

July 25, 2025

Public Q&A on H5N1 Avian Influenza and the H5N1 Vaccine

Avian Influenza

1. What is Avian influenza?

Avian influenza (commonly known as “bird flu”) is a type of influenza virus mainly found in wild birds, with detections of avian influenza typically increasing during the fall bird migration season. It can sometimes infect mammals and in rare cases, humans.

Avian influenza can be classified two ways based on the severity of illness in infected birds:

- Low pathogenic avian influenza (LPAI)
- Highly pathogenic avian influenza (HPAI)

2. Why is avian influenza a concern?

Based on circulation internationally, the HPAI, H5N1 strain circulating in Ontario since 2022, can cause disease in:

- wild birds
- commercial poultry
- wild and domestic mammals, including some pets and dairy cattle in the USA, and
- humans, in rare cases.

In recent years this H5N1 strain has been detected in an increased number of wild and domestic animals worldwide and there have been some reports of human cases of H5N1 in the United States. In Canada, a single human case was reported in 2024 in British Columbia (BC).

Given there is no evidence of sustained human-to-human transmission of the virus, and based on ongoing risk assessments by the Public Health Agency of Canada (PHAC), the risk of H5N1 is low in Ontario and Canada

3. What are the symptoms and potential health risks from contracting avian influenza?

Although most strains do not easily infect humans, there is still a low risk of people getting avian influenza from contact with an infected animal. Individuals who are in close, ongoing contact with infected animals or their environment may face a higher risk of exposure given the significance of contact, type and duration (e.g., ongoing repeated direct contact with infected dead birds).

While avian influenza is caused by a different virus than the seasonal flu, some of the symptoms may be similar, including:

- Fever
- Cough
- sore throat
- runny or stuffy nose
- muscle or body aches
- headaches
- fatigue or tiredness
- conjunctivitis (red eyes)
- shortness of breath or difficulty breathing

Some people are more vulnerable to infection or serious complications and hospitalization.

4. What is the risk of avian influenza for people?

Human infections with avian influenza are rare. Currently there is no evidence of sustained human-to-human transmission of avian Influenza and the risk to the general public remains low. Globally, infections have been primarily among people with direct exposure to infected animals. As of June 2025, only one case has been reported in Canada , in British Columbia, since H5N1 first emerged in humans in 1997.

5. If I contract H5N1, will I get over it like the common cold?

Human infections with avian influenza are rare so data on outcomes and recovery are limited. While the seasonal flu and H5N1 are caused by different viruses, the symptoms may be similar.

It is important to contact a health care provider or contact Health811 if you have flu like symptoms and have been around sick or dead birds or animals in the past 10 days which were suspected or confirmed to have the virus.

6. Is the anticipated level of avian influenza expected to be bad this year?

This current H5N1 strain has been detected in an increased number of wild and domestic animals worldwide since it emerged in 2021. Monitoring and testing for the presence of avian influenza provincially and nationally continues to track the spread of the virus. Most cases of H5N1 in Ontario have occurred in the spring and fall migratory bird seasons.

Ontario continues to monitor for cases and collaborates with Public Health Ontario (PHO), the Public Health Agency of Canada (PHAC), and health-care providers to monitor and assess the risk of avian influenza for humans.

Immunization

7. Is there a vaccine for Avian Influenza?

Arepanrix™ H5N1 is a vaccine that has been approved for use by Health Canada for immunization against avian influenza A -H5N1 infection in adults and children ages 6 months of age and older and was recently made available by the federal government to provinces and territories.

As human infections with H5N1 are rare, a limited number of people are currently eligible for immunization to increase their protection against infection with H5N1 if they are exposed based on their occupation.

8. What kinds of infection does the avian influenza vaccine protect against?

Since 2021, this strain of H5N1 has been detected in an increased number of wild and domestic animals worldwide and there have been some reports of human cases of H5N1 in the United States. In Canada, a single human case was reported in 2024 in BC.

Arepanrix™ H5N1 is approved for use for preventing against H5N1 avian influenza infections, like the strain of H5N1 that is currently being detected in Canada and worldwide. The vaccine does not provide protection against the seasonal flu, and does not provide protection against other types (non-H5N1 strains) of avian influenza.

9. Should everyone receive the Avian Influenza vaccine?

Currently, risk for the general population remains low and only select high risk occupational groups are eligible to receive the vaccine.

