

**Sample Collection for SARS CoV-2 detection
(Nasopharyngeal Swab and Throat Swab)****1. Introduction**

Sample collection is important to obtain reliable result to diagnose infection and this procedure describes nasopharyngeal and oropharyngeal specimen collection for detection of SARS CoV-2.

2. Sample Criteria

Sample should comply the below criteria, if the sample is not complying the criteria should be rejected.




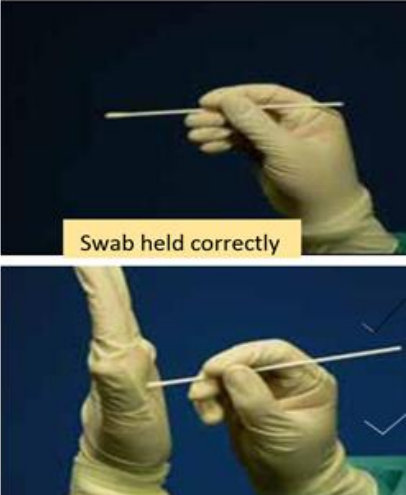

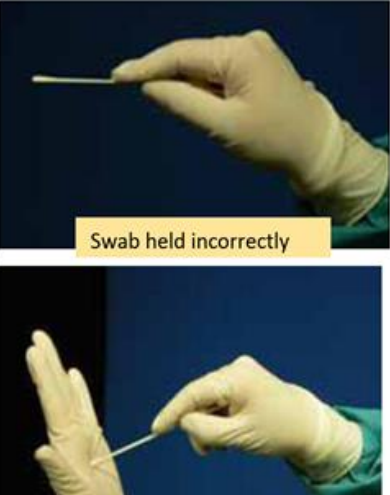
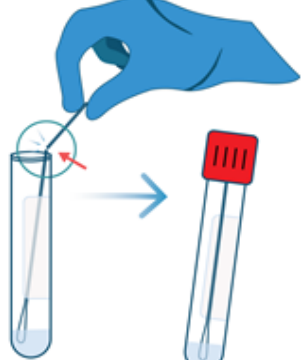
Specimen Type	Criteria
Nasopharyngeal, oropharyngeal, nasal, or mid-turbinate specimen	<ul style="list-style-type: none">▪ Tube ID :<ul style="list-style-type: none">○ Patient name○ Age○ Province name ▪ Contained in VTM media▪ Leakproof▪ Volume \geq 2.5mL▪ Transport temperature at +2 to +8 °C within 2 days▪ 3 packagings : VTM, parafilm Or Absorbent Tissue, ziplock plastic bag, Strong Plastic box ▪ Form should be filled and complied with the samples tube▪ Form should be clean and clear▪ Form should be separate from the samples tube

3. Before collecting the specimen

1. Lab technician must wear PPE (coverall protective, gloves, N95Mask, face shield, goggles, plastic boots) all the process.
2. Lab technician asks the patient to have a seat and to spell his/her full name.
3. Then, checks if patient's information is matching with the form and explains the procedure of specimen collection.
4. Labels/writes down the name of the patient on the VTM and labels should have a patient name Or ID patient, Age, Province and Date of writing should be clearly legible.



4. Collecting nasopharyngeal specimen

	<ol style="list-style-type: none">1) Tilt patient's head back 70 degrees. Gently and slowly insert a minitip swab with a flexible shaft through the nostril parallel to the palate until resistance is encountered.2) The distance is equivalent to that from the nostril to the ear of the patient, indicating contact with the nasopharynx.
<p>④ Leave swab in place for several seconds, rotate the swab in place, and then slowly remove the swab.</p> 	<ol style="list-style-type: none">3) Gently rub and roll the swab, leaving it in place for several seconds to absorb secretions. Remark: If a deviated septum or blockage creates difficulty in obtaining the specimen from one nostril, use the same swab to obtain the specimen from the other nostril.4) Slowly remove swab while rotating it.
  <p>Swab held correctly</p>	  <p>Swab held incorrectly</p>
	<ol style="list-style-type: none">5) Place swab, tip first, into the transport tube provided.6) Break the swab handle at the swab breakpoint by bending back, Once the tip is near the bottom, once the tip is near the bottom. Remark: The swab should fit in the tube comfortably so that the cap can be screwed on tightly to prevent leakage and contamination.



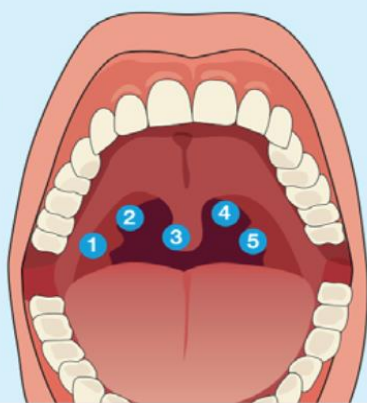
5. Collecting throat specimen



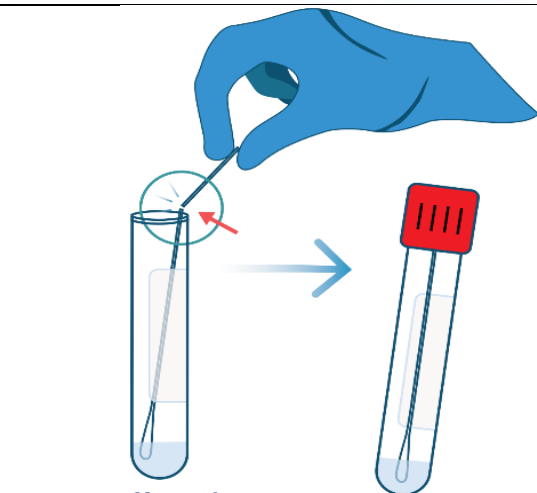
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Make sure the swab makes good contact with the 5 key areas of the mouth:

- 1 Tonsil
- 2 Posterior wall
- 3 Uvula
- 4 Posterior wall
- 5 Tonsil



- 1) Insert swab into the posterior pharynx and tonsillar areas.
- 2) Rub swab over both tonsillar pillars and posterior oropharynx and avoid touching the tongue, teeth, and gums.



- 3) Place swab, tip first, into the transport tube provided in the same tube with Nasopharyngeal specimen.
- 4) Break the swab handle at the swab breakpoint by bending back, Once the tip is near the bottom, once the tip is near the bottom.

Remark: The swab should fit in the tube comfortably so that the cap can be screwed on tightly to prevent leakage and contamination

Reference

- WHO Guidelines for the collection of clinical specimens during field investigation of outbreaks. Department of Communicable Disease Surveillance, World Health Organization, Geneva, 2000
- CDC. Specimen collection guidelines. Centers for Disease Control and Prevention (USA), retrieved from https://www.cdc.gov/coronavirus/2019-ncov/downloads/lab/NP_Specimen_Collection_Infographic_FINAL_508.pdf accessed 10 May 2021