Clinical Practice Procedures: Other/COVID-19
nasopharyngeal & oropharyngeal specimen collection

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<tr>
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<td>Date</td>
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<tr>
<td>Purpose</td>
<td>To ensure a consistent procedural approach to COVID-19 nasopharyngeal &amp; oropharyngeal specimen collection.</td>
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<td>Scope</td>
<td>Applies to Queensland Ambulance Service (QAS) clinical staff.</td>
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<td>Health care setting</td>
<td>Pre-hospital assessment and treatment.</td>
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<td>Population</td>
<td>Applies to all ages unless stated otherwise.</td>
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COVID-19 nasopharyngeal & oropharyngeal specimen collection

One of the most effective ways of limiting the spread of COVID-19 is through the widespread testing, subsequent identification and isolation of members of the population who are COVID-19 positive. The laboratory testing of specimens taken from the pharyngeal cavity and nasal passages is an accurate and reliable method of detecting COVID-19 infection.

Ambulance clinicians may be called upon in certain situations to assist with the collection of specimens from specified population groups, augmenting the efforts of other Queensland Health clinicians.

This CPP describes the method of specimen collection that has been endorsed by the QAS Medical Director, for specifically trained and authorised Queensland Ambulance Service clinicians.

### Indications
- Collection of specimens for COVID-19 testing in accordance with current guidelines/case definitions.

### Contraindications
- Recent facial trauma/fracture/surgery
- Craniofacial abnormalities
- Patients less than 1 year of age

### Complications
- Pain and discomfort
- Haemorrhage (nasal and/or pharyngeal)
- Poor specimen collection technique leading to a false negative and need for repeat testing.

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**Procedure – COVID-19 nasopharyngeal & oropharyngeal specimen collection**

1. Perform hand hygiene.
2. Don personal protective equipment (PPE) as per current QAS COVID-19 PPE requirements.
3. Don an additional plastic apron over the existing PPE.
4. Explain the procedure to the patient before commencing.
5. Label a swab container in accordance with the selected pathology services requirements.
6. Confirm that all patient details on the label are correct.
7. Open the packaging by gently twisting the swab holder.
8. Remove the swab from the container.
9. Stand slightly to the side of the patient to reduce unnecessary exposure.

**Adult (12 years or older)**

a) Ask the patient to open their mouth and stick out their tongue.

b) Using a pencil like grip, firmly swab the posterior pharynx and tonsillar beds – avoid contact with the patient’s tongue and uvula.

c) Withdraw the swab and if necessary, allow the patient a moment to regain composure.

d) Ask the patient to tilt their head back – consider supporting the patient's head to prevent sudden withdrawal.

e) Using the same swab, gently insert the swab into one nostril, proceeding along the floor of the nasal cavity parallel to the palate until resistance is felt. This is approximately half to two thirds of the distance between the anterior nares and the ear.

f) Rotate the swab several times against the nasal wall.

g) Repeat the process in the other nostril with the same swab to absorb secretions.
**Procedure – COVID-19 nasopharyngeal & oropharyngeal specimen collection**

**Paediatric (1 to 11 years)**

a) Explain the procedure to the parent/carer (and if appropriate the patient) before commencing.

b) Ensure the child is in a comfortable and secure position (with parent/carer holding one arm across the child’s body to hold the arms secure and the hand placed on the child’s forehead).

c) Using a pencil like grip, gently insert the swab into one nostril, proceeding along the floor of the nasal cavity parallel to the palate until resistance is felt.

d) Rotate the swab several times against the nasal wall.

e) Using the same swab, repeat the process in the other nostril to absorb secretions.

*Note:* In younger children, only swabbing of the nasal passages is required. Swabbing on the posterior pharynx through the oral cavity is not necessary or recommended.[4]

10. Place the swab into the container, flocked end first, and secure tightly.

11. With the aid of a ‘clean assistant’ to prevent cross contamination, confirm the patient details on the specimen label and pathology request form match.

12. Request the ‘clean assistant’ place the correctly labelled pathology request form in the outer compartment of the biohazard specimen bag.

13. With the ‘clean assistant’ holding the biohazard bag, gently place the correctly labelled specimen in the open sample section and request it be sealed.

14. Remove gloves and perform hand hygiene.

15. Remove outer plastic apron and perform hand hygiene.

16. If performing additional testing, the base layer of PPE (thumb gown, mask and eye protection) must remain on.

17. Between each patient, perform hand hygiene, don a new plastic apron and gloves.

18. At the completion of all testing, doff all PPE as per current QAS COVID-19 PPE requirements.

**Additional information**

- Caution should be undertaken when performing specimen collection in patients with:
  - risk of upper airway obstruction (e.g. croup);
  - bleeding disorders; AND/OR
  - concomitant use of anticoagulation therapy.

- Significant distress may be experienced by the paediatric patient – if the procedure is unsuccessful, consider the use of distraction techniques before re-attempting.

- The QAS supplies one size of flocked swab suitable for use in all patients from one year of age to adult.

- For patients with a significantly deviated septum, it may not be possible to insert the swab into the narrowed naris without inflicting significant pain. In these cases, swabbing of a single naris is considered appropriate.

- If nasal swabbing causes epistaxis, perform appropriate first aid measures.