



## HPAI in Livestock– Questions & Answers for farmers

Updated January 27, 2025.

*\*This document is based on nine months of learning about the virus and its transmission pathways within the dairy industry. Canada's approach emphasizes proactive surveillance and swift containment measures should the virus be detected within the country. Scientific knowledge continuously shapes evolving recommendations and drives updates to government preparedness, surveillance, and control policies. Farmers, provincial marketing boards, and stakeholders within the dairy sector have a role to play in minimizing the risk of introducing or spreading the HPAI virus.*

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### Surveillance for HPAI and Milk Safety

#### Is pasteurized milk safe to consume?

Pasteurization is a requirement in Canada to ensure the milk we drink is safe<sup>1</sup>. It kills harmful bacteria and viruses while retaining the nutritional properties of milk. Because cow's milk and milk products are pasteurized, they would remain safe to consume and HPAI would not be a food safety concern here. Moreover, only milk from healthy animals is authorized for distribution and for human consumption.

#### Why is Canada testing milk for the H5N1 virus?

The Canadian government is testing milk from milk trucks on a regular basis in many processing plants in all provinces. To date, there has been no detection of the virus. Health Canada, the Public Health Agency of Canada and CFIA started to test milk mid-year in 2024, to proactively detect if there was a case of HPAI in cattle in Canada. If it was found, it would swiftly be traced back to contain and eradicate the disease on an affected farm.

Ongoing Canadian surveillance to identify and manage the possible emergence of HPAI in cattle includes:

- requiring negative HPAI test results for lactating dairy cattle being imported from the United States to Canada;
- testing milk to look for viral fragments of HPAI;
- facilitating the voluntary testing of milk and cows not presenting clinical signs of HPAI to verify that animals are healthy. This testing can also help offer some peace of mind to those who buy or show cattle; and
- Traceability of cattle movement (in DairyTrace and SimpliTrace) is also part of the surveillance efforts to reduce the impact of any animal disease in Canada.

### Trade Policies

#### What are Canada's import requirements for dairy cattle?

Cows imported in Canada from the U.S. need to be tested before moving. In April 2024, the Canadian Food Inspection Agency (CFIA) announced the US exporters must fill an addendum on top of the regular health certificate requirements (see [Notice to industry](#)) before being able to ship cows to Canada.

On exports, as there is no confirmed case in Canada, no testing is required at this time for Canadian dairy cows going to the USA, except if going to an event that requires a proof of testing (e.g. World Dairy Expo).

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<sup>1</sup> Typically heating milk to 72 degrees Celsius for 12-17 seconds and cooling it immediately after.

### **What are the other regular requirements for importing cattle?**

The testing requirement is on top of Canada's regular import requirements for breeding cattle into Canada:

- need an import permit;
- must be accompanied by an export certificate endorsed by United States Department of Agriculture (USDA) officials that identifies the animal;
- must not have been exposed to any communicable disease; and,
- must be inspected on arrival by a CFIA veterinarian for signs of any disease\*.

\*If an animal is showing signs of any communicable disease, the veterinarian cannot clear the animal for export. CFIA also inspects all cattle at the border before import or at the time of import to mitigate the risk of sick cattle coming to Canada.

*Reference- [Requirements for Breeding Cattle Imported from the United States to Canada](#)*

### **Federal Responsibilities**

#### **Is HPAI in cattle a reportable disease?**

HPAI is a federally reportable disease in any species, including cattle. Veterinarians must contact their [local CFIA animal health office](#) if they suspect HPAI infection and consult the [Guidance for private veterinarians](#).

#### **What is the CFIA doing to prepare for the possibility of finding cases in Canada?**

The CFIA is working with Health Canada, public health authorities, provincial Chief Veterinarian Officers (CVO) and Canada's veterinary community, agricultural organizations, and the provinces and territories to:

- monitor the situation closely;
- coordinate national and provincial response plans to contain the virus; and,
- ensure every stakeholder has the latest information as the situation evolves.

#### **Why are there other federal departments involved in the surveillance efforts?**

In Canada, the Minister of Health oversees Health Canada, the Public Health Agency of Canada and the Canadian Food Inspection Agency. The federal preparedness actions for HPAI have been ongoing for a long time as there are many species of wild animals, birds and mammals, that were affected before dairy cows became affected. In recent months, poultry flocks, wild birds and even humans have been affected by various clades (subtypes) of H5N1.

