Avian Influenza (H5N1) Prevention & Risk Mitigation (2025)

BACKGROUND

Avian influenza (H5N1) is a type of influenza A virus which is mainly found in wild birds. Avian influenza can also infect domestic and commercial poultry, such as chickens and turkeys, and less commonly, mammals, including dairy cattle. Avian Influenza (H5N1) has caused rare and sporadic infections in humans. To date, there has been no evidence of sustained transmission between humans. Since 2024, there have been over 60 confirmed reported human cases and one death associated with H5N1 bird flu infection in the United States. Currently, in Ontario, there have been no laboratory-confirmed cases of H5N1. Symptoms can include fever, body aches, cough, sore throat, red eyes, breathing problems and sometimes, diarrhea and vomiting. At this time, Avian influenza does not spread easily from person to person, however recent studies have shown mutations in the virus which may increase the likelihood of human-to-human transmission.

Individuals who are at an increased risk include persons:

- working with poultry (like chickens, turkeys and ducks) or livestock (like cattle and goats), on a commercial farm or with small farms or backyard flocks
- hunting, de-feathering, field dressing and butchering wild birds and wild mammals
- working with wild birds for activities such as rehabilitation, research, or conservation
- working with wild mammals, especially those that commonly eat wild birds (like foxes, skunks, raccoons, mink and other farmed fur animals and some marine mammals)
- visiting animal farms or live animal markets
- consuming unpasteurized milk
- consuming raw or undercooked meat

Emergency preparedness is an important effort for public health, health care organizations, and government. Being prepared for the emergence of human cases of H5N1 involves preventing exposures, recognizing symptoms, and responding effectively. Key aspects of H5N1 preparedness that the WECHU is focusing on include:

- **Surveillance and Monitoring** - Public Health Ontario is enhancing surveillance by testing influenza A positive specimens, including those related to H5N1. The WECHU will continue to monitor H5N1 activities and make recommendations to stakeholders and the public based on data trends and reports. In addition, wastewater monitoring is a rapidly evolving surveillance tool that can monitor levels of disease activity over time and look for unusual changes or elevated disease levels. Testing strategies already exist in wastewater for flu and several other infectious diseases and the investigation and development of techniques to use wastewater testing for H5N1 are underway and could be incorporated in the future.

- **Human to Animal Contact Management** – In addition to recommending that the public stay away from wild birds and other wild animals (don't touch, feed, or handle them), the WECHU recommends individuals avoid contact with livestock (e.g. commercial or domestic poultry) or other sick animals without precaution. Of particular concern are the risks associated with backyard chickens in WEC, due to the frequent and close contact between poultry and humans, but also due to the increased susceptibility of backyard chickens to H5N1 based on free-range systems (roam from property to property) and the

potential contact with infected wild birds. For people who work with high risk or infected wild birds or other wildlife, the proper use of personal protective equipment (PPE) is strongly recommended.

- **Communication and Public Education** – Based on the low risk of H5N1, the WECHU is currently advising the public to avoid contact with sick or dead birds, follow safe food handling practices, and report any sick or dead wildlife. The WECHU provides timely updates to the public in the event the risk level changes.
- **Immunization** – Although there is no vaccine specific for Avian Influenza available locally at this time, it is crucial to stay up-to-date on the seasonal influenza vaccine. The Federal government has procured 500,000 doses of an H5N1 avian influenza vaccine. The vaccine is intended for use in individuals at higher risk of exposure to the virus, such as those working with infected animals. The vaccine is part of Canada's pandemic preparedness efforts and will be allocated to provinces and territories for potential use based on risk conditions. Ontario is working with the Federal government to ensure timely access to H5N1 vaccines for individuals at increased risk in the event that this vaccine is needed.
- **Emergency Preparedness and Response Planning** - Contingency plans are being developed for managing outbreaks and human cases. For stakeholders working in close contact with wildlife or birds, contingency plans should be developed to include the humane and rapid destruction of infected flocks, minimizing spread, and effective carcass disposal.
- **Collaboration** – Several key partners including provincial and federal health agencies, municipalities, hospitals, health care providers, emergency responders, are working together to inform and develop strategies that help our community address the challenges associated with the emergence of H5N1. This includes the development and endorsement of an IMS structure in the event of a public health emergency.

PROPOSED MOTION

Whereas, the current pandemic risk of H5N1 in Ontario for the general public remains low, but the risk of infection is higher for individuals with close contact to infected animals, like farm workers, and for those handling wild birds; and

Whereas, wastewater monitoring is a non-invasive, cost-effective rapidly evolving tool for public health surveillance to help alert public health officials to diseases that may be spreading in a community; and

Whereas, H5N1 vaccines are available, but not currently accessible for public use in Ontario; and

Whereas, backyard poultry, like chickens, are highly vulnerable to the H5N1 virus, especially if they have free range outdoor access and exposure to infected wild birds;

Now therefore be it resolved that the Windsor-Essex County Board of Health will continue to prioritize and resource the work associated with the Windsor-Essex County Health Unit's emergency preparedness activities and response planning associated with H5N1; and

FURTHER THAT, the Windsor-Essex County Board of Health recommends that local municipalities with by-laws permitting backyard chickens make immediate efforts to ensure that backyard chicken owners are aware of the increased illness risks of H5N1, and strategies that should be implemented to reduce their risk of illness;

FURTHER THAT, the Windsor-Essex County Board of Health recommends that local municipalities and key stakeholders connected with the H5N1 response, make efforts in the next three months to update protocols, conduct simulations and activity drills, and plan to ensure the availability of necessary resources in the event of future changes to local H5N1 risk;

FURTHER THAT, the Windsor-Essex County Board of Health recommends that the provincial government work to secure the necessary supply of H5N1 vaccines for individuals at increased risk in Windsor and Essex County and across the province in necessary quantities;

FURTHER THAT, the Windsor-Essex County Board of Health encourages the provincial government to fund the research and development of wastewater testing strategies and strengthen the infrastructure for clinical testing that could be implemented at the local and regional levels.