

Reminders for Avian Influenza Testing

Update to York Region health care professionals as of December 2, 2024

On November 13, 2024, the Public Health Agency of Canada confirmed the first domestically acquired human case of avian influenza A(H5N1) in Canada. While H5N1 continues to circulate among wild and domestic animals during the ongoing outbreak in Canada, risk to humans in our region remains low. To support ongoing vigilance and preventive efforts, this brief notice aims to provide our healthcare professional partners, hospitals, and labs with relevant information on avian influenza, including testing protocols and reporting requirements.

What is avian influenza A(H5N1) and how is it transmitted?

Avian influenza is a type of influenza A virus that primarily affects wild and domesticated birds (e.g. chickens) but can also infect other animals. H5N1 is a highly pathogenic avian influenza (HPAI) that is the predominant subtype in the ongoing outbreak that is impacting poultry across North America and dairy cows in the US. Transmission from animals and animal products to humans is rare, and there is no evidence of sustained human-to-human transmission to date. However, certain exposures pose a higher risk for transmission to humans:

- Close contact with infected poultry, animals or contaminated environments
- Consuming under or uncooked poultry, egg products, or unpasteurized milk from an affected farm
- Exposure to manure or litter containing high concentrations of the virus

Those who are at high risk for these exposures include:

- Poultry farm workers
- People with backyard chickens
- People involved in handling sick animals or exposed to affected environment
- People who visited a live poultry market

What is the human health risk?

There is an ongoing outbreak of H5N1 in Canada among domestic poultry, wild birds and some mammals. In other provinces, there are several active outbreaks at poultry premises, but there are no active H5N1 outbreaks in Ontario at the time of this notice. **The risk of human infection in our region remains low.** Broadly, the ongoing rise in HPAI among birds and mammals increases the risk of human exposure and therefore opportunities for the virus to adapt to more easily infect humans or gain human-to-human transmissibility. It is additionally concerning when a human host is coinfecting with both human and avian influenza, as this creates an opportunity for genetic reassortment, potentially leading to accelerated human adaptation and increased pandemic risk.

What are the signs and symptoms of avian influenza?

Individuals may have no symptoms at all or may experience mild to severe influenza-like illness (ILI) symptoms. Common symptoms can include:

- Fever, malaise, fatigue, myalgia, arthralgia, headache.
- Cough, rhinorrhea, sore throat.
- Conjunctivitis
- Gastrointestinal symptoms (diarrhea and vomiting)
- Respiratory complications including shortness of breath, chest pain, pneumonia, respiratory failure and death.

What can be done reduce the risk of avian influenza for humans?

The general public should avoid handling wild birds. When contact is unavoidable, be sure to wear appropriate personal protective equipment and use a double bag to avoid contact with blood, body fluids and feces. Follow proper hand hygiene practices and wash your hands thoroughly with soap and water after any contact.

Vaccination: While the annual influenza vaccine does not directly protect against avian influenza, receiving the seasonal vaccine reduces the risk of concurrent infections. It is strongly recommended that individuals who work with live birds and mammals (such as poultry, livestock, slaughterhouse and processing plant workers, wildlife officers/researchers, and veterinarians) get vaccinated each year.

Treatment: If avian influenza is suspected in a patient, notify Public Health. Antivirals can be used to treat suspected, probable or confirmed cases; treatment can be initiated while waiting for lab confirmation and should not be delayed by lab confirmation.

If a patient is asymptomatic and exposure to avian influenza is suspected, notify Public Health; post-exposure prophylaxis may be considered.

Testing for avian influenza

Relevant hospital and laboratory personnel are encouraged to review the recently updated [Public Health Ontario \(PHO\) page](#) that includes criteria for submitting and selecting Influenza A positive specimens for subtyping or whole genome sequencing as part of PHO's enhanced influenza surveillance program. This program is essential for early identification of novel influenza strains including HPAI.

For health care providers, if a patient presents with ILI symptoms and they are at high risk for exposure to avian influenza (see list above), consider testing for avian influenza in addition to other potential causes of acute respiratory illness.

- Prior to specimen submission, contact PHO's Laboratory Customer Service Centre at 416-235-6556 or 1-877-604-4567 or after-hours Emergency Duty Officer at 416-605-3113 for further instructions and testing approval.
- Complete all fields of the [PHO's General Test Requisition Form](#)
 - Travel history and clinical information must be provided. Indicate the following: travel to farms or areas experiencing avian influenza activity; symptoms and clinical conditions including pneumonia; high risk status for respiratory viral infection complications; patient setting; admission status at time of collection (if known).
- Under Tests Requested include all the following Avian Influenza, COVID-19 PCR, and Multiplex Respiratory Virus PCR/MRVP
- Obtain both a nasopharyngeal swab and a throat swab.
 - Health care providers with access to additional diagnostic modalities (e.g. bronchoalveolar lavage) can refer to the link below from Public Health Ontario for more information.

For additional information and instructions on avian influenza testing, please visit: [Avian Influenza – Real-time PCR | Public Health Ontario](#)

Contact Us

If you have any questions about avian influenza or testing criteria, please contact our Control of Infectious Diseases team:

- Email: CIDIntakeLine@york.ca
- Telephone: 1-877-464-9675 ext. 73588
- Fax number: 905-898-5213

Report all suspected or confirmed cases of avian influenza to

York Region Public Health

1-877-464-9675 ext. 73588

Monday to Friday, 8:30 a.m. and 4:30 p.m.

905-953-6478

After hours, including weekends and holidays