

What is Avian Influenza?

Avian influenza refers to the disease caused by infection with avian (bird) influenza (flu) Type A viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species. Avian flu viruses do not normally infect humans. However, sporadic human infections with avian flu viruses have occurred.

Most human infections with avian influenza A viruses have occurred following direct or close contact with infected poultry. Illness in humans has ranged from mild to severe.

The spread of avian influenza A viruses from one ill person to another has been reported very rarely, and has been limited, inefficient and not sustained. However, because avian influenza A viruses have the potential to change and gain the ability to spread easily between people, monitoring for human infection and person-to-person transmission is extremely important for public health.

How to Prevent Avian Flu?

Currently, the best way to prevent infection with avian influenza A viruses is to avoid sources of exposure whenever possible. Most human infections with avian influenza A viruses have occurred following direct close or prolonged contact with sick or dead infected poultry.

People who work with poultry or who respond to avian influenza outbreaks are advised to follow recommended biosecurity and infection control practices; these include use of appropriate personal protective equipment and careful attention to hand hygiene. In addition, highly pathogenic avian influenza (HPAI) poultry outbreak responders should adhere to guidance from CDC and World Health Organization (WHO) and receive seasonal influenza vaccination annually and take prophylactic antiviral medication during response. They should also be monitored for illness during and after responding to HPAI outbreaks among poultry. Responders to low pathogenic avian influenza (LPAI) outbreaks should also consider this guidance as part of their response plan. Seasonal influenza vaccination will not prevent infection with avian influenza A viruses, but can reduce the risk of co-infection with human and avian influenza A viruses.

What are Current Treatments for Avian Flu?

For treatment (and prevention) of human infection with avian influenza A viruses, CDC and WHO currently recommend oseltamivir or zanamivir, two of four prescription antiviral medications currently licensed for use in the United States.

In particular, analyses of available HPAI H5N1 viruses circulating worldwide suggest that most viruses are susceptible to oseltamivir and zanamivir. However, some evidence of resistance to oseltamivir has been reported in HPAI H5N1 viruses isolated from some human HPAI H5N1 cases. Monitoring for antiviral resistance among avian influenza A viruses is crucial and ongoing, and data directly inform antiviral treatment recommendations.

What are the Known Avian Flu Strands?

If you have any questions, please contact Allen County Public Health at 419-228-4457. Health Department staff members are available to answer your questions Monday to Friday from 8:00 a.m. to 4:30 p.m. You can also visit www.allencountypublichealth.org and the Centers for Disease Control and Prevention's Web site at www.emergency.cdc.gov for additional information.

Three prominent subtypes of avian influenza A viruses that are known to infect both birds and people are:

Influenza A H5

Nine potential subtypes of H5 viruses are known (H5N1, H5N2, H5N3, H5N4, H5N5, H5N6, H5N7, H5N8, and H5N9). Most H5 viruses identified worldwide in wild birds and poultry are LPAI viruses. Sporadic H5 virus infection of humans, such as with highly pathogenic avian influenza A (H5N1) viruses currently circulating among poultry in Asia and the Middle East have been reported in 15 countries, often resulting in severe pneumonia with approximately 60% mortality worldwide.

Influenza A H7

Nine potential subtypes of H7 viruses are known (H7N1, H7N2, H7N3, H7N4, H7N5, H7N6, H7N7, H7N8, and H7N9). Most H7 viruses identified worldwide in wild birds and poultry are LPAI viruses. H7 virus infection in humans is uncommon, but has been documented in persons who have direct contact with infected birds, especially during outbreaks of H7 virus among poultry. Illness in humans may include conjunctivitis and/or upper respiratory tract symptoms.

In humans, LPAI (H7N2, H7N3, H7N7) virus infections have caused mild to moderate illness.

HPAI (H7N3, H7N7) virus infections have caused mild to severe and fatal illness.

On April 1, 2013, [the first known human cases of infection with avian influenza H7N9 viruses were reported](#). These were associated with severe respiratory illness and death.

Influenza A H9

Nine potential subtypes of H9 are known (H9N1, H9N2, H9N3, H9N4, H9N5, H9N6, H9N7, H9N8, and H9N9); all H9 viruses identified worldwide in wild birds and poultry are LPAI viruses. H9N2 virus has been detected in bird populations in Asia, Europe, the Middle East and Africa. Rare, sporadic H9N2 virus infections of humans have been reported to cause generally mild upper respiratory tract illness.