Attachment II.2 - ProvLab Respiratory Specimen Collection Guidelines

Check ProvLab Bulletins for most current information on specimen collection, testing and interpretation of lab results.

http://www.provlab.ab.ca/ or http://www.albertahealthservices.ca/3290.asp

ProvLab Bulletin (May 11, 2011) - New Laboratory Policy, Acceptance of Laboratory Samples and Test Requests.

ProvLab Bulletin (August 22, 2011) – Reminder Laboratory Policy, Acceptance of Laboratory Samples and Test Requests.

The Requisition must be completed to include:

- Patient’s/resident’s full name (first and last names)
- Patient/resident Personal Health Number (PHN) or unique numerical assigned equivalent
- Patient/resident demographics including: date of birth (DOB), gender, address, phone number
- Physician name (full name), address/location
- Test orders clearly indicated, including body site and sample type, date and time of collection
- Clinical history and other clinical information
- Site of the outbreak (i.e. facility/unit)
- EI# (assigned by the ProvLab and provided to Public Health Lead investigator)
- Fax number of outbreak facility/unit or ICP/ICD office
- Results will be faxed to the outbreak facility/unit or ICP/ICD when it is noted on the requisition, and reported to Zone Outbreak Response Lead.

Note: Viral history information is not required as long as the EI# is clearly recorded on the requisition.

Specimen Transport:

- AHS is reviewing current transportation processes within Zones to identify gaps and make appropriate recommendations.
Attachment II.2 cont’d

NASOPHARYNGEAL (NP) AND THROAT SWAB FOR DETECTION OF RESPIRATORY INFECTIONS

General Information:
- The amount of virus is greatest in acute phase of illness, usually within the first 48-72 hours of symptom onset.
- NP swabs are the preferred specimens for respiratory virus testing and pertussis testing.
- If nasopharyngeal swabs are difficult to collect, or if nasal secretions are minimal, throat swabs collected in viral transport media are acceptable alternatives.
- Collect up to a maximum of six (6) NP or throat swabs from separate cases, in the acute phase of illness, to determine the etiological agent of a suspected viral respiratory outbreak. Submit these as a batch of samples.
- If one or more of these samples are positive and an etiological agent has been identified, further swabs should not be collected. If additional specimens are received under the EI# at some later period, these will not be tested unless the external investigator (Zone Outbreak Response Lead or MOH) has contacted the ProvLab point person for the EI# or designate.
- If six (6) samples have been tested and all are negative for respiratory virus for a particular EI#, additional samples will not be tested unless there is consultation between the external investigator and the ProvLab point person for the EI# or designate (e.g. MOC\VOC).
- Contact the ProvLab point person for the EI# or designate anytime, if the clinical situation for the EI# has changed and additional testing needs to be done.
- Results of the Respiratory Virus Panel (RVP) by molecular testing are usually available within 48hrs.

Swab Description: The NP swab has a white plastic shaft, with three (3) different thicknesses, ending in a “furry” or flock tip. Each swab is individually packaged and labeled “Copan sterile swab applicator”. After specimen is collected, to fit the swab into the transport medium container, please use break or cut the swab shaft where there is a deep score mark (∨) on the thick part of the shaft (see graphic).

Collection of a Nasopharyngeal (NP) Swab:
1. Access the respiratory outbreak specimen collection kit (contains NP flock swab, Universal Transport Media, ProvLab requisition), and appropriate PPE
2. Check expiry date of Universal Transport Medium (UTM). Do not use if the media is leaking, has turned color, is cloudy or has expired.
3. Perform hand hygiene by washing hands with soap and water or using alcohol-based hand rub.
4. Put on appropriate PPE. (See Table 4.)
5. Have the patient sit in a chair or lie on a bed - elevate the head of the bed so that their head can be tilted back (see diagram).
6. Remove any mucous from the patient’s nose, with a tissue or cotton tipped swab prior to collecting the NP swab.
7. How deep is the NP swab inserted into the nasopharynx? Measure the distance from the corner of the nose to the front of the ear and insert the shaft ONLY half this length. In adults, this distance is usually about four (4) cm, (finest thickness of this swab shaft). In children this distance is less.
Attachment II.2 cont’d

8. Tilt the patient’s head back slightly (about 70°) to straighten the passage from the front of the nose to the nasopharynx to make insertion of the swab easier.
9. **Gently** insert the swab along the medial part of the septum, along the base of the nose, until it reaches the posterior nares - gentle rotation of the swab may be helpful. (If resistance is encountered on one side, try the other nostril, as the patient may have a deviated septum).
10. Rotate the swab several times to dislodge the columnar epithelial cells, and then remove the swab. 
    **Note:** *Insertion of the swab usually induces a cough.*
11. Put the NP swab into the transport medium and break or cut at the score mark on the shaft so that it does not protrude above the rim of the container. Failure to do so will result in the transport medium leaking and the **sample being discarded**.
12. Ensure that the lid of the container is screwed on tight, and put the specimen in the biohazard zip lock bag.
13. Remove and discard gloves. Perform hand hygiene by washing hands with soap and water or using alcohol-based hand rub.
14. Remove and discard face mask and eye protection, and repeat hand hygiene if hands become contaminated.
15. Follow the labeling and transport instructions given in the collection kit insert. Ensure to label the UTM container with patient information.

**Source:** Provincial Laboratory for Public Health (ProvLab).

**Collection of a Throat Swab (TS) in viral transport media:**

1. Access the respiratory outbreak specimen collection kit (contains NP flock swab, Universal Transport Media, ProvLab requisition), and appropriate PPE
2. Check expiry date of Universal Transport Medium (UTM). Do not use if the media is leaking, has turned color, is cloudy or has expired.
3. Perform hand hygiene by washing hands with soap and water or using alcohol-based hand rub.
4. Put on appropriate PPE. (See Table 4)
5. Using the plastic shafted swab in the kit, vigorously swab the back of the throat around the tonsillar area.
6. Place the swab into the transport medium, and break off the shaft so that it does not protrude above the rim of the container. Failure to do so will result in the transport medium leaking and the **sample being discarded**.
7. Ensure that the lid of the container is screwed on tight.
8. Remove and discard gloves. Perform hand hygiene by washing hands with soap and water or using alcohol-based hand rub.
9. Remove and discard face mask and eye protection, and repeat hand hygiene if hands become contaminated.
10. Follow the labeling and transport instructions given in the collection kit insert. Ensure to label the UTM container with patient information.

**Source:** Provincial Laboratory for Public Health (ProvLab).

---

If the specimens are for outbreak diagnosis, ensure specimen is transported to the lab ASAP. Rural facilities to transport lab specimens to ProvLab as directed by the Zone Outbreak Response Lead or by the fastest means possible.