

New Brunswick Sentinel Practitioner Respiratory Network (NB-SPRN)

Lab specimen submission

Appropriate specimen

- Sentinel practitioners are asked to collect up to one nasopharyngeal (NP) specimen per day from patients presenting with influenza like illness (ILI). Please note that nasopharyngeal swabs are the recommended specimen; however for surveillance purposes only, nasal swabs and nasopharyngeal aspirate are now acceptable as alternatives.
- It is recommended that, if possible, the specimen is obtained within 72 hrs of onset as the amount of viral shedding decreases throughout time thereby increasing the chance of false negatives.
- The Influenza-like illness case definition remains the same as for the previous respiratory season:
 - Acute onset of respiratory illness with fever and cough and with one or more of the following: sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present; in patients under 5 or 65 and older, fever may not be prominent.
- We request that you swab only those patients that meet this case definition. Of course, additional swabs can certainly be collected as part of your other routine clinical duties.

Specimen collection procedure

- Please note, that NP swab, nasal swab and NP aspirate procedures should be done in accordance to current facility policies for the specific procedure based on specimen type; hand hygiene; infection control practices. Note, if a novel influenza or emerging respiratory pathogen is suspected, please contact your Regional Laboratory for up-to-date information on appropriate specimen and collection procedures.

Nasopharyngeal Swab Procedure¹:

1. Explain the procedure to the patient.
2. Use the NP swab supplied with the viral transport media.
3. If the patient has a lot of mucus in the nose, this can interfere with the collection of cells. Either ask the patient to use a tissue to gently clean out visible nasal mucus or clean the nostril yourself with a cotton swab (e.g. Q-Tip).
4. Estimate the distance to the nasopharynx: prior to insertion, measure the distance from the corner of the nose to the front of the ear and insert the shaft approximately 2/3 of this length.
5. Seat the patient comfortably. Tilt the patient's head back slightly to straighten the passage from the front of the nose to the nasopharynx to make insertion of the swab easier (see Figure 1)
6. Insert the swab provided along the medial part of the septum, along the floor of the nose, until it reaches the posterior nares; gentle rotation of the swab may be helpful. (If resistance is encountered, try the other nostril; the patient may have a deviated septum.)
7. Allow the swab to sit in place for 5–10 seconds.
8. Rotate the swab several times to dislodge the columnar epithelial cells. Note: Insertion of the swab usually induces a cough.
9. Withdraw the swab and place it in the collection tube.

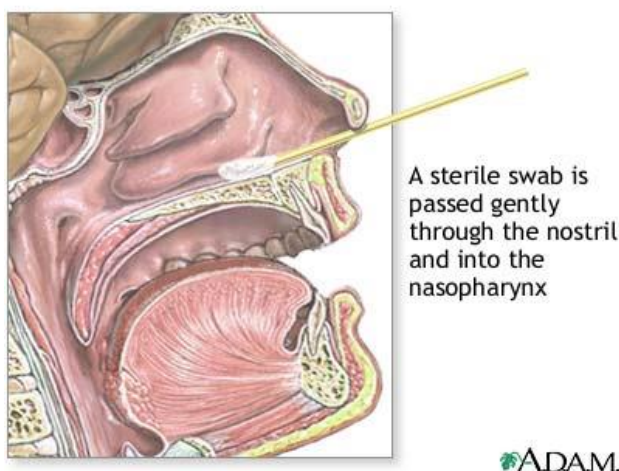


Figure 1. Nasopharynx (NP) swab collection²

¹ NP swab procedure based on PHAC description in Annex C of Canadian Pandemic Influenza Plan for the Health Sector (English): <http://www.phac-aspc.gc.ca/cpip-pclcpi/ann-c-eng.php#appb3> (French)version: <http://www.phac-aspc.gc.ca/cpip-pclcpi/ann-c-fra.php>

² Obtained from: <http://www.nlm.nih.gov/medlineplus/ency/imagepages/9687.htm>

Nasal Swab Procedure³:

1. Use the NP swab supplied with the viral transport media.
2. Insert the swab 1.0 to 1.5 cm into the nostril and rotate it three or four times against the surface of the nasal cavity.
3. Withdraw the swab and place it in the collection tube.

Nasopharyngeal Aspirate Procedure⁴: (Easier and safer than swabbing in infants and young children)

1. Insert tubing into the nostril parallel to the palate.
2. Aspirate nasopharyngeal secretions.
3. Collect the specimens in sterile vials.

When the appropriate apparatus is available, NP aspirates are to be done according to your local practices. NP aspirate specimens can be shipped in their own containers but they must be accompanied by the NB SPRN laboratory requisition form.

Lab requisition

The NB SPRN lab requisition form is to be used for every specimen. The form is to be filled as completely as possible for every specimen, including the section related to exposures to swine or poultry, previous vaccine history, antivirals and travel. The completed NB SPRN lab requisition must accompany the specimen- do not separate them.

Viral storage and transport to Regional Laboratory

Please refer to your Regional Laboratory for viral storage and transport protocols.

Kits

Nasopharyngeal and nasal swabs are included in the kits received for seasonal sentinel surveillance. The swab kits will be mailed to you periodically from the microbiology laboratory of the Dr. Georges-Dumont University Hospital Centre. The frequency of swab kits shipping to your site will depend on demand which is contingent on respiratory activity in your area. The first swab kits will be mailed to you during the week of

³ Ipp, M., Carson, S., Petric, M., Parkin, PC. Rapid painless diagnosis of viral respiratory infection; *Arch Dis Child*; 2002; 28: 372-373.

⁴ CDC-Public Health Guidance for Community-Level Preparedness and Response to SARS Version 2, Supplement F: Laboratory Guidance, Appendix F4, Guidelines for Collecting Specimen from Potential SARS patients, 2004.

September 18, 2023. If additional swab kits are needed you can obtain them through the microbiology laboratory of the Dr. Georges-L. Dumont University Hospital Centre.

The contact person for the microbiology laboratory is:

Michelle Bernard, Manager
New Brunswick Public Health Laboratory
Dr. Georges-L. Dumont University Hospital Centre
330 Avenue Université, Moncton, NB E1C 2Z3
Tel. (506) 227-1775 / Fax (506) 862-4827
Email: michelle.bernard@VitaliteNB.ca

Each kit contains collection vials with transport media which is marked with a red dot and a copy of the NB SPRN lab requisition form (salmon-pink in color). It is important to send the NB SPRN lab requisition form along with the specimen in the marked collection vial in order to distinguish them from clinical specimens. This will ensure an appropriate prioritization and data linkage between the laboratory results and the epidemiological information collected on the NB SPRN lab requisition form.

KEY CONTACTS AT THE DEPARTMENT OF HEALTH

Should you have any questions or concerns, please contact the Epidemiology and Surveillance Branch at 506-444-3044, or CDCunit@gnb.ca.