



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

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| Policy code | CPP_OT_CSC_1221 |
| Date | December, 2021 |
| Purpose | To ensure a consistent procedural approach to COVID-19 nasopharyngeal & oropharyngeal specimen collection. |
| Scope | Applies to Queensland Ambulance Service (QAS) clinical staff. |
| Health care setting | Pre-hospital assessment and treatment. |
| Population | Applies to all ages unless stated otherwise. |
| Source of funding | Internal – 100% |
| Author | Clinical Quality & Patient Safety Unit, QAS |
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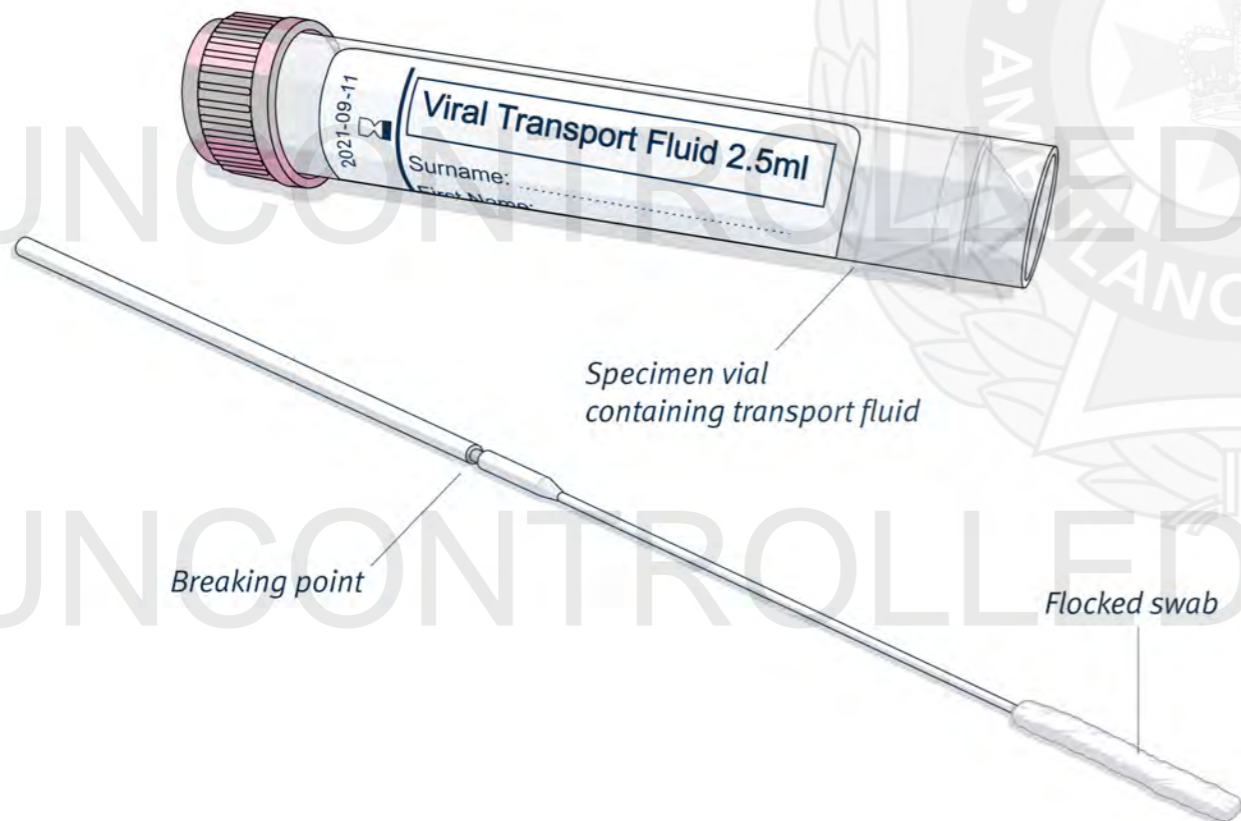
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One of the most effective ways of limiting the spread of COVID-19 is through the widespread testing, subsequent identification and isolation of members of the population who are COVID-19 positive.^[1] The laboratory testing of specimens taken from the pharyngeal cavity and nasal passages is an accurate and reliable method of detecting COVID-19 infection.^[2]

Ambulance clinicians may be called upon in certain situations to assist with the collection of specimens from specified population groups, including staff surveillance testing and 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.^[3]

Contraindications



- Recent facial trauma/fracture/surgery
- Craniofacial abnormalities
- Persons 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.

