

PHSA Laboratories

BCCDC Public Health Laboratory

December 4, 2024

Updated Practices and Guidelines for Respiratory Sample Testing at the BCCDC Public Health Laboratory

The BCCDC PHL, as a reference and public health laboratory for British Columbia, provides testing for respiratory pathogens as part of the spectrum of laboratory diagnostic services across the province. This memo provides an update for respiratory sample testing and testing recommendations for highly pathogenic avian influenza.

SARS-CoV-2, Influenza A/B, RSV and the extended respiratory panel

In BC, each patient sample submitted for respiratory viral testing has been at minimum tested for SARS-CoV-2, influenza A virus, influenza B virus, and respiratory syncytial virus (RSV). Nucleic acid testing (NAT) has been recommended for acute care and rapid antigen testing for SARS-CoV-2 has been widely available.

The BCCDC PHL offers an **extended respiratory pathogen panel for a wider range of pathogens upon request.**

The following instances are appropriate indications for the respiratory panel test:

- For individuals where atypical bacterial (*Mycoplasma pneumoniae*, *Chlamydia pneumoniae*, or *Legionella pneumophila*) etiology is suspected and conventional treatments have not resolved disease, OR who have either worsening disease or need for hospitalization
- For individuals with negative viral screen testing (SARS-CoV-2, Influenza A/B, RSV) results who fall into the following categories:
 - Hospitalized patients with respiratory symptoms and suspected infectious etiology, not yet identified
 - Immunosuppressed (e.g. cancer on chemotherapy, solid organ transplant) or medically complex (e.g. with several comorbidities) individuals where a diagnosis will inform management
 - Cases with extrapulmonary organ involvement for which an infectious etiology is suspected, including but not limited to myocarditis/pericarditis, acute flaccid paralysis, encephalitis
 - Febrile Infants < 3 months of age
 - Pediatric patients with fever for ≥5 days who are not responding to empiric therapy
 - Individuals in a suspected facility outbreak, only for the first 6 specimens within a localized region (e.g. ward)

Please order the respiratory panel using the BCCDC PHL [Virology requisition](#) (indicate “extended respiratory panel” in the Other area of the RESPIRATORY section), through established LIS interfaces, or contact the BCCDC PHL to add on the test.

Highly Pathogenic Avian Influenza A(H5N1)

A specific memo on testing for H5N1 was circulated to local laboratories on November 10th, 2024:

http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Forms/Labs/BCCDC_PHL_H5N1memo_Final%201.pdf.

Erratum: “Note that NAT subtyping performs best when the cycle threshold (Ct) value is <35” should read “Note that NAT subtyping performs best when the cycle threshold (Ct) value is <30”.

Resources

For other testing details, please refer to the BCCDC PHL test menu on eLab (<http://www.elabhandbook.info/phsa/>) and search for these test pages:

- SARS-CoV-2 virus NAT
- Influenza A/B and RSV NAT
- Human Avian Influenza A Testing
- Influenza A Virus Typing NAT
- Respiratory Pathogen Panel (NAT)

Surveillance

- Weekly respiratory virus testing and positive counts for BC are reported to PHAC via FluWatch: <https://health-infobase.canada.ca/respiratory-virus-detections/>
- BC-specific respiratory disease surveillance bulletins and dashboard are routinely produced by the BCCDC: <http://www.bccdc.ca/health-professionals/data-reports/respiratory-virus-data>

Sincerely,



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