Avian influenza: A BC clinician's guide to diagnosis and management

Highly pathogenic avian influenza (HPAI), notably of the H5N1 subtype, was detected in domestic poultry across BC and around the globe at unprecedented rates in 2022.[1-3] BC has had the highest number of poultry premises affected in comparison to other provinces,[1] leading to significant impacts on the livelihoods and well-being of poultry owners.

Avian influenza viruses have sporadically infected humans and have largely followed direct exposure to infected poultry.[4] The rising detection among birds increases the potential for human exposure and intermixing of different influenza strains.[4] Human health risk is currently considered to be low. However, if the virus adapts and leads to sustained human-to-human transmission, this would be considered a high-impact event.[4] Early detection of avian influenza viruses in humans enables public health action to detect and control potential human-to-human transmission.

Clinical presentation

Clinical signs and symptoms of avian influenza in humans closely resemble acute respiratory or influenza-like illness. Disease severity and manifestations can range from asymptomatic infection to severe.[5] Avian influenza viruses in circulation have an incubation period in humans of 2 to 10 days (with most averaging 2 to 5 days).[5]

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Who to test for avian influenza and report to public health

Clinicians should have a low threshold for testing patients presenting with symptoms compatible with avian influenza and who have had close contact with an infected/sick bird or animal or other concerning exposures[5] within 10 days following that exposure. These symptomatic individuals should be reported to your local Medical Health Officer as soon as possible.[5]

How to collect specimens for avian influenza testing

When testing is indicated, a nasopharyngeal swab and a throat swab or sputum sample (for patients with a productive cough) should be collected.

Notify the BCCDC medical microbiologist on call of the suspect case and testing request at 604 661-7033. Collect the sample and document the exposure on the test requisition (e.g., human high-risk HPAI), and send it directly to your local testing lab.

Recommendations for management of HPAI exposure in humans

If asymptomatic

Provide instructions to self-monitor for the development of symptoms for 10 days after the last exposure, and report any symptom development immediately to local public health. Individuals should also be counseled to avoid visiting other farms, avoid interactions with individuals at higher risk of severe illness,[5] and avoid large gatherings for 10 days following exposure.

Individuals can be provided chemoprophylaxis for the purposes of protecting the individual and preventing further transmission. It can be given up to 7 days after the last exposure. Decision to offer prophylaxis should be based on clinical judgment and an exposure assessment. Exposure assessment should consider the use of personal protective equipment and whether any breaches occurred, the type of exposure (working directly with affected birds, working with birds with confirmed infection, open/closed air environment), the duration/time since exposure, and the risk of complications from influenza.[5]

If symptomatic

Antivirals should be considered for the treatment of both suspected and confirmed cases of avian influenza, as they can reduce the severity and duration of illness if administered within 48 hours of illness onset. The person should be advised to follow respiratory etiquette, wash hands regularly, and isolate from others for 7 days or until symptoms resolve, whichever is longer.

If household contacts develop symptoms before test results are available, they should also isolate and notify their local public health unit.

If the decision is made to provide chemoprophylaxis for contacts, oseltamivir 75 mg b.i.d. can be given for 7 days (for time-limited exposures) or 10 days (for ongoing exposures) in adults. Treatment of suspected or confirmed cases requires only a 5-day course. Alternate to oseltamivir could include zanamivir 10 mg b.i.d.[6]

What patients can do to protect themselves

Actions that people can take (particularly those handling birds and/or with small flocks) to protect themselves and others are

provided in the interim BCCDC clinical guidelines.[5] To prevent co-infection with both seasonal human influenza and avian influenza viruses, it is important patients are offered the annual influenza vaccine. ■

—Rohit Vijh, MD, MPH, CCFP
Senior Public Health and Preventive Medicine Resident, UBC
Community Family Physician

—Erin Fraser, DVM, MSc
Public Health Veterinarian, Public Health Response, BC Centre for Disease Control

—Mayank Singal, MD, MPH, CCFP, FRCPC
Physician Epidemiologist, Public Health Response, BC Centre for Disease Control

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officer along with the comprehensive consultation report. The surgeon should also bill fee code 19326, using the surgery date as the date of service. If the claim is accepted, the ESP will be paid.

Can I use different payee numbers to invoice for the consults (or fee code 19326) and the surgical procedure fee items?
No. You must invoice using the same payee number via Teleplan.

I've been paid for the surgery, but I did not receive payment for the ESP. What happened?
If you received payment for a surgery without receiving the ESP surcharge at the same time, this likely means the surgery did not qualify for the ESP. The ESP surcharge is paid only at the time the surgery's base fees are paid. You will not be paid the ESP separately later. If you wish to dispute an unpaid ESP surcharge, please contact WorkSafeBC Payment Services promptly at 1 888 422-2228.

If you are unsure whether you were paid the ESP for a surgery, try checking for it in your medical billing software under "Adjustment Code 31."

Are there exceptions to the ESP program?
Joint replacement surgery is an exception to the 40-business-day rule. The ESP qualification window for this procedure is 6 calendar months. For the ESP to be applied to the surgery, the surgeon needs to call WorkSafeBC Health Care Programs at 1 866 244-6404 and press "2" or email hcsinqu@worksafebc.com.

If you encounter other challenges or have further questions regarding ESP billings, contact Doctors of BC at worksafebc@doctorsofbc.ca. ■

—Patrick Wong
Quality Assurance Supervisor, WorkSafeBC

—Dana Chmelnitsky
Program Manager, WorkSafeBC