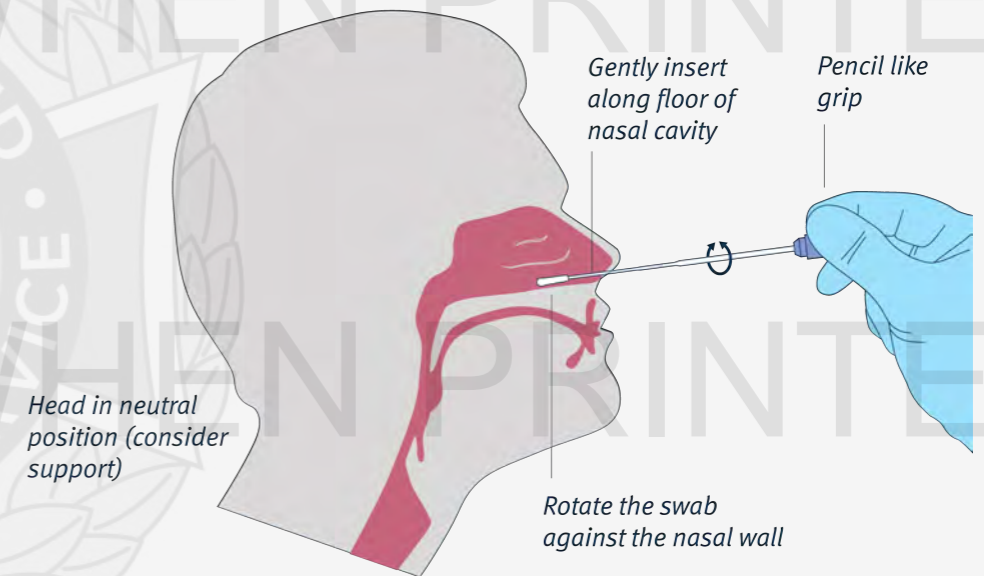
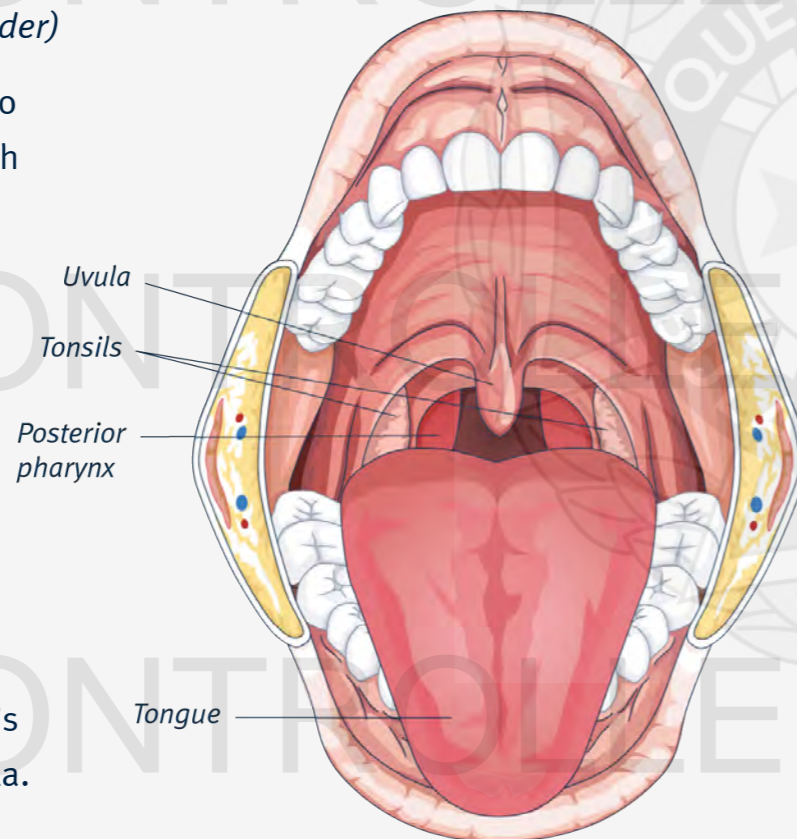
Procedure – COVID-19 nasopharyngeal & oropharyngeal specimen collection

1. Perform hand hygiene.
2. Don personal protective equipment (PPE) as per the QAS protocol relevant to the situation (eg. fever clinic, ambulance clinician surveillance testing).
3. Explain the procedure prior to commencing.
4. Label a swab container in accordance with the selected pathology services requirements.
5. Confirm that all personal details on the label are correct.
6. Prepare all equipment required to perform the procedure.
7. Stand slightly to the side of the person to reduce unnecessary exposure.

- c) Withdraw the swab and if necessary, allow the person a moment to regain composure.
- d) Ask the person to place their head in a neutral position – consider supporting the person’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 approximately 2–3 cm for adults and 1–2 cm for children.^[4,5]

Adult (12 years or older)

- a) Ask the person 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 person’s tongue and uvula.



- f) Rotate the swab several times ensuring good contact against the nasal wall.
- g) Repeat the process in the other nostril with the same swab to absorb secretions.

Paediatric (1 to 11 years)

- a) Explain the procedure to the parent/carer (and if appropriate the child) 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 for 1–2 cm.
- 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, swabbing of the nasal passages only is required. Swabbing on the posterior pharynx through the oral cavity is not necessary or recommended.^[6]

8. Place the swab into the container, flocked end first. With some swab types it is necessary to snap the swab near the flocked end and allow it to fall into the container. Secure the lid tightly.
9. Process pathology sample in accordance with local clinic work instruction.
10. 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 people with:
 - risk of upper airway obstruction (e.g. croup);
 - bleeding disorders; AND/OR
 - concomitant use of anticoagulation therapy.
- Significant distress may be experienced by children – 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 people from one year of age to adult.
- For people 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.
- The method for nasal swabbing has changed from the earlier recommended method of swabbing the back of the nasal cavity,^[7] to the method outlined in this updated CPP, which accords with the most recently available evidence.^[4,5]
- There are several types of specimen collection swabs currently in use. Clinicians performing specimen collection may be required to use different swabs to those they have used prior, according to those that are available at the time.