



MEMORANDUM

Date: 10/22/2025

Re: 2025/2026 Respiratory Virus Season Testing Practices and Guidelines

Background

As British Columbia prepares for the upcoming respiratory virus season, the following document provides up-to-date guidance on current respiratory virus testing practices for diagnosis, viral characterization, and outbreaks; along with details on how to order respiratory testing through the BCCDC Public Health Laboratory (PHL).

Diagnostic Testing

For all respiratory virus testing, a nasopharyngeal swab is the preferred sample type, for more information on other sample types for respiratory testing please visit the [BCCDC eLab Handbook](#) landing page and search for specific respiratory test pages.

Respiratory Virus Screening

Testing for respiratory viruses is not recommended unless the results inform patient care or outbreak management. Generally, testing of ambulatory outpatients is not indicated. When indicated, the provincial recommendation is to test viral respiratory samples for the following respiratory viruses: SARS-CoV-2, influenza A/B, and RSV.

Extended Respiratory Panel

An extended respiratory panel for a wider range of respiratory pathogens may be requested in the following circumstances:

- For individuals where atypical bacterial pathogens (*Mycoplasma pneumoniae*, *Chlamydia pneumoniae*, or *Legionella pneumophila*) are suspected and conventional treatments have not resolved the disease, OR who have either worsening disease or need for hospitalization
- For individuals already screened for SARS-CoV-2, influenza A/B, and RSV who fall into the following categories:
 - Hospitalized patients with critical (i.e. in ICU or high intensity care) respiratory symptoms and suspected infectious viral 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 viral etiology is suspected, including but not limited to myocarditis/pericarditis, acute flaccid paralysis, encephalitis
 - Admitted febrile Infants < 3 months of age
- If an extended respiratory panel is required for a scenario not listed, contact the BCCDC Medical Microbiologist on-call by email at BCCDC_MicroOncall@bccdc.ca or by phone at (604)-661-7033.

Please see 'Ordering Details for Respiratory Testing' for additional information on how to order the extended panel in these circumstances.

Viral Characterization Testing

Influenza A - Low season (currently)

During low influenza A season, viruses are characterized to help predict the strains that will be circulating during the upcoming season and to monitor for infections due to highly pathogenic avian influenza circulating in birds.

We ask testing laboratories to ensure that all positive influenza A respiratory samples with a NAT detection cycle threshold signal (Ct) of 30 or less are subtyped for H1 and H3, either at the local hospital lab or at the BCCDC PHL.

However, if avian influenza is suspected, all influenza A positive samples should be subtyped regardless of the Ct value. Please ensure that the Medical Health Officer of the appropriate local health authority and the BCCDC Medical Microbiologist on-call have been notified of all suspect avian influenza cases and refer to [BCCDC PHL testing recommendations for avian influenza](#) for additional information and guidance.

Samples that cannot be subtyped as H1 or H3 should be forwarded to the PHL for H5 testing.

For rapid subtyping results for hospitalized patients with severe disease, please contact the BCCDC Medical Microbiologist on-call to expedite testing.

Influenza A - High season (typically January)

The BCCDC PHL will communicate when to transition to the following subtyping strategy, as the exact date of influenza A high season varies every year

During the height of influenza A season, only a portion of influenza A positive samples require subtyping. During this period, we recommend samples from one pre-determined day each week (testing lab's choice of day) be subtyped for H1 and H3, either at the local hospital lab or at the PHL. Where Ct values are available and subtyping is to be performed at the PHL, please only forward samples that have a Ct less than 30.

If avian influenza is suspected, all influenza A positive samples should be subtyped regardless of the Ct value. Please ensure that the Medical Health Officer of the appropriate local health authority and the BCCDC Medical Microbiologist on-call have been notified of all suspect avian influenza cases and refer to [BCCDC PHL testing recommendations for avian influenza](#) for additional information and guidance.

Samples that cannot be subtyped as H1 or H3 should be forwarded to the PHL for H5 testing.

Please note, during low and high influenza season a subset of H1 and H3 subtyped samples will be sequenced to identify the viral clade for surveillance purposes.

SARS-CoV-2

Seasonality for SARS-CoV-2 is less defined, and we are sequencing only a select portion of the SARS-CoV-2 positive samples to monitor circulating variants.

We ask testing laboratories to forward all samples testing positive for SARS-CoV-2 ($Ct \leq 30$) on one predetermined day of the week (testing lab's choice of day).

Additional Respiratory Virus Sequencing

We encourage testing laboratories to send specimens from the following situations for additional characterization through sequencing.

- **Severe cases of influenza A and SARS-CoV-2**
- **Complex cases** (e.g. suspicion of resistance to antivirals, immunocompromised host with persistent infection)
- **Atypical diagnostic results** (e.g. indeterminate or negative results for influenza A or SARS-CoV-2 that are deemed atypical by a microbiologist)

Please contact BCCDCWGSRequest@bccdc.ca to request additional respiratory virus sequencing for the above situations. Indicate in your email and on the sample requisition the reason for additional sequencing (e.g. severe case, complex case, or atypical result).

Outbreak Testing

For influenza-like illness outbreaks, including those at long-term care facilities (LTCF), the BCCDC PHL will provide testing as follows:

- **A maximum of 6 specimens may be submitted for influenza-like illness outbreak testing per affected area**
 - All six samples must be sent together in one shipment to the BCCDC PHL
 - Each sample must come with a completed [BCCDC PHL Virology requisition](#) and indicate "Outbreak" in the "Outbreak Location/Information" field in the top right corner of Section 2.
 - If more than 6 samples are sent at a time, the BCCDC PHL will randomly select 6 specimens to test
- **Samples will only be tested for influenza A, influenza B, RSV, and SARS-CoV-2**
 - Requests for extended respiratory panel testing must be approved by the BCCDC Medical Microbiologist on-call by email at BCCDC_MicroOncall@bccdc.ca or by phone at (604)-661-7033.
- **Results for testing can be accessed through the Regional Health Authority;** no additional notifications or reports of results related to outbreak testing will be provided by the BCCDC PHL.

Residents in facilities requiring diagnostic testing should follow routine testing pathways.

If you have any questions, please contact the lead epidemiologist at your respective health authority. The Influenza-Like Illness Outbreak Laboratory form (ILI form) has been discontinued and is no longer required for submission to the laboratory for outbreak testing.

For influenza A or SARS-CoV-2 whole genome sequencing cluster (outbreak) investigation requests, please email BCCDCWGSRequests@bccdc.ca.

Ordering Details for Respiratory Testing

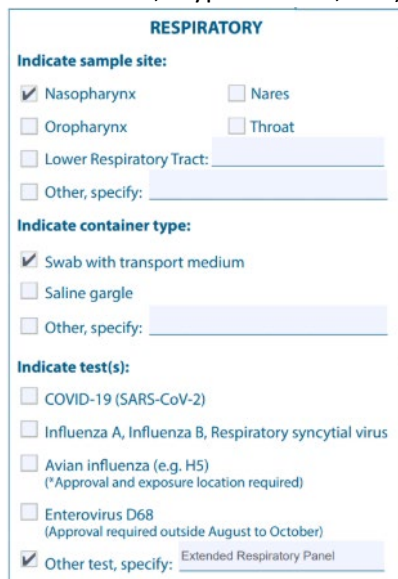
Extended Respiratory Panel

To order the extended respiratory panel, indicate “extended respiratory panel” in the Respiratory are under Section two, under “indicate test(s), Other test, specify” on the [BCCDC PHL Virology requisition](#) (**Figure 1**), through established LIS interfaces, or contact the BCCDC PHL to add on the test.

Typing by NAT/Sequencing

To request typing of respiratory viruses, please use the [BCCDC PHL Virology requisition](#) and complete all fields in the “Referral laboratory use only Viral Typing by NAT/Sequencing” section (**Figure 2**). For those interfaced sites, please include the following information in the appropriate “Comment fields” for the order:

1. Name of the virus (e.g. influenza A, SARS-CoV-2, RSV);
2. Sample site (i.e. Nasopharynx, throat, nares, etc.)
3. Ct value (specify N/A if not available);
4. Additional information: (include reason for typing, e.g. suspect avian influenza, untypeable, severe case, atypical result, etc.)



RESPIRATORY

Indicate sample site:

☒ Nasopharynx ☐ Nares
☐ Oropharynx ☐ Throat
☐ Lower Respiratory Tract: _____
☐ Other, specify: _____

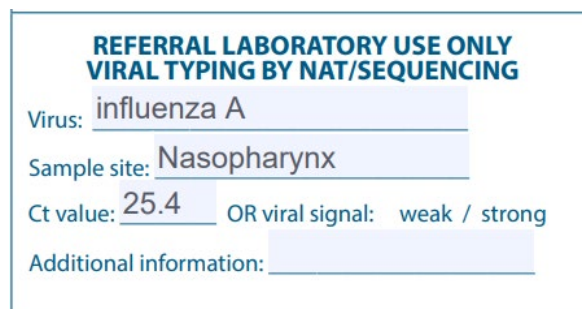
Indicate container type:

☒ Swab with transport medium
☐ Saline gargle
☐ Other, specify: _____

Indicate test(s):

☐ COVID-19 (SARS-CoV-2)
☐ Influenza A, Influenza B, Respiratory syncytial virus
☐ Avian influenza (e.g. H5)
(*Approval and exposure location required)
☐ Enterovirus D68
(Approval required outside August to October)
☒ Other test, specify: Extended Respiratory Panel

Figure 1. Example of ordering the extended respiratory panel on BCCDC PHL Virology Requisition



**REFERRAL LABORATORY USE ONLY
VIRAL TYPING BY NAT/SEQUENCING**

Virus: influenza A

Sample site: Nasopharynx

Ct value: 25.4 OR viral signal: weak / strong

Additional information: _____

Figure 2. Example of ordering typing by NAT/Sequencing on BCCDC PHL Virology Requisition

Thank you,



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