Ontario continues to monitor cases and collaborates with Public Health Ontario (PHO), the Public Health Agency of Canada (PHAC), and health-care providers to monitor and assess the risk of avian influenza for humans globally and within the province. Eligible populations may change over time if the context and risk change in Ontario.

Ontario's Chief Medical Officer of Health will continue to provide advice to the government on the appropriate and effective measures that are needed to protect the health of Ontarians.

10. Who can get vaccinated?

Given their ongoing and significant occupational exposure to the H5N1 virus, a limited number of people are eligible for immunization to protect against infection with H5N1, including:

- **People with ongoing contact with birds likely to be infected with H5N1.**
 - Wildlife officers, researchers, rehabilitators who handle dead or sick birds (e.g., bird banders).
 - Veterinarians or veterinary technicians who are exposed to dead or sick birds likely infected with H5N1 (e.g., necropsy).
- **People who handle live avian H5N1 virus in laboratory settings.**
 - Laboratory workers who manipulate, handle, or culture live H5N1 virus such as in research, industrial, or clinical reference laboratory settings.

11. Why were these populations chosen? Can other populations receive a dose? (i.e., close contacts of eligible populations, others who work with birds)

Only the recommended populations are eligible for immunization.

Current eligibility was assessed according to an at-risk approach based on significant and ongoing exposure to sick or dead birds and to the live virus.

The Ministry and the Office of Chief Medical Officer of Health, Public Health continues to monitor and assess the status of avian influenza in the province and globally, including evidence and expert recommendations. Eligible populations may change over time if the context and risk level change.

12.Q: Are hunters/trappers eligible for the H5N1 vaccine?

Hunters and trappers may occasionally interact with birds or animals that could carry avian influenza. However, hunters and trappers are typically interacting with healthy and/or live animals, which are much less likely to carry or shed the virus. Because of this lower risk, vaccination is not currently recommended for this group.

Instead, hunters and trappers are encouraged to:

- Avoid handling sick or dead birds
- Wear gloves and wash hands thoroughly after handling game
- Report unusual bird deaths to local authorities
- Cook game meat thoroughly, to an internal temperature of approximately 74°C (165° F)
- Follow safe food handling practices such as hand washing and keeping game products separate from other food products to avoid cross-contamination
- Do not eat, drink, or smoke while handling raw game products
- Thoroughly clean contaminated surfaces on tools, work areas, and clothing

The Ministry and the Office of Chief Medical Officer of Health, Public Health continues to monitor and assess the status of avian influenza in the province and globally, including evidence and expert recommendations. Eligible populations may change over time if the context and risk level change.

13. Most of the reported human cases of avian influenza cases in the USA occurred in dairy farms, and to a lesser extent in poultry farms. Why are these workers not part of the eligible population in Ontario?

While poultry farm workers in Ontario may be exposed to avian influenza, they do not experience unprotected ongoing exposure to sick or dead birds. Once highly pathogenic avian influenza is suspected or detected on a poultry farm, control measures are immediately put into place to prevent exposure to infected birds. Poultry and livestock workers are encouraged to use proper [personal protective equipment](#) when working around animals, as this is a very important means of protecting yourself against exposure to the disease.

As of June 2025, H5N1 infections have not been detected in Ontario dairy cattle.

Based on the current risk, ongoing risk prevention measures, and given the limited data on duration of protection from the H5N1 vaccine, immunization is not currently recommended for poultry or cattle farm workers.

The Ministry and the Office of Chief Medical Officer of Health, Public Health continues to monitor and assess the status of avian influenza in the province and globally, including evidence and expert recommendations. Eligible populations may change over time if the context and risk level change.

14. How do eligible populations receive their dose(s), can I get it at a pharmacy?

Given the limited eligibility immunization will be led through local public health units. For information on what is happening in your community, including when and where eligible people can receive their vaccines, contact your local public health unit.

15. If I'm not eligible, can I pay for the vaccine?

The H5N1 vaccine is not available for purchase on the private market.

16. Do eligible populations need a health card/OHIP to receive a dose(s)?

Individuals without an OHIP card may receive the vaccine per the eligibility. Questions on identification documents should be discussed with the local public health unit.

17. Is the vaccine mandatory, what if I am eligible but don't want to get it?

The vaccine is not mandatory, those who are eligible are encouraged to discuss vaccination with a healthcare provider or their public health unit.

