

FAQ: ADDRESSING PUBLIC CONCERNS ABOUT HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI)

BY THERESA BURNS, MSc, DVM, PhD

Highly pathogenic avian influenza (HPAI) is a severe viral infection primarily affecting birds, including both wild birds and domestic poultry. Wild birds, especially waterfowl, serve as natural reservoirs for avian influenza viruses. These birds often carry and shed the virus without showing any clinical signs, allowing it to persist in the environment and spread over long distances through migration. Since spring 2022, HPAI H5N1 has been affecting poultry farms in BC, as well as across North America. In 2024, the virus spilled over into dairy cattle in Texas and was then transmitted across the United States through interfarm movements.

In addition to being reportable to the Canadian Food Inspection Agency (CFIA), HPAI is provincially reportable in BC. This means any person with suspicion of HPAI in any domestic animal is required to report to the CFIA District Office and the BC Office of the Chief Veterinarian. If needed, testing can be arranged at the Animal Health Centre in Abbotsford.

This FAQ aims to provide information for BC veterinarians to help them address common questions from their clients, including outbreak responses, poultry supply, and the safety of poultry products.

WHY ARE POULTRY FLOCKS INFECTED WITH HPAI BEING HUMANELY DESTROYED, AND WHY IS THIS CONSIDERED NECESSARY?

The CFIA leads the response to avian influenza outbreaks, with support from the poultry industry and other partners. Canada's emergency response strategy aims to eradicate the disease and re-establish the country's disease-free status as quickly as possible. The humane destruction of all infected and exposed poultry is a critical disease control strategy that serves several key purposes:

1. Preventing animal suffering: Poultry infected with HPAI are generally severely ill and almost always die. The virus spreads rapidly and waiting for natural recovery could result in immense suffering and a significant impact on animal welfare.
2. Minimizing the spread of the disease: Strict quarantine and animal movement controls are implemented on all infected and exposed farms. All infected flocks are humanely destroyed, and their carcasses are disposed of in a biosecure and environmentally responsible manner. Infected premises are thoroughly cleaned and disinfected before new birds are introduced. This containment approach reduces the virus load in the environment, protects other farms, and minimizes the impacts on animal welfare, food security, and public health.
3. Maintaining trade stability: Countries may impose trade restrictions on poultry products from areas experiencing active HPAI outbreaks. Demonstrating effective disease control through containment and surveillance helps restore access to international markets. Without such measures, prolonged trade bans could severely impact farmers, the poultry industry, and overall food security.

WHY AREN'T WE SEEING LARGE NUMBERS OF DEAD WILD BIRDS IF HPAI IS VERY SERIOUS ON POULTRY FARMS?

The absence of visible dead wild birds in some areas does not mean bird populations there are unaffected by HPAI. There are several factors that can contribute to the misperception HPAI is not present in the area:

1. Asymptomatic carriers: Some wild bird species, particularly waterfowl, can carry and shed the virus without showing clinical symptoms, while others, like raptors and scavengers, are more susceptible and may die. Over time, wild bird populations tend to become more adapted to circulating strains and show less mortality.
2. Remote locations: Many wild birds are in unpopulated or remote areas where dead birds are less likely to be observed or reported by the public. Additionally, predators and scavengers often remove carcasses quickly, making them less visible to the public.

The BC HPAI wildlife surveillance program, available at www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/animal-health/office-of-the-chief-veterinarian/26527#AI, indicates that HPAI is causing increased mortality in wild birds in BC. Between October and December 2024, approximately 90 wild birds were confirmed to have HPAI in BC. Additionally, environmental sediment samples from wetlands in the Fraser Valley had high test positive rates. For up-to-date data on detections in wildlife and sediment in BC, visit the BC Highly Pathogenic Avian Influenza (HPAI) Detections dashboard at governmentofbc.maps.arcgis.com/apps/dashboards/8c6c84718e5748179102a0be2368029a.

“THE ABSENCE OF VISIBLE DEAD WILD BIRDS IN SOME AREAS DOES NOT MEAN BIRD POPULATIONS THERE ARE UNAFFECTED BY HPAI.”

DOES CANADA HAVE A PLAN FOR HPAI IN DAIRY CATTLE?

While the US dairy sector has been heavily impacted by HPAI, as of December 31, 2024, Canada has had no cases of HPAI in dairy cattle. Surveillance of milk is ongoing across Canada as this is an important method to support the early identification of cases. The Governments of Canada and BC have response plans in place should a case of HPAI be detected in cattle in Canada.

CAN HPAI BE TRANSMITTED TO HUMANS BY EATING POULTRY OR DAIRY PRODUCTS?

There is no evidence to suggest HPAI can be transmitted to humans through properly cooked and handled poultry or eggs. Additionally, regulatory requirements mandate the humane destruction of infected poultry on farms and prevent them from being processed for consumption, increasing food safety and reducing public health risks. Pasteurization is effective for inactivating HPAI in milk products.

Most reported human cases of avian influenza have been linked to close contact with infected poultry or dairy cattle or heavily contaminated environments. This is why public health recommendations are for people and pets to avoid exposure to infected birds, animals, and contaminated environments, and to use personal protective equipment where contact is unavoidable.

WHAT ABOUT PET FOOD?

Cats and dogs infected with HPAI may show respiratory and neurologic signs. Infections have been caused by direct contact and consumption of infected dead birds and raw milk. In addition, at least one case in an indoor cat in the US was linked to consumption of contaminated raw pet food. Cooked pet foods are not considered a risk. As of December 31, 2024, there have been no reported cases of HPAI infections in pet cats or dogs in BC.

Additional resources to learn the most up to date information on the current HPAI situation are made available on the Chapter's website at www.canadianveterinarians.net/sbcv/west-coast-veterinarian-magazine. [WCV](#)



Theresa Burns, MSc, DVM, PhD, is the Chief Veterinarian of BC and is the former director of Canadian Animal Health Surveillance System. She is a veterinary epidemiologist and has experience working as a practising veterinarian in mixed, equine, and small animal practices. She received MSc and DVM degrees from the Western College of Veterinary Medicine and a PhD in epidemiology from the University of Guelph. Over her career, Dr. Burns has had the opportunity to use methods from multiple disciplines to collaborate on complex issues at the interface of human, animal, and environmental health in Canada and in other countries. She is interested in understanding systems and stakeholder perspectives to develop real-world solutions to complex problems.