

# Avian Influenza



Avian Influenza (AI) is a contagious viral infection that can affect several species of food producing birds as well as pet birds and wild birds. AI viruses can be classified into 2 categories based on the severity of the illness caused in birds: low pathogenicity (LPAI; usually causing relatively mild disease) and high pathogenicity (HPAI; usually causing more severe disease, often with high mortality).

## Report suspicious cases to the Canadian Food Inspection Agency (CFIA)

In Canada, highly pathogenic avian influenza and low pathogenicity H5 and H7 avian influenza viruses are considered to be Notifiable Avian Influenza, which is a reportable disease for domestic birds under the federal Health of Animals Act. All suspected cases must be reported to the Canadian Food Inspection Agency (CFIA) through your nearest CFIA Animal Health Office.

**Tel: 902-536-1010**

## How is the disease spread?

Wild birds, especially waterfowl, are natural reservoirs of AI. They may not be affected by the disease but can transmit it to domestic birds. The disease can be spread by:

- direct contact with infected birds
- contaminated feed and water, equipment, clothing, footwear, and poultry litter



## Risk to flocks

AI often causes severe disease, death, and production losses, and is not treatable. CFIA responds to cases of AI in domestic birds. CFIA's response strategy would involve:

- Humane destruction and proper disposal of all infected and exposed birds
- Zoning to define infected and disease-free areas
- Strict quarantine and movement controls to prevent spread of the disease
- Surveillance and tracing of potentially infected animals
- Decontamination of infected premises

## Control measures

Prevention is best achieved through strict biosecurity measures designed to protect your flock from AI and other common poultry diseases. Poultry owners should take the following precautions:

- Prevent wild birds from coming in contact with poultry, as well as with their food and water
- Maintain strict control over access to poultry houses, limiting access to people who must be there
- Require that all persons who enter the site where poultry are held disinfect their footwear, wash their hands and wear clean clothing
- Make sure that equipment is cleaned and disinfected before taking it into poultry houses
- Avoid having bird feeders and duck ponds close to poultry barns because they attract wild birds
- Maintain high sanitation standards

## Clinical signs of the disease

- Sudden death
- Lack of energy, movement or appetite
- Decreased egg production
- Swelling and discoloration around head, neck or eyes
- Nervous signs, tremors, or lack of coordination
- Coughing, gasping for air or sneezing
- Diarrhea

## Risk to humans

Avian influenza viruses, such as highly pathogenic H5N1 may, on rare occasions, cause disease in humans. Transmission to humans has occurred through close contact with infected birds or heavily contaminated environments.

## General Biosecurity Measures

### Register with the Nova Scotia Premises ID program

This is a free program for all livestock and poultry owners. The program allows for traceability information to be accessed quickly for the protection of animal and public health. More information on this program can be found at <https://novascotia.ca/agri/programs-and-services/industry-protection/#PID>

### Prevent contact with wild birds and other animals

Keep birds, their water and food away from wild birds

### Take care with new stock

The most common source of disease is from new stock:

- Be aware that AI (especially in waterfowl), ILT and some other diseases can be present in apparently healthy birds with no history of disease
- Obtain birds and eggs from reliable sources and, if possible, from a single source.

- Consider buying only fertilized eggs or commercial vaccinated chicks
- Choose disease-free sources. However, a flock without a history of disease does not mean the flock is safe. The disease status of backyard flocks is typically unknown
- Keep birds of the same age, if possible, or group birds by age

## Quarantine new or returning birds

This helps prevent many diseases. Note that birds with ILT may not have clinical signs even through a quarantine period and may still be a risk.

- Quarantine new or returning birds for 2 to 4 weeks before mixing with your flock
- Quarantine in a separate building to prevent direct bird-to-bird contact
- Observe birds for abnormal behavior
- Handle and tend to quarantined birds last using separate clothing and equipment

## Monitor bird health

Contact your veterinarian if you observe any of the following:

- birds appear sick
- mortality is high
- egg quality or production drops suddenly

Dead birds may be submitted to the Nova Scotia Animal Health Laboratory for post-mortem examinations.

### **Nova Scotia Animal Health Laboratory**

Hancock Veterinary Building  
(Dalhousie Agricultural Campus)  
65 River Road, Bible Hill,  
Nova Scotia B2N 2P3

**Tel:** (902) 893-6540

**Email:** [AnimalHealthLab@novascotia.ca](mailto:AnimalHealthLab@novascotia.ca)

## Maintain poultry housing and yard

- Clean and disinfect the flock area or pen at least once each year.
- Clean and sanitize feeders and drinkers regularly

## Discourage pests and rodents

- Keep the area around pens free of debris
- Cut the grass short
- Drain standing water
- Keep feed in tightly closed containers
- Clean up spilled feed promptly

## Maintain personal hygiene

- Use dedicated clothing and footwear for working around the flock
- Wash hands thoroughly before and after working with the flock

## Manage risk through workflow

- Work with youngest birds first
- Handle sick or quarantined birds last







## Restrict access to your flock

- Post biosecurity signs
- Restrict visitors
- Ensure that necessary visitors or service personnel
  - wear clean footwear and coveralls
  - follow personal hygiene procedures including handwashing

## Manage risk caused by equipment

- Do not share equipment with other poultry owners
- Regularly clean and disinfect equipment that comes into contact with poultry

## Keep accurate records

- source of birds
- health concerns
- vaccination history
- changes (acquisition of new birds, new feed, etc.)

## Follow a biosecurity plan

- Create a biosecurity plan
- Update your plan regularly