H5N1 Vaccine Information

18. What vaccine will be administered, is it new?

In Ontario, eligible people will receive the Arepanrix™ H5N1 vaccine for immunization against H5N1. Arepanrix™ was initially approved for use by Health Canada in 2013 for immunization against avian influenza A(H5N1) infection in adults and children ages 6 months of age and older and has been updated to target the recently circulating H5N1 strain.

19. Is the vaccine safe?

Health Canada reviews the safety and how well a vaccine works as part of the regulatory process prior to approving the product for use in the country.

Vaccines are also monitored by Health Canada, the Public Health Agency of Canada and in Ontario and other provinces and territories for any adverse reactions that may occur after vaccination so that appropriate measures can be taken.

Clinical trials of similar H5N1 products have shown no safety signals.

20. When should the vaccine be given?

The H5N1 vaccine series should ideally be completed in the summer of 2025, to provide protection before the fall bird migration season when avian influenza cases tend to rise and to allow for the timely administration of the flu shot when it becomes available in the fall.

21. How many doses are required?

The H5N1 vaccine requires two doses, administered at least three weeks (21 days) apart.

22. Can this vaccine be given with other vaccines?

It is recommended to maintain an interval of at least six weeks between an Arepanrix™ H5N1 dose and any other vaccine, including the seasonal flu shot.

23. Should people who get the H5N1 vaccine still get a flu shot in Fall 2025?

Yes, getting an annual flu shot is the best way to remain protected against the most severe outcomes of infection, including hospitalization caused by the seasonal flu.

Flu season typically runs from late fall to early spring. It is recommended to get the updated flu vaccines each fall. Additionally, receiving the flu shot reduces the risk of co-infection with both the seasonal flu and avian influenza.

24. How effective is the H5N1 vaccine?

The Arepanrix™ H5N1 vaccine is expected to provide protection against the currently circulating strain of H5N1 (clade 2.3.4.4b) and some cross-protection against related strains.

25. What are the possible side effects?

Safety data from related clinical trials suggest that the H5N1 vaccine is generally well tolerated. The most commonly reported side effects were mild to moderate injection site reactions, muscle aches, headache, fatigue, and joint pain.

Severe allergic reactions are rare, but immediate medical care should be sought if symptoms such as hives, facial swelling, or difficulty breathing occur.

Any severe, unexpected, or unusual adverse events following the receipt of the H5N1 vaccine, whether or not they are clearly attributable to the vaccine, should be reported to the local public health unit.

26. Who should not receive this vaccine?

People who have serious allergies (anaphylaxis) to any ingredient in the vaccine, except eggs, should not receive this vaccine. Studies have demonstrated that egg-allergic persons can safely receive influenza vaccines.

A health care provider can tell you which ingredients are in the vaccine and if it is safe for you.

27. Can pregnant or breastfeeding people receive the vaccine?

Eligible pregnant or breastfeeding individuals may consider receiving the vaccine after a risk/benefit discussion with a health care provider.

28. What if I only get one dose? Will I still have adequate protection?

Data for the current H5N1 vaccine is limited and includes indirect evidence from other similar vaccines. The Health Canada approved product monograph indicates that two doses are a complete series.

29. Do I need to get the H5N1 vaccine every year? / Do I need to get a booster dose(s)?

Data for the current H5N1 vaccine is limited and includes indirect evidence from other similar vaccines. The Health Canada approved product monograph does not indicate any booster doses required at this time.

The Ministry and the Office of Chief Medical Officer of Health, Public Health continues to monitor and assess the status of avian influenza in the province and globally, and evidence and expert recommendations to inform programming and

guidance in Ontario. for future doses and eligible groups will be shared as they become available.

30. Does the H5N1 vaccine provide lifelong protection?

Data for the current H5N1 vaccine is limited and includes indirect evidence from other similar vaccines. It is expected that eligible people who receive the 2 dose vaccine series will be provided with some protection against infection for the upcoming fall bird migration season when avian influenza cases tend to rise.

31. Where can I get more information?

For more details on avian influenza and the vaccine, visit:

[Avian flu | ontario.ca](https://www.ontario.ca/avian-flu)

[Highly pathogenic avian influenza: Recommendations for personal protective equipment for workers and employers](#)[Public Health Ontario - Avian Influenza](#)

[Canada.ca - Avian Influenza A\(H5N1\)](#)