Objective
To provide an overview of the preferred specimen collection methods for novel coronavirus disease (COVID-19) polymerase chain reaction (PCR) testing

Key Messages
The following methods are preferred for specimen collection:

• **Nasopharyngeal (NP) swabbing** is the **optimal** specimen collection method for COVID-19 PCR testing
• **Combined swabbing of the throat AND both nostrils** (anterior nares) is a **preferred alternative** method when NP swabbings cannot be performed (e.g., may be considered for some children, when repeat sampling is likely, if NP swabs are unavailable)
• **Deep nasal swabbing** is also a **preferred alternative** method when NP swabbings or combined swabbing of the throat and both nostrils cannot be performed

Important Considerations

• Anyone who is being tested (whether symptomatic or asymptomatic) should be counselled that an **NP swab** is the **recommended** specimen collection method, because specimens from this collection method are the **most sensitive**, resulting in more accurate results
• The collection of **NP and deep nasal swabs is a controlled act**; thus, only certain regulated health professionals or those to whom the act has been delegated may collect this type of specimen through a direct order or medical directive. The collection of **nose and throat swabs is not a controlled act**, thus can be performed by anyone with appropriate training
• Nasopharyngeal swabs are intended for NP specimen collection; however, if NP swabs are the only type of swab available, they can also be used to collect deep nasal specimens and combined throat and nostril specimens
  • **The larger throat/nasal swabs cannot be used for NP specimen collection**
• To avoid testing delay or rejection, complete all fields of the COVID-19 Test Requisition, including specimen type and collection date: [https://bit.ly/312lmDj](https://bit.ly/312lmDj)
Preferred Swab Collection Specimen Types for COVID-19 PCR Testing

Nasopharyngeal (NP) **Optimal Method**

1. Tilt patient's head back 70°
2. Insert flexible shaft mini-tip swab through nares parallel to palate (not upwards) until:
   a. Resistance is met, OR
   b. Distance is equivalent to half the distance from the patient's ear to their nostril
3. Gently rub and roll the swab
4. Leave swab in place for several seconds to absorb secretions
5. Slowly remove the swab while rotating it and immediately place in sterile tube containing transport medium

**Anterior naris**
**Mid inferior portion of inferior turbinate**
**Posterior pharynx**

*In a seated position, tilt the head back at a 70° angle as illustrated in the picture*

**Recommendation:**
Optimal collection method

**Sensitivity to Detect SARS-COV-2:**
Optimal sensitivity (94.4%)

**Controlled Act:**
Yes

**Swab Type:**
Nasopharyngeal swab only

Combined Throat and Both Nostrils (nasal/anterior nares)


1. Insert swab in posterior pharynx and tonsillar areas
2. Rub swab over posterior pharynx and bilateral tonsillar pillars; avoid tongue, teeth, and gums
3. Using the same swab, insert about 1 cm (0.5 in) inside nares*
4. Rotate swab and leave in place for 10-15 seconds
5. Using the same swab, repeat for the other nostril
6. Immediately place in sterile tube containing transport medium

*Swab insertion distance will differ for paediatric patients*

**Anterior naris**
**Mid inferior portion of inferior turbinate**
**Posterior pharynx**

*In a seated position, tilt the head back at a 70° angle as illustrated in the picture*

**Recommendation:**
Preferred alternative when NP swab cannot be collected

**Sensitivity to Detect SARS-COV-2:**
Approximates the sensitivity of an NP swab (91.7%)

**Controlled Act:**
No

**Swab Type:**
Nasopharyngeal swab or throat/nasal swab

Deep Nasal

1. Tilt patient's head back 70°
2. While gently rotating swab, insert swab about 2.5 cm (>1 in)* straight back (not up) into nostril until the collar/safety stopping point touches the outside of the nose
3. Rotate swab several times against the wall
4. Leave swab in place for several seconds to absorb secretions
5. Repeat for both nostrils using same swab
6. Immediately place in sterile tube containing transport medium

*Swab insertion distance will differ for paediatric patients*

**Anterior naris**
**Mid inferior portion of inferior turbinate**
**Posterior pharynx**

*In a seated position, tilt the head back at a 70° angle as illustrated in the picture*

**Recommendation:**
Preferred alternative when NP swab cannot be collected

**Sensitivity to Detect SARS-COV-2:**
Approximates the sensitivity of an NP swab (82.6%)

**Controlled Act:**
Yes

**Swab Type:**
Nasopharyngeal swab or throat/nasal swab


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