

### What is Avian Influenza?

Avian influenza or “bird flu” is an infection found in birds that is caused by the influenza A virus. The virus can be passed from birds to people, although infection in people is considered rare. There are many different types of bird flu, and some cause disease while others do not. In recent years, the term bird flu has often been used to describe the H5N1, H5N2, H5N6, H5N8, H5N10 and H7N9 avian influenza viruses.

### Who is at risk for Avian Influenza?

People may become infected when they have contact with infected birds, especially domestic birds. People also may become ill from exposure to areas or surfaces contaminated with bird feces or respiratory secretions, such as on farms or in live bird markets. Birds with avian influenza have been documented in every part of the world.

### What are the symptoms of Avian Influenza?

Most avian influenza viruses do not cause illness in people. However, people infected with avian flu viruses may have a variety of symptoms depending on the type of avian influenza virus they have. For example, some people may only develop mild eye infections. In other instances, symptoms are very similar to that of seasonal human influenza, including fever, chills, headache, cough and body aches. For severe cases, symptoms may lead to death due to pneumonia and other respiratory complications.

### How soon do symptoms appear?

The time it takes for a person to develop symptoms after exposure is dependent on the type of influenza virus. Generally, symptoms appear within 10 days of exposure, but could be longer.

### How is Avian Influenza spread?

Avian influenza can spread from infected birds to people; however, this occurs very rarely. Most people with avian influenza become infected when they have contact with infected birds or contaminated environments. Birds shed virus in their saliva, mucous, and droppings. In general, people cannot spread avian influenza to other people. Very limited person-to-person spread has been documented in family caregivers with close contact to infected individuals. However, most people who care for someone with bird flu do not contract the disease.

Sometimes avian influenza viruses will change over time. If the right changes occur, it may become possible for people to spread this flu virus from person-to-person more readily. If this happens, monitoring for human infection and person-to-person spread is extremely important.

### When and for how long is a person able to spread the disease?

Person-to-person spread of avian influenza is extremely rare. It is not known how long a person is able to spread avian influenza, and this timeframe will likely vary depending on the type of virus.

## How is a person diagnosed?

Diagnosis begins with the appearance of classic signs and symptoms of seasonal influenza, including fever, cough, sore throat, congestion and body aches, along with an appropriate exposure, such as a recent history of travel to a country or area where bird flu transmission has been identified, and/or evidence of bird exposure, especially exposure to sick birds or their droppings. A laboratory test available at the State Public Health Laboratory is required in order to confirm this diagnosis, as commercial influenza test kits currently on the market are not designed to detect avian influenza viruses.

## What is the treatment?

Antibiotics are not effective against avian influenza. Treatment with an antiviral drug is recommended for cases and their close contacts. These drugs work best when given within 48 hours after the first symptoms appear. In certain situations, people with an exposure to avian influenza may receive antivirals as preventative treatment.

## Does past infection make a person immune?

It is unknown at this time. There are many different types of avian influenza viruses and the viruses can change over time, therefore being infected with one type of avian influenza may not offer adequate protection from other virus strains.

## Should children or others be excluded from child care, school, work or other activities if they have Avian Influenza?

Yes. For how long someone should be excluded will depend on the type of avian influenza virus and the severity of the human disease it might cause. Consult with your healthcare provider, or state health department for further guidance. Children with any type of influenza should always be excluded from child care or school when they have a fever until that fever free for 24 hours without the use of fever-reducing medications.

## What can be done to prevent the spread of Avian Influenza among people?

The best way to prevent the spread of avian influenza is to reduce your exposure to sick and dying birds. View wildlife from a distance and don't touch dead or sick animals. If you notice sick or dying birds, report it to local wildlife or public health officials or veterinarians. If you are traveling to another country, avoid bird markets and bird farms. Avoid contact with sick patients who have suspected or confirmed bird flu. If you have contact with wild birds or domestic poultry, wash your hands with soap and water before resuming normal activities.

## Additional Information:

Additional information is available by calling the North Dakota Department of Health at 800-472-2180. For additional information about the disease in birds, call the Department of Agriculture, Animal Health Division at 701-328-2654 or visit <https://www.nd.gov/ndda/disease/avian-influenza>.

**This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health Resources:**

Resources:

American Academy of Pediatrics. [Children in Out-Of-Home Child Care]. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31<sup>st</sup> ed. Itasca, IL: American Academy of Pediatrics; 2018:[122-136].

World Health Organization website (2019): [www.who.int/influenza/human\\_animal\\_interface/en/](http://www.who.int/influenza/human_animal_interface/en/)

Centers for Disease Control and Prevention website (2019): [www.cdc.gov/flu/avianflu/](http://www.cdc.gov/flu/avianflu/)