



HPAI in Livestock– Q&A

Updated May 10, 2024.

**Please note that the information and recommendations below are based on what we know about the virus and precautionary principles, from a pan-Canadian perspective. The knowledge about the disease will inform recommendations and government policies, which are likely to evolve over time. They may also differ from province to province, as the situation evolves in various parts of the country.*

Pasteurization, Prevention & Preparation

Is pasteurized milk safe to consume?

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

Why did the US find virus traces in milk in stores?

It is not unexpected that fragments of inactivated virus were found in pasteurized milk in the United States because pasteurization kills bacteria and viruses, but it does not physically 'remove' them. These fragments are dead and pose no hazard for consumption.

Practical reading: *US found H5N1 flu virus in pasteurized milk:* [why the risk to humans is low](#)

Why is Canada testing milk for the H5N1 virus?

On May 3rd, Health Canada, Public Health Agency of Canada (PHAC) and the Canadian Food Inspection Agency (CFIA) announced they will proactively test milk in Canada, even if CFIA has not detected a case of HPAI in cattle in Canada at this time. According to information received by DFC, this surveillance tactic is added to the robust protective measures that are already in place in Canada. There are three prongs to the expanded surveillance to identify and manage the possible emergence of HPAI in Canada:

- requiring negative HPAI test results for lactating dairy cattle being imported from the United States to Canada;
- conducting enhanced testing of milk at the retail level to look for viral fragments of HPAI;
- facilitating the voluntary testing of cows that are not presenting with clinical signs of HPAI to facilitate enhanced industry biosecurity efforts.

The US has mandated testing before moving lactating dairy cows between state lines. What does it mean for Canada?

Cows imported in Canada need to be tested before moving between states in the U.S. On April 29, the Canadian Food Inspection Agency (CFIA) indicated this applies to cows being imported into Canada, so a US exporter will have an addendum to fill out on top of the regular health certificate requirements (see [Notice to industry](#)).

On exports, since there is no confirmed case in Canada, no testing is required at this time for Canadian dairy cows going moving to the USA. However, this might change should Canada get a confirmed HPAI case.

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 the 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 a cow 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](#).

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 the United States Department of Agriculture, Canadian public health authorities, Canada's veterinary community and industry to:

- monitor the situation closely;
- help coordinate a national response; and,
- ensure that everyone has access to the latest information as the situation evolves.

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

Ongoing federal preparedness actions for HPAI span the continuum from monitoring/surveillance and risk assessment, laboratory capacity, updated guidance and communications, science coordination, and medical countermeasure readiness.

What are the provincial and federal responsibilities?

Compared to avian flu in the poultry industry, the HPAI variant does not affect dairy cows in the same way, and does not require the same level of intervention by CFIA, as it does for chickens for example. The federal government's responsibility is therefore different in this case, and the provinces play a predominant role in managing this crisis. Thus, provincial governments - more specifically, provincial departments of agriculture and chief veterinarians - are responsible for the response and coordination of measures to be taken in case of detection of the disease on a dairy farm.

Vigilance, prevention and preparedness on the farm

How does the virus circulate?

At this time, epidemiological work indicates that the spread of the virus in cows seems largely linked to the movement of infected cows to other farms. The virus spreads laterally to other cows because it survives in milk, and on milking equipment and on other surfaces.

- There is no evidence of ‘nose-to-nose’ transmission between cows.
- Prevention measures include being vigilant to isolate new or returning animals for 21 days, and milking them last, so that milking system is disinfected before it is used on healthy cows.
- Take precautions to avoid contamination of clothes and surfaces: for example, wear clean clothes or biosecurity gear. Only introduce clean and necessary equipment in a barn.

What precautions are advised on the farm?

The proAction program outlines biosecurity measures that reduce risks of introduction or transmission of a disease on the farm. Here are the most pertinent:

- If possible, keep a closed herd.
- Isolate new or returning animals for 21 days to prevent spread from a possibly asymptomatic cow.
- Report cow movement in DairyTrace every day or every second day for rapid trace back.
- Milk newly introduced cows or sick cows last. Disinfect the milking system to prevent spread via milking equipment.
- Wear only clean clothes in the dairy barn, disinfect or change boots when entering the barn to prevent bringing in viruses on clothes.
- If you have different species, change before going to a barn that houses other species to avoid bringing possible virus to them.
- Only necessary staff/vet should be allowed near sick animals and wear PPE, wash their hands and avoid touching their face to reduce risk of human contracting virus.
- Minimize contact with wild birds near barns, and limit their access to feed or water for cows.

Useful links

- [Biosecurity Resources](#) under proAction. Refer to: *Preventing an Outbreak – Being Vigilant about Animal Introductions*
- [Animal biosecurity \(Canadian Food Inspection Agency\)](#)

Is keeping closed herds a good idea?

Yes. Because lateral transmission between cows is seen as a risk factor in infected herds in the US, consider maintaining closed herds if possible. Limiting or reducing the introductions 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. Mitigating the risk of this new disease by brushing up on your proAction Standard Operating Procedures (SOP): If you must introduce or reintroduce animals, isolate them for 21 days, milk them last before disinfecting your system, and actively monitor for the emergence of symptoms.

- Refer to *Preventing an Outbreak – Being Vigilant About Animal Introductions*. on the proAction [Biosecurity page](#).

Why should we limit visitors to farms?

The virus can survive on various surfaces, which means that people could passively carry the virus on their clothes and shoes. To reduce risks for your herd, restrict access to the barn to essential visitors only,

ensure that they wear the appropriate clean biosecurity gear, that they disinfect their boots and any equipment they bring in a barn before entering.

Are indicators of H5N1 virus in wildlife in the area?

Watch for signs of dead birds or other small wildlife that are in contact with birds. CFIA notes that H5N1 has been detected in many species in Canada: cats, dogs, racoons, skunks, foxes, seals, dolphins, porpoises, a black bear, wild mink, and river otter. CFIA notes that the signs observed in dairy cows are quite different and milder than those observed in other infected mammals with the virus.

I understand that heat-treating milk before feeding it to calves is the government's recommendation. Would acidification of milk not also work?

It is recommended that milk be heat-treated before feeding it to calves or any other animals on the farm. Unlike pasteurization or heat treatment, acidification has not been verified to inactivate influenza viruses in milk. It is possible for a cow to have the virus and not fall sick or show symptoms. Peak incidence of symptoms occurs 3-6 days after the infection, which is why it is strongly recommended to heat-treat milk.

Recognizing Clinical Signs

What are the signs of HPAI in dairy cows?

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

- a sudden drop in milk;
- thicker consistency milk, similar to colostrum;
- decrease in feed consumption, drop in rumen motility;
- dry manure or constipation;
- fever (sometimes).

What should you do if you detect symptoms in your herd?

1. Isolate infected animals.
2. Contact your herd veterinarian immediately.
 - Veterinarians will know how to proceed and will reach out to authorities if any testing is required.
 - Do not ship milk from cows with symptoms.
3. Follow guidance from your provincial authorities as they work to mitigate risks and contain the disease.
4. Follow the advice of the Public Health Agency of Canada and the Canadian Food Inspection Agency for additional recommendations on sanitary measures you can apply.

What is the testing procedure?

The provincial government and CFIA will work together if testing is needed. They will take all precautions to protect your privacy (required by law).

How quickly do cows recover?

Cows recover in about two to weeks with supportive care such as fluids, rest, and pain and fever control measures as needed.