

DATE:	2022 May 16
TO:	All Healthcare Providers
FROM:	Alberta Precision Laboratories (APL) – Public Health Laboratory
RE:	Highly Pathogenic Avian Influenza (H5N1) Testing

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Key Message

- A strain of H5N1 highly pathogenic avian influenza (HPAI) has been detected in Alberta poultry flocks and poses an infection risk to humans in close contact with infected birds (see the Medical Officer of Health [MOH] bulletins at www.ahs.ca/moh for related Zone-specific public health bulletins).
- In patients with acute viral respiratory illness or influenza-like illness and live bird exposure in the preceding 10 days, consider testing for avian influenza.
- **Contact the APL – Public Health Laboratory Virologist on-call (VOC) to facilitate testing and the Zone MOH prior to submitting specimens if a suspected case is encountered.**

Background

- The specific strain causing the current HPAI outbreak in birds has been transmitted to humans in rare cases, thus data on the human impact is limited at this time.
- Routine influenza nucleic acid tests (NATs) used in Alberta can detect avian influenza but do not differentiate it from seasonal influenza strains without further testing.
- Subtyping of influenza A strains and identification of HPAI is performed at the APL – Public Health Laboratory.
- For a temporary period, the APL – Public Health laboratory will also be subtyping influenza A positive samples detected throughout the province – this will result in some duplicate influenza and COVID-19 results and subtyping results reported to ordering physicians.
- The APL – Public Health Laboratory VOC needs to be contacted prior to submitting samples so that the appropriate tests are carried out and suitable biosafety precautions are taken.

Actions Required

- If there is a suspect avian influenza case, contact the APL – Public Health Laboratory VOC (Edmonton 780-407-8822, Calgary 403-333-4942) and the Zone MOH prior to submitting specimens to the laboratory.
- Specimens for avian influenza testing are the same types of respiratory samples used for routine influenza testing (i.e., nasopharyngeal [NP] swab in Universal or Viral Transport Medium, NP aspirate, endotracheal tube aspirate, bronchoalveolar lavage, and bronchial wash – **a throat swab by itself is not sufficient for testing**).
- Collect samples using precautions as per [Infection Prevention and Control recommendations for COVID-19](#) (page 2, Laboratory testing for COVID-19, under NP swab or throat swab for a symptomatic individual).



- Samples approved for avian influenza testing by the VOC and Zone MOH should be submitted to the laboratory with the following documentation:
 - **For paper requisitions**, use the COVID-19 and Other Respiratory Viruses Requisition (<https://www.albertahealthservices.ca/frm-21701.pdf>), select “COVID-19 and Respiratory Pathogen Panel (RPP),” “Outbreak investigation” under “Respiratory Pathogen Panel (RPP) Criteria,” appropriate clinical history and admission status, and write “Suspect H5N1 avian influenza” on the requisition.
 - **In EPIC/Connect Care**, use the Emerging Respiratory Pathogen order, select “Avian Influenza,” and write “Suspect H5N1 avian influenza” in the additional clinical/information field. Questions only need to be answered in one of the four auto-selected orders.
 - **In Sunrise Clinical Manager**, use the viral respiratory infection testing order set to order COVID-19 and influenza (routine) and write “Suspect H5N1 avian influenza” in the “Indicate if emerging pathogen suspected” field.
 - **In Meditech**, order influenza/RSV or Respiratory Pathogen Panel and write “Suspect H5N1 avian influenza” in the “Other history” field.

Inquiries and feedback may be directed to

- Dr. Nathan Zelyas, Medical Microbiologist, APL—Public Health Laboratory, Nathan.Zelyas@aplabs.ca

Approved by

- Dr. Graham Tipples, Medical/Scientific Director, APL—Public Health Laboratory