

HPAI and Your Farm: The Need to Know if You Test Positive

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Monitoring Closely

Highly Pathogenic Avian Influenza (HPAI) was first detected in dairy cattle in the United States in March 2024 and has since spread to 16 states, impacting over 920 dairy farms to date. Evidence to date indicates that cases were most likely linked to a single transmission event from HPAI infected birds to dairy cattle, with continuous spread due to movement of cattle between dairy farms, and other factors such as shared equipment and personnel, frequent visitors, and potentially other animals on farm. Fatalities in dairy cattle due to HPAI are uncommon, and one of the greatest impacts felt on infected farms is due to significant milk production losses. HPAI can also spread to humans, emphasizing the importance of early detection and control to safeguard human health.

As of January 1st, 2025, there are no cases in Canada, but preparations are underway at the Federal and Provincial levels for its arrival. Recently, the Canadian Food Inspection Agency (CFIA) finalized the "HPAI in Dairy Cattle Event Response Plan" (the dERP) to guide provincial planning. This article will outline what to expect if your farm tests positive for HPAI and the requirements that must be met to continue shipping milk in British Columbia.

How can HPAI be detected on my farm?

If animals are showing signs that might be HPAI, you are required to report to CFIA and the Provincial Chief Veterinarian immediately. CFIA will collect information about your herd and your veterinarian will submit samples for HPAI testing.

In herds that are not showing signs of disease, there are four avenues for detection:

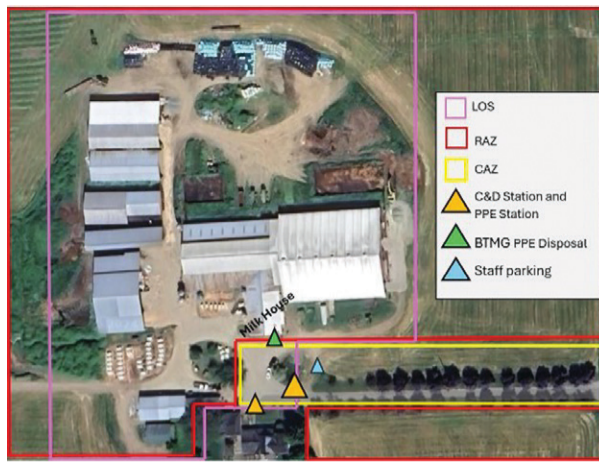
1. CFIA surveillance at the processing level,
2. Voluntary bulk tank milk testing for surveillance,
3. Milk sample submission from individual animals,
4. Nasal swab sample submission for individual non-lactating animals.

CFIA surveillance samples collected at processors (milk) are tested at a CFIA laboratory, while other samples will first be tested at the Animal Health Center in Abbotsford. In the event of a non-negative sample, the milk or nasal swab sample will be sent to the National Center for Foreign Animal Disease Laboratory (NCFAD) for confirmatory testing. At that time, the producer will be contacted by the Chief Veterinarian (OCV; Ministry of Agriculture) and the CFIA district veterinarian will conduct a suspect case investigation. Movement controls will be implemented until herd status is confirmed as negative. Because of the implications for human health, the Public Health Authority will also be contacting the farm if confirmatory test results are positive.

Biosecurity Requirements for continuous milk shipment

Pasteurization kills the HPAI virus in milk, so dairy producers can continue to ship milk from healthy animals to processors for pasteurization and sale, if their farm tests positive. However, due to the high risk of the virus spreading to other farms and to safeguard human health, a farm must implement the following biosecurity protocols to have their milk picked up:

- 1) Complete a written Biosecurity Plan and designate a biosecurity officer.
- 2) Complete a biosecurity map for the farm (Figure 1) indicating the "Line of Separation" (LOS), the "Restricted Access Zone" (RAZ), the "Controlled Access Zone" (CAZ) and "Cleaning and Decontamination Stations" (C&D).
- 3) Establish and equip C&D Stations at all access points across the LOS.
- 4) Supply adequate PPE to milk truck drivers (BTMGs). A "PPE Disposal Station" must be set up at the milk house for the BTMG to dispose of their PPE once milk pick-up is completed. It is highly recommended to supply any staff working around livestock with PPE as well.
- 5) All animal movements on/off the premises must STOP. Any movement must be authorized until movement controls are lifted from the farm.



Biosecurity Map

Figure 1: Farm Biosecurity map designating the LOS, RAZ, and CAZ, with marked C&D Stations.

Timeline – Milk Testing and Quarantine

The dERP sets out a timeline of disease response activities for farms that test positive for HPAI (Figure 2). If the farm is confirmed positive, the farm remains under quarantine and can retest their herd for HPAI after a **minimum of 30 days** have passed. A second test must be completed a **minimum of 14 days** after the first retest. If the farm has two consecutive negative tests, the farm will undergo a facilities C&D and be released from quarantine. **At a minimum, a farm can expect to be under quarantine for 6 weeks.**

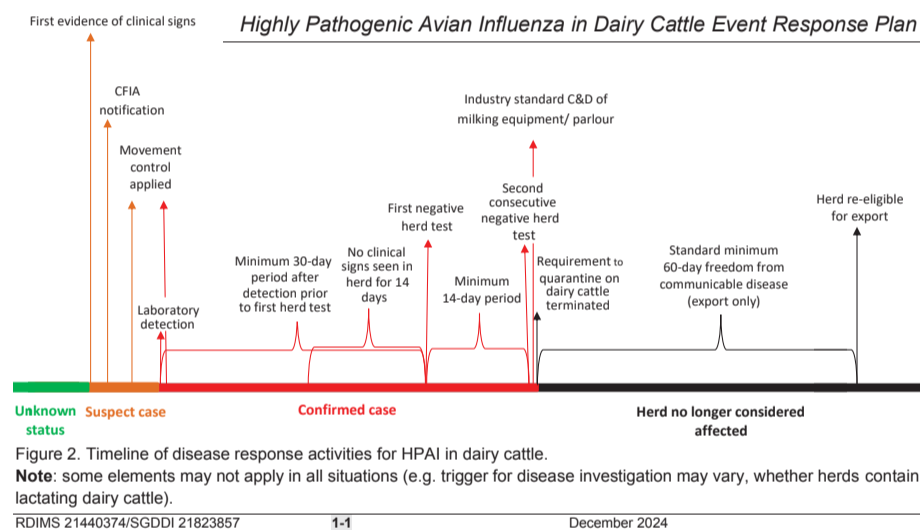


Figure 2. Timeline of disease response activities for HPAI in dairy cattle.
Note: some elements may not apply in all situations (e.g. trigger for disease investigation may vary, whether herds contain lactating dairy cattle).
RDIMS 21440374/SGDDI 21823857 1-1 December 2024
Uncontrolled copy when printed, refer to Notice to non-CFIA readers

QUICK FACTS

Clinical signs will improve over 4 to 7 days

Herd incubation period: 12 to 21 days

Bulk tank detection: Up to 16 days before herd symptoms appear

Stop-Movement Controls and Animal Movement

In general, movements of animals off infected farms will be stopped to prevent disease spread. The inability to move animals on and off farm during the quarantine period is not practical for some farm operations, therefore certain movements may be authorized on a case-by-case basis (See table below). Farms that co-house poultry may be subject to additional control measures. It should be noted that any farm receiving dairy cattle from an affected farm will be put under quarantine and subject to a herd test 21 days after the new introduction (some exceptions apply).

Waste Milk Management

Waste milk from unhealthy cows cannot enter the bulk tank and should not be fed to other animals, including calves, dogs and cats. This milk must be disposed of in an approved manner such as pasteurization/heat treatment. If those options are not possible, other methods may be approved such as solidification and burial, sub-surface injected when combined with slurry, or removal of waste milk under authorized movement to an off-site location for viral inactivation. Waste milk can be disposed of in a manure pit / slurry tank as a last resort, and approval will be given on a case-by-case basis as additional quarantine requirements must be observed (see below).



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Manure/Slurry Management

If a farm disposes of raw waste milk in the manure pit or slurry tank, a quarantine holding period for the manure pit will be required. This quarantine will last a minimum of 60 days

from the last day raw waste milk from HPAI infected cattle was added to the pit and will depend on average daily temperatures being above 4 degrees Celsius. Other factors such as capacity and type of manure pit/slurry tank, volume of raw waste milk, time of year, and location of affected premises in relation to other dairy and poultry farms, will all be considered when determining the quarantine period.

Online Resources

Producer guidance documents outlining HPAI requirements and recommendations can be found on the Office of the Chief Veterinarian webpage.



The Office of the Chief Veterinarian continues to monitor the HPAI situation in the US closely. Please reach out to chief.veterinarian@gov.bc.ca with any questions or concerns.

Alberta producers
(<https://www.alberta.ca/h5n1-avian-influenza-in-alberta>).



AUTHORIZED MOVEMENTS

Non-lactating dairy cattle (>30 days before calving) moving to a **non-terminal location** if they are isolated from all dairy cattle in the affected herd that are lactating, showing clinical signs, or known to be infected. Animals must have a negative nasal swab test result within 7 days prior to movement. The receiving farm must be made aware animals are coming from an affected farm.

Regulatory movement control is required for dairy cattle moving from an affected premise to any **abattoir / terminal location**. Federal abattoir requirements for dairy cattle originating from an HPAI affected herd are under development as of January 1, 2025.

Deadstock can be removed from the premise with a license to transport and must adhere to applicable specified risk material regulations. Acceptable disposal methods include incineration, burial, composting and rendering. (*additional restrictions may apply)

PROHIBITED ANIMAL MOVEMENTS

Live dairy cattle moving to an assembly yard, auction mart, or other transient location where animals are assembled and dispersed to **non-terminal locations**.

All lactating cattle at any stage of lactation, and dry dairy cows that are <30 days from calving moving to a **non-terminal location**.

Winter 2025 update on the HPAI – Dairy Situation

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Written in collaboration with the B.C. Ministry of Agriculture and Food's Office of the Chief Veterinarian

While Canada continues to have zero detections of high pathogenicity avian influenza (HPAI) in dairy cattle, cases in the US have not slowed. As of January 23, 2025, the disease has been found in 937 dairy herds across 16 states (California has 720 infected herds). Since October 21, 2024, BC has seen HPAI outbreak on poultry farms with 81 poultry premises infected with HPAI.

“ QUICK FACTS

The [HPAI] strain impacting BC's poultry operations in fall 2024/winter 2025 is different from the strain impacting cattle in the US.

Sampling of raw milk arriving at processing plants across Canada continues and as of December 19, 2024, all samples (1,432) have tested negative. In addition, testing is available for clinically healthy cattle and bulk

tank samples to individual farms free of cost through BC's Animal Health Centre. The purpose of offering testing for healthy cattle and bulk tanks is to facilitate enhanced industry biosecurity and proactive management decision making to reduce on-farm risk. Field data indicates HPAI can be detected in the bulk milk tank up to 21 days before the dairy herd shows symptoms of HPAI, providing an opportunity for early detection and control via bulk tank sampling.

Farmers are encouraged to continue practicing good biosecurity to prevent the introduction and spread of diseases in herds. For example:

- **Minimize introducing new animals:** Avoid bringing new animals into the herd, especially those imported from the US. If necessary, isolate and monitor them for 30 days. Testing of non-lactating animals on arrival from the US is strongly recommended.
- **Consult your veterinarian:** Discuss testing protocols with your herd veterinarian.
- **Maintain strict hygiene:** Clean and disinfect your livestock trailer after moving cattle or returning from the US.

By staying informed and implementing strong biosecurity practices, Canadian dairy farmers can continue to minimize the risk of HPAI entering their herds.



For the latest updates, please visit the websites of the:

- BC Ministry of Agriculture and Food <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/animal-health/reportable-notifiable-diseases/avian-influenza-ai/hpai-in-ruminants>
- Canadian Food Inspection Agency
- United States Department of Agriculture

