

Collection of nasal and throat swabs for respiratory virus testing

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Obtain materials

- Personal protective equipment (PPE) for the health care worker (HCW) using contact and droplet precautions: gown, surgical mask, protective eyewear, gloves; and hand hygiene products.
- If the patient has severe symptoms suggestive of pneumonia, contact and airborne precautions should be observed. The HCW should wear a P2/N95 respirator which should be fit checked.
- Single swab for deep nasal and oropharyngeal collection (may be dacron or rayon, although flocked preferred) and transport medium (e.g. Universal Transport Medium (UTM), Viral Transport Medium (VTM), Liquid Amies). Dry swabs are not recommended.
- Note the tube contains liquid so splashes, spills and leaks in transit must be prevented.

Prepare room

- Need a wall that the patient can rest their head against when patient stands or sits.
- HCW needs enough space to be able to stand **beside** the patient (**not** in front).
- Hand hygiene: need to have facilities and products e.g. alcohol-based handcleanser.
- Appropriate waste disposal within arm's length from where you collect the patient's specimens.

Prepare healthcare worker

- Perform hand hygiene, don PPE according to current NSW Health infection control guidelines.

Prepare patient

- Explain the procedure to the patient.
- Place patient with head against a wall (standing or sitting).

Specimen collection

- To conserve swabs the same swab that has been used to sample the oropharynx should be utilised for deep nasal sampling.
- Sampling both sites is recommended to optimise the chances of virus detection.
- Label the tube with the patient name, date of birth, collection date, specimen site (throat, nose).

Throat swab

- Stand at the side of the patient.
- Ensure the patient's head is resting against the wall.
- Place your hand on the patient's forehead (non-dominant hand).
- Ask the patient to open their mouth widely and say 'argh'.

- Insert the swab into mouth avoiding any saliva.
- Swab the tonsillar beds and the back of the throat, avoiding the tongue. Place sideways pressure on the swab in order to collect epithelial cells from the tonsillar fossa at the side of the pharynx, not the mucous.

Deep nasal swab

- Place your hand on the patient's forehead (non-dominant hand) and the thumb at the tip of the nose.
- Using a pencil grip and while gently rotating the swab, insert the tip 2–3 cm (or until resistance is met), into the left or right nostril, parallel to the palate, to absorb mucoid secretion.
- Rotate the swab several times against the nasal wall.
- Withdraw and repeat the process in the other nostril.
- Insert swab into the labelled tube (fully insert the swab into the tube, snap the swab, discard the residual shaft) and tighten the cap.

Remove PPE

- Remove PPE according to current NSW Health infection control guidelines.
- Perform hand hygiene.

Specimen handling and transport

- If SARS-CoV-2 testing is to be undertaken in a different laboratory to testing for other respiratory viruses, then the original swab and remaining eluate should be forwarded for SARS-CoV-2 testing.
- Handle specimens under PC2 conditions in accordance with AS/NZS 2243.3:2010 Safety in Laboratories Part 3: Microbiological Safety and Containment.
- Store and transport at 2-8°C.
- Transport as Biological Substances Category B (UN 3373); if by air, pack to IATA Packing Instruction 650.

Related documents

- [PHLN guidance on laboratory testing for 2019-nCoV](#)
- [CDNA National guidelines for public health units - Coronavirus Disease 2019 \(COVID-19\)](#)