Reminder Communication: Avian Influenza Guidelines

November 10, 2023

We are observing increased avian influenza activity in BC again, with 21 infected premises detected in Fraser, Interior, and Island Health Authorities between October 20 and November 9, 2023. These represent the first detections in BC flocks since May 1, 2023.

There have been increased detections of avian influenza spillover to a wide range of mammalian species in BC and throughout the Americas, with several large marine mammal outbreaks where animal-to-animal transmission has not been ruled out. The increased number of detections of the current H5N1 strain among mammals raises concerns that the virus might adapt to infect humans more easily.

Increased avian influenza activity among birds and mammals increases the potential for human exposure. Concurrent infection with human and avian influenza in a human host could provide an opportunity for genetic re-assortment, which could facilitate human adaptation and associated pandemic risk. To reduce that potential, seasonal influenza vaccine is recommended for people working with live poultry, and other measures are implemented to i) minimize exposures to potentially infected animals, ii) mitigate the risk of acquiring infection, and iii) monitor to ensure timely identification of human cases.

This communication is to provide Regional Health Authorities (RHAs) and First Nations Health Authority with a reminder of the updated guidance on the management of human exposures to avian influenza.

Reporting Mechanisms and Case Definitions

Suspected and confirmed animal cases: Laboratories and veterinarians must notify the Chief Veterinarian of any suspected or laboratory confirmed animal cases in BC, which then results in notification to the BCCDC and the Medical Health Officer in the affected RHA.

Probable and confirmed human cases: Healthcare providers should report any person under investigation to their RHA. Confirmed and probable human cases should be reported by RHA to BCCDC within 24 hours, via the RHA’s respective electronic public health reporting system and/or the Avian Influenza Case Report Form.

The BC case definitions for avian influenza were updated to increase specificity of the person under investigation and probable cases.
Management of human exposure to an avian source

Public health should obtain a list of all human exposures to an infected poultry premises in the 21-day period prior to the onset of clinical signs in the birds. Public health follow-up with all potentially exposed individuals includes exposure assessment, symptom inquiry, active or passive surveillance, education, and post-exposure prophylaxis or treatment assessment.

Exposure assessment (high, medium, or low risk): Management of individual contacts is based on virus-specific risk, individual exposure, and other factors specific to the individual or situation. The exposure risk assessment is detailed in the Interim Public Health Guidelines for H5N1 Avian Influenza Outbreak.

Active or passive surveillance: For asymptomatic exposed individuals, RHAs provide instructions to self-monitor for the development of symptoms for 10 days after the last exposure to a known or highly suspected source of avian influenza virus, and to report any symptom development immediately. Depending on the risk assessment, different follow-up modalities could be employed (active daily monitoring or self-monitoring with a follow-up call at the end of the monitoring period).

Education: As soon as an avian influenza virus is known to be circulating in a premises, individuals within the affected area should take precautions to minimize risk of infection (e.g., avoiding direct contact with birds, manure or surfaces that may be contaminated, and wear appropriate personal protective equipment (PPE)). PPE includes a fit-tested N95 respirator, protective eyewear, reusable gloves, and protective clothing.

Post-exposure antiviral prophylaxis: Chemoprophylaxis using influenza antivirals (i.e., oseltamivir or zanamivir) can be considered to protect the individual and/or prevent further transmission. It can be started up to 7 days after the last exposure. In contrast to seasonal influenza prophylaxis, prophylaxis for avian influenza is a full treatment dose. The decision to initiate chemoprophylaxis should be based on clinical judgment, human illness risk according to the influenza subtype identified, and exposure risk assessment.

Management of symptomatic patients reporting an exposure to an avian source

Individuals who were exposed to avian influenza and develop symptoms should isolate immediately and be assessed by a health care provider for clinical management, including testing, and antiviral treatment.

Isolation: The person should be advised on appropriate isolation protocols, and to stay away from others for seven days or until symptoms resolve, whichever is longer. A follow up with the case at the end of the isolation period may be undertaken to ensure symptom resolution, no ongoing exposure, and no other contacts identified.
Testing: Clinicians should have a low threshold for avian influenza virus testing of individuals with clinically compatible symptoms who report sick bird exposure within the 10 days prior to onset. The BCCDC Medical Microbiologist on-call should be notified of the case and testing request at 604-661-7033. A nasopharyngeal and throat swab should be collected with appropriate infection prevention control precautions and sent directly to the BCCDC Public Health Laboratory. The lab requisition should specify exposure to avian influenza virus with a wording such as “high-risk for AIV”. If the test is negative for influenza virus, clinicians may consider retesting and collecting another specimen if the clinical suspicion for avian influenza was high.

Antiviral treatment: Antivirals should be readily available for the treatment of suspected and confirmed cases of avian influenza. Oseltamivir or zanamavir can reduce the duration of illness and improve the prospect of survival if administered within 48 hours of illness onset. If avian influenza infection is suspected, antiviral treatment should be provided without waiting for lab confirmation. At clinical discretion, treatment may also be considered after 48 hours.

If the avian influenza diagnosis is confirmed, RHAs should ensure that the case is isolated and knows how to access medical care, as needed. Contacts of the human case should be identified and can be offered testing.

Other sources of information

Human avian influenza case definitions can be found on the BCCDC Avian Influenza: Case definitions for notification to/within public health webpage.

The Exposure Risk Assessment is detailed in the Interim Public Health Guidelines for H5N1 Avian Influenza Outbreak.

The BCCDC PHL eLab Handbook provides testing information, including ordering procedures, process information, specimen collection instructions, and handling and transport instructions.

The AgSafe: Avian Influenza provides guidance on the recommended personal protective equipment in a farm setting.

The Avian Influenza Case Report Form allows RHAs to report confirmed and probable human cases to BCCDC within 24 hours.

For more information on avian influenza, consult the Ministry of Agriculture and Food’s website.