

Sample Collection Instructions for COVID-19

Patients not admitted to hospital (including those in ER)

A single upper respiratory tract specimen will be accepted for COVID-19 testing. Upper respiratory tract specimens include a nasopharyngeal swab (NPS) **OR** viral throat swab collected in universal transport medium. NPS is preferred over a viral throat swab – information available to date suggests that a NPS has higher sensitivity than a throat swab for COVID-19 detection.

In-patients

For in-patients, it is recommended to collect a minimum of two specimens, from two different sites:

1. Upper respiratory tract: submit both a nasopharyngeal swab (NPS) **AND** viral throat swab. **Note, although the NP swab and throat swab use the same sampling kit, a separate kit (medium tube) is needed for each sample. Also, for the NP swab, the smaller swab is used, while for the throat swab, the larger swab is used.**
2. Lower respiratory tract specimens: submit when possible.
3. Sputum: collect if patient has a productive cough. Do not induce.

Specimen collection kits and Alternates

The following specimen collection kits can be used for collection of nasal or nasopharyngeal specimens:

- Virus Respiratory Kit order #390082
- Virus Culture Kit order #390081

Alternates:

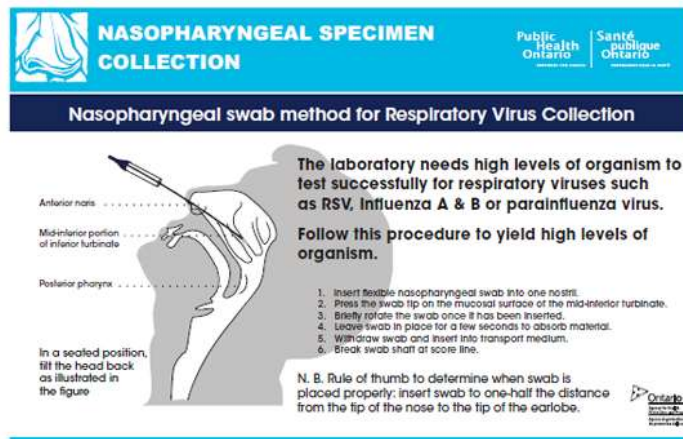
- Chlamydia trachomatis Culture - Female Kit order #: 390083
- Chlamydia trachomatis Culture - Male Kit order #: 390084
- Mycoplasma pneumoniae/Chlamydia pneumoniae PCR Kit order #: 390085
- Roche PCR Media Uniswab Kit order #: 300295
- Bordetella pertussis BP Kit order #: 390052

Further information on alternative collection kits is available here: [Public Health Ontario](#)

Collecting NP Swab

1. Open the pouched seal pack and aseptically remove the sterile swabs from the package.
2. **If 2 swabs are present in the kit, use the smaller swab when collecting the NP sample.**
Discard the larger/thicker swab.
3. Collect the specimen from the site involved as early as possible following onset of symptoms. (see picture below)
4. Aseptically remove cap from vial and insert swab in medium. (A separate medium is required for each swab).
5. Break swab shaft evenly at the scored line to fit in tube well below the cap and replace cap to vial closing tightly.
6. Label the specimen container with the patient's full name, date of collection and one other unique identifier such as the patient's date of birth or Health Card Number. Failure to provide this information may result in rejection or testing delay.

7. Complete all fields of the PHOL [COVID-19 specific](#) requisition:
 - Patient's full name
 - Date of birth
 - Health Card Number (number match the specimen label),
 - Test requested – specify COVID-19
 - Specimen type
 - Reason for test – Diagnostic (serology is not available, including immune status)
 - Signs and symptoms – list all relevant
 - Onset date and date collected
 - Travel history within 14 days of symptom onset including all destinations and travel dates
 - Patient setting (e.g. ER, hospitalized, ICU)
 - Clinical information including whether the patient has pneumonia/lower respiratory tract infection and any associated risk factors
8. Place specimen in the biohazard bag and seal bag.
9. Insert the completed requisition in the pocket on the outside of the sealed biohazard bag.
10. To maintain optimum viability, the specimen should be stored and transported at 2-8°C or on wet ice to the laboratory for processing within 72 hours of collection. Preference is for specimen to get to the Toronto Public Health Ontario Lab (PHOL) ASAP.
11. Results: turnaround time for testing is up to 4 days.



Collecting Throat Swab - 1 kit

1. Open the pouched seal pack and aseptically remove the sterile swabs from the package.
2. **If 2 swabs are present in the kit. Use the larger/thicker swab for collecting the throat sample.** Discard the smaller swab.
3. Collect the specimen from the site involved as early as possible following onset of symptoms.
4. Aseptically remove cap from vial and insert swab in medium. (A separate medium is required for each swab).
5. Break swab shaft evenly at the scored line to fit in tube well below the cap and replace cap to vial closing tightly.

6. Label the specimen container with the patient's full name, date of collection and one other unique identifier such as the patient's date of birth or Health Card Number. Failure to provide this information may result in rejection or testing delay.
7. Complete all fields of the PHOL requisition. **The same requisition can be used for all of COVID-19 samples.**
8. Place specimen in the biohazard bag and seal bag.
9. Insert the completed requisition in the pocket on the outside of the sealed biohazard bag.
10. To maintain optimum viability, the specimen should be stored and transported at 2-8°C or on wet ice to the laboratory for processing within 72 hours of collection. Preference is for specimen to get to the Toronto Public Health Ontario Lab (PHOL) ASAP.
11. Results: turnaround time for testing is up to 4 days.

Sputum Collection: if patient has a productive cough. Do not induce. (Admitted patients only)

1. Open the biohazard bag and remove the sterile container.
2. Collect sputum specimens early in the morning, before eating. Do not submit pure saliva or nasal secretions. 5 ml sputum is optimal; the patient may expectorate several times.
3. Do not have patient rinse mouth with tap water before producing specimen.
4. Replace cap on container closing tightly.
5. Label the specimen container with the patient's full name, date of collection and one other unique identifier such as the patient's date of birth or Health Card Number. Failure to provide this information may result in rejection or testing delay.
6. Complete all fields of the requisition: include, the patient's full name, date of birth, Health Card Number (must match the specimen label), enter COVID-19 under test description, source of specimen (indicate if induced), date of onset, date of collection, physician name and address, and clinical diagnosis.
7. Place specimen container in the biohazard bag and seal bag.
8. Insert the completed requisition in the pocket on the outside of the sealed biohazard bag.
9. Transport the specimen to the Toronto PHOL laboratory as soon as possible after collection. If transport is delayed more than one hour the specimen must be refrigerated.

Storage: Kits should be stored at 2-25°C until used. Improper storage will result in a loss of efficacy.

To order kits or for more information:

- Email: PHOL.Warehouse@oahpp;
- Fax: 416-235-5753;
- Phone: 1-877-604-4567
- Virus Respiratory Kit order: #390082
- Virus Culture Kit order: #390081
- Chlamydia trachomatis Culture - Female Kit order #: 390083
- Chlamydia trachomatis Culture - Male Kit order #: 390084
- Mycoplasma pneumoniae/Chlamydia pneumoniae PCR Kit order #: 390085
- Roche PCR Media Uniswab Kit order #: 300295
- Bordetella pertussis BP Kit order #: 390052