



Sioux Lookout First Nations Health Authority

COMMUNITY WELLBEING ADVISORY

To: Sioux Lookout area Chiefs and Health Directors
From: Dr. Lloyd Douglas, Public Health Physician
Date: 25 November 2024
Re: **The First Confirmed Human Case of Avian Influenza (H5N1) in Canada**

Issue

The Public Health Agency of Canada (PHAC) has recently confirmed the first domestically acquired human case of avian influenza in Canada. The case was detected earlier this month in a teenager from British Columbia. The source of the individual's infection has not yet been determined. Avian influenza primarily affects wild birds but can also infect domestic and commercial poultry, as well as mammals, including dairy cattle. While the United States is currently experiencing an outbreak of avian influenza (H5N1) in dairy cattle, the genotype of the virus in the British Columbia human case is different from the strain circulating in the United States¹.

Canadian health officials are closely monitoring the situation and will provide updates as more information becomes available. This Community Wellbeing Advisory aims to provide the latest information about the disease and offers public health recommendations to help reduce the risk of the infection in Sioux Lookout area First Nations communities.

What is avian influenza?

Avian influenza, also known as bird flu, is a contagious viral infection caused by the type "A" influenza virus. It primarily affects various bird species, including food-producing birds such as chickens, turkeys, and quails, as well as pet and wild birds. In addition to birds, the virus can also infect mammals including bears, cats, foxes, livestock (such as cattle and goats), marine mammals, mink and other fur-farmed animals, otters, raccoons, and skunks. Avian influenza often causes severe illness and death in birds.

Risk of avian influenza for humans

While rare, avian influenza can infect humans. Transmission typically occurs through close contact with infected birds, such as among poultry or livestock workers, or individuals who frequently hunt wild birds and other wildlife. You cannot become infected by eating thoroughly cooked poultry, eggs, and meat. Pasteurized milk and milk products are also safe to consume.

Clinical signs and symptoms

Symptoms typically appear within 1 to 5 days after exposure, although in some cases, they may take longer. The illness often begins with symptoms such as cough, shortness of breath, fever, headache, and muscle aches. Early symptoms may include diarrhea, runny nose, sore throat, fatigue, red eyes (conjunctivitis), and bleeding gums. In rare cases, the disease can rapidly progress to:

- Severe respiratory illness:
 - difficulty in breathing
 - pneumonia (lung infection)
 - acute respiratory distress syndrome (ARDS)
- Neurological changes:
 - changed mental state
 - seizures

In very severe cases, the infection may lead to multi-organ failure, affecting the kidney, liver, and heart, and can lead to death.

Prevention

The risk of avian influenza for the general public in Ontario is currently low. Avian influenza does not spread easily from person to person. While there is no specific avian influenza vaccine available for public use, the annual seasonal influenza vaccine (flu shot) can reduce the risk of co-infection with H5N1 and serious complications. The National Advisory Committee on Immunization (NACI) emphasizes the importance of the flu shot, particularly for those who may have significant exposure to avian influenza virus².

Minimizing contact with secretions (mucus, saliva), blood, or feces from infected birds and mammals is key to preventing avian influenza A infections.

- Do not eat birds or mammals that appear to be sick
- Do not handle sick or dead wild birds or other wildlife
- If handling sick or dead wild birds is unavoidable or if you are processing harvested birds:
 - wear protective clothing, which includes face masks, goggles, gloves, and boots
 - always work in a well-ventilated environment
 - if working outdoors, stay upwind to avoid inhaling dust and feathers
 - avoid direct contact with blood, feces, and respiratory secretions
 - do NOT eat, drink, or smoke, and do NOT touch your eyes or face while handling wildlife
 - keep children and pets away from the area
- After you are done:
 - clean and disinfect tools and worksurfaces (including those in vehicles) with hot water and soap and a household disinfectant
 - immediately remove and wash clothing and footwear
 - wash your hands with soap and warm water immediately after you have finished. If you don't have access to water, use hand sanitizer
- If you observe sick or dead birds or other wildlife, do not handle them yourself, instead contact the Canadian Wildlife Health Cooperative at 1-567-2033 or the Ontario regional centre of the Canadian Wildlife Health Cooperative at (866) 673-4781
- Consuming under-cooked meat may transmit the virus to your body and should be avoided
- Be vigilant for flu-like symptoms, especially if you have had contact with birds or contaminated environments

If you become ill

If you get influenza-like symptoms (i.e. fever, cough, sore throat, headache, body pain, and fatigue) within 10 days after handling wild birds:

- Contact the nursing station and inform them that you had contact with wild birds/mammals
- Isolate away from others and follow measures which help reduce the spread of infection
 - cover your mouth and nose with a tissue or your elbow when coughing or sneezing
 - consider physical distancing
 - wear a mask when physical distancing is not possible
 - consider regular hand hygiene
 - improve indoor ventilation (e.g., opening windows)
 - regularly clean and disinfect surfaces and objects

Educate your community: Share information about avian influenza and its risks. Awareness is key to prevention.

Stay informed: Follow updates from public health authorities regarding avian influenza and local advisories.

The Sioux Lookout First Nations Health Authority (SLFNHA) is closely monitoring the situation to help protect the health of the community members we serve.

We thank all community workers, healthcare providers, and community members for their support in preventing the transmission of preventable diseases.

If you have any questions, please contact:

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or

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References

1. Government of Canada. (2024, November). *Update on avian influenza and risk to Canadians*. Public Health Agency of Canada. Retrieved from <https://www.canada.ca/en/public-health/news/2024/11/update-on-avian-influenza-and-risk-to-canadians.html>
2. Public Health Agency of Canada. (2024). *National Advisory Committee on Immunization (NACI): Statement on Seasonal Influenza Vaccine for 2024–2025*. Ottawa, ON: Public Health Agency of Canada; Available from: <https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-seasonal-influenza-vaccine-2024-2025.html>