



Bulk Tank Milk Testing for Highly Pathogenic Avian Influenza in Cattle Guidance for Producers and Veterinarians

This document provides guidance on voluntary surveillance testing for Highly Pathogenic Avian Influenza (HPAI) in dairy cattle. As part of a [national initiative](#) led by the Canadian Food Inspection Agency (CFIA), testing is available at the BC [Animal Health Center](#) (AHC) for clinically healthy cattle and bulk tanks **free of cost**. The purpose of offering testing for healthy cattle and bulk tanks is to facilitate enhanced industry biosecurity efforts and allow producers to implement proactive management decisions to reduce the risk around their farm.

Why test clinically healthy cattle or the bulk tank?

Testing clinically healthy animals or the bulk tank provides a tool that producers can use to detect subclinical HPAI at the herd level. Early detection can facilitate risk reduction by reducing the spread of HPAI within the herd. Testing incoming animals could be instrumental to help reduce the risk of introducing HPAI into your herd. **Field data indicates that HPAI can be detected in bulk tank milk up to 21 days before the dairy herd shows symptoms of HPAI**, providing an opportunity for early detection and control.

Testing your bulk tank will allow you to monitor your overall herd status and act quickly should the result change. Testing at the herd level through the bulk tank can help determine whether you start testing individual cows much earlier and allow for an increased level of biosecurity within the farm to help reduce transmission between animals. HPAI transmission can occur between all age groups of animals and nasal swabbing is available for non-lactating animals. Please speak with your herd veterinarian regarding nasal swab testing.

Testing costs are covered by the CFIA, so producers will not be charged laboratory fees. Producers are still responsible for veterinary and courier fees. The test turnaround time is 2-5 business days from sample receipt at the Animal Health Center. Results will be provided to the producer via the email provided on the [submission form](#).

For remote farms interested in bulk tank milk sampling, please contact Erin Cuthbert (erin.cuthbert@gov.bc.ca) to assist with facilitating sample collection and transport. The sample submission form must be submitted electronically via email.

Ministry of Agriculture and Food
Office of the Chief Veterinarian &
Animal Health Center

Mailing Address:
1767 Angus Campbell Rd
Abbotsford, BC V3G 2M3
Telephone: 604 556-3003
Toll Free: 1-800-661-9903

Web Address:
<https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/animal-health/office-of-the-chief-veterinarian>



Milk Sampling Guidelines

Milk sample vials or specimen containers should be labelled with the farm IRMA and collection date.

Individual animals:

- Strip each quarter before taking a milk sample. Collect milk from all four quarters and collect up to 10mL aseptically into a sterile plastic specimen container or milk sample vial with a secure lid.
 - Record the individual cow identification number directly on the sample container.
- The milk sample must be kept below 4°C until they are submitted to the lab
 - Samples can be stored in the refrigerator or in a cooler with ice

Bulk Tank Samples:

- Agitate the bulk tank for 5 minutes
- Use a clean container or ladle to collect a milk sample from the top of the bulk tank (if milk level is too low, a sample can be collected through the bulk tank valve – if possible, sanitize the bulk tank valve before collecting the sample with 200ppm chlorinated water or similar sanitizer)
- Pour milk into a sterile plastic specimen container or milk sample vial with a secure lid
- The milk sample must be kept below 4°C until they are submitted to the lab
 - Samples can be stored in the refrigerator or in a cooler with ice

Shipping Milk Samples

Milk samples can be dropped off at the AHC or couriered. Couriered samples should be taped shut to prevent leaking and packed with ice packs to keep the sample cold until they arrive. The submission form must be packed with the sample. Samples can be shipped to:

Animal Health Center
1767 Angus Campbell Road,
Abbotsford, BC V3G 2M3

*Please indicate **“Diagnostic Sample”** on the waybill.

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What does a negative test result mean?

The HPAI test used for movement screening is a PCR (polymerase chain reaction). A negative test indicates no detection of influenza A virus in the sample.

- A negative test for bulk tank milk for a herd with no clinical signs typically means no HPAI infection.

Rarely, a false negative result occurs when the herd is infected, but HPAI is not detected by the test. This can happen if the herd is not yet shedding high levels of HPAI, for instance if the herd was infected very recently. This can also happen if the sample is contaminated with material inhibiting the test, or if the sample is too diluted.

- Ensure the milk submitted is a clean sample (minimal to no soil or feces) to minimize the chance of a false negative result.

What will happen if the test comes back positive?

All results that are positive at AHC will be reported to CFIA and the Office of the Chief Veterinarian. The samples will be forwarded to the National Centre for Foreign Animal Disease (NCFAD) for confirmatory testing. Producers who test positive for HPAI can continue to ship milk, but biosecurity requirements must be met to do so.

- Producers are expected to initiate a voluntary quarantine as soon as they are suspicious of HPAI in the herd or receive a positive HPAI result
- The Chief Veterinarian may disclose the farm identity and location to other parties (e.g. BCDA, MMB, milk, feed, animal transporters) and instruct those parties to take actions to reduce risk of disease spread.
- Cattle herds with a positive test result may undergo a disease investigation including trace out to other herds that have shipped or received animals from the herd with the positive test. The disease investigation may lead to regulatory action, including quarantining of the herd(s) for up to 30 days after clinical signs in all cattle have resolved.

Further guidance is available upon request from the Ministry of Agriculture and Food, and BC Dairy.