michael Marty (Officer in Charge) 310-215-2365 will forward to duty officer's cell phone.

Quarantine Medical Officer: (Los Angeles) Dr. Bill Mackenzie

Seattle-Tacoma International Airport Ms. Ms. Heather Hastings (Officer in Charge) Seattle, WA 98158-1250

24 hour contact call 206 553 4519 and press 0 the duty officer will be paged, (206) 553-4455 (fax)

Quarantine Medical Officer: (Seattle) Dr. Peter Houck