



Coronavirus (COVID-19) Laboratory Testing in Victoria

The 2019 novel coronavirus (COVID-19) has been confirmed as the causative agent of a respiratory outbreak first diagnosed in Wuhan City, Hubei Province, China in December 2019.

Approval for testing

Testing for Coronavirus infection (COVID-19) no longer requires approval by the Department of Human Health and Services (DHHS).

A patient with an illness that is compatible with the novel coronavirus infection and has at least one clinical AND at least one epidemiological criteria from the [case definition](#), should be tested.

It is critical that clinicians limit testing to patients who meet the above criteria and use only one swab when testing, as there is significant pressure on supply of swabs and reagent kits for COVID-19 testing. Please provide clinical details on request slips so high-risk patients and healthcare workers can be prioritised.

The department no longer needs to be notified about any suspected cases.

Only confirmed cases need to be notified to the department. This should be done as soon as practicable by calling **1300 651 160**, 24 hours a day

Specimens for testing

Australian Clinical Labs Collection Centres will not be collecting the samples for coronavirus, samples collected by practitioners can be submitted to Clinical Labs and we will refer on to VIDRL for testing.

The following specimens are recommended to be sent to Clinical Labs, to be forwarded to VIDRL, when requesting COVID-19:

1. Upper respiratory tract - only one swab is required.

This can be taken from two sites:

- a) Nasopharyngeal swab: Insert a swab into nostril parallel to