The risk of transmission to humans remains low. However, the Government of Canada, the provinces and territories, as well as those in the United States, are working together to actively monitor, prepare and respond as necessary to this evolving situation to help safeguard Canada's cattle, flocks, and protect the health of people in Canada. Various departments have different functions, ranging from monitoring, surveillance and risk assessment, laboratory capacity, updating guidance and communications, science coordination, and medical countermeasure readiness.

### **Provincial Responsibilities**

Provincial departments of agriculture and chief veterinarians are responsible for deploying the response and coordination of measures to be taken in case of detection of HPAI on a dairy farm in their province. Your provincial marketing board would also be involved in operations of traceback and response should a farm be affected in your province. They will be pleased to provide more information to farmers. Note that affected farmers' privacy will be respected and the milk from healthy cows would continue to be picked up to be pasteurized.

## Individual Farm Responsibilities

### How does the virus circulate on dairy farms?

Epidemiological work indicates that the spread of the virus in cows is largely linked to two main reasons: the movement of infected cows to other farms, and the virus being carried passively on surfaces like milking equipment, trailers, clothing or vehicles of people that work on or visit more than one farm.

The virus spreads laterally to other cows because it survives in milk and urine, on milking equipment and on other surfaces. (Contaminated surfaces are also known as fomites). Prevention measures include:

- Being vigilant in isolating new or returning animals for at least 14 days, and milking them last, before the milking system is disinfected.
- Testing these isolated animals 2-3 weeks after arrival, even if they seem to be healthy. Also test bulk tank. When tests are negative, you can return animals to the general herd.
- Taking precautions to avoid fomites: for example, limit barn access to essential suppliers. Have them wear clean clothes or biosecurity gear and only introduce clean and necessary equipment in a barn. After being in an area with potentially infected animals, change clothes/coveralls (and bag exposed clothing) and disinfect boots.

### Is keeping closed herds a good idea?

Because lateral transmission between cows is a risk factor in HPAI-infected herds in the US, consider maintaining closed herds if possible. Limiting or reducing the introduction of new cows is the best way to protect your herd.

### Are there alternatives to keeping a closed herd?

If operating as a closed herd is not always practical for you, consider other ways to limit animal movements in your herd. If you need to buy animals, ask the seller about the health status of the animal/herd, and test animals before bringing them to your farm.

CFIA offers voluntary testing of milk samples from healthy cows (individual cows and bulk tank milk) to help you make safer decisions about moving cattle on and off farm or bringing an animal back to the farm from events. Your sample must be submitted by your herd veterinarian and CFIA covers the cost of the laboratory test.

You may also want to brush up on your proAction Standard Operating Procedures (SOP) so your staff is aware of your prevention measures. Consider including prevention procedures such as: If you must introduce or reintroduce animals, isolate them for at least 14 days, milk them last before disinfecting the milking system, and actively monitor for the emergence of symptoms. Test isolated animals and bulk tank before they join the herd.

### What precautions can a farm take?

Here are some of the most pertinent biosecurity measures to reduce risks of introduction or transmission of HPAI (and other diseases) on the farm:

- If it is not possible to keep a closed herd, ask questions from the seller about herd health.
- Isolate new animals for at least 14 days to prevent spread from a possibly asymptomatic bovine.
- Milk new cows (or sick cows) last, before the milking system is disinfected. This prevents possible spread via milking equipment.
- Test isolated animals for HPAI before bringing them in your herd (or to and from an event where cattle from various herds are commingled). Include a test on your bulk tank milk before deciding on letting new animals out of isolation.
- Wear only clean clothes in the dairy barn, disinfect or change boots when entering a new barn to prevent bringing in viruses on clothing or equipment.

- If you have different species on the farm, change before going to a barn that houses other species – including poultry, pork and others to avoid potentially bringing a virus to them.
- Only necessary staff/veterinarian should be allowed near sick animals, wear personal protective equipment (PPE), wash their hands and avoid touching their face to reduce risk of human contracting virus. Remove and bag exposed clothing as they leave this area to prevent spreading viruses to other parts of a farm, a car, or the house.

*References- [CFIA](#), [Canadian Centre for Occupational Health and Safety](#); [proAction](#)*

### **Should we limit visitors to farms?**

The H5N1 virus is known to survive on various surfaces, which means that people could passively carry bird flu virus on their clothes, footwear or other surfaces (fomites). This is why it is good practice to restrict access to the barn to essential visitors only, ensure that they wear only clean clothes, coverall or biosecurity gear, that they disinfect their boots and any equipment they bring in a barn before entering.

### **Are signs of H5N1 virus in wildlife in the area a risk for my family or farm?**

Watch for signs of dead birds, cats or other wildlife in the area, to protect your family's health. CFIA notes that H5N1 virus can spread to various species and has been detected in many species in Canada, including cats, dogs, racoons, skunks, foxes, and more wild animals. Human cases are rare but remain a possibility. Report signs of dead wildlife to your local office of the [Canadian Wildlife Health Cooperative \(CWHC\)](#).

## **Recognizing Clinical Signs**

### **What are the signs of HPAI in dairy cows?**

Dairy farmers with affected cows have reported a rapid onset of symptoms in lactating cows, such as:

- sudden decrease in milk production;
- colostrum-like consistency of milk;
- decreased feed intake with decreased rumen motility;
- respiratory signs, including clear nasal discharge;
- lethargy, dehydration, dry stool or diarrhea, sometimes fever.

## **In case of infection on a farm**

### **What should I do if I detect symptoms in my herd?**

1. Isolate affected animals.
2. Contact your herd veterinarian immediately.
  - Veterinarians will proceed with testing if necessary.
  - Discard milk from cows with symptoms of illness.
3. Accept guidance and help from your provincial authorities as they work to mitigate risks and contain the disease on the farm, so you can return to normal business as promptly as you can.

**I understand that pasteurizing milk before feeding it to calves is the government's recommendation.**

### **Would acidification of milk also not work?**

It is recommended that milk be pasteurized (heated to 72°C for 15 seconds, or 63°C for 30 minutes) before feeding it to calves or any other animals on the farm. Other heat-treatments may not be as effective against the virus. Buying a milk replacer is also a safe option. Acidification has not been verified to inactivate influenza viruses in milk. It is possible for a cow to have the virus in her milk without showing symptoms, as peak incidence of symptoms in cows occurs at 3-6 days.

**Why should I get my cattle tested if I see suspicious signs?**

As with any disease, it is good to know what you need to do to manage a situation, and you can get help to contain the disease promptly and get back to normal business as promptly as you can. Identifying and containing the disease swiftly would also reduce costs to the farm, help provide effective treatment to sick cows, and reduce the risk of spread/ possible contamination to other animals (including cats and dogs), to workers and to other farms.

Ongoing vigilance is crucial so everyone in the sector can collaborate to implement effective strategies that protect animal and human health.

**What is the testing procedure?**

Whether you are testing cattle for the purposes of avoiding introduction in your herd or if there is a suspicion of disease, your veterinarian will take samples at your farm and send them to a laboratory. The provincial government and CFIA work together on testing. They will take all precautions to protect your privacy (required by law).

**What will happen if I have a positive test on my farm?**

- Your milk from healthy cows will continue to be picked up and sent for pasteurization. Pasteurization kills the virus in milk.
- You will get help from your veterinarian and biosecurity experts (provincial government staff) to contain the virus promptly on the farm.
- You will get help and tips to protect human health (PPE for those in direct contact with sick animals).
- You will get advice on how to avoid/ reduce risk of spreading the virus on the farm and to other farms. This is likely to include restricting movement of animals, changing clothes, and cleaning and disinfecting tools, vehicles and equipment.
- Your provincial marketing board staff will be there to help you with various questions.
- Your privacy will be protected by regulatory authorities.

*References – [CFIA](#); [Animal Health Canada](#)*

**Are there guidelines on handling sick animals?**

The Public Health Agency of Canada ([PHAC](#)) says human infection with avian influenza is rare. It is well known that several farm workers handling sick cows or sick poultry have been infected in the U.S. Occupational Health authorities recommend that if you are in direct contact with a sick animal to wear personal protection equipment (PPE) such as gloves, mask, non-ventilated goggles, water-resistant apron or coveralls, avoid touching your eyes, nose, and mouth until after washing your hands, avoid touching the raw milk. Change and bag exposed protective clothing (to discard or disinfect) before moving to avoid bringing the virus to other areas on the farm, car or house.

*Reference-[Canadian Centre for Occupational Health and Safety](#).*

**How quickly do cows recover?**

Not all cows in a herd become ill. Cows with symptoms recover in about two weeks with supportive veterinary care that may include fluids, rest, and pain and fever control measures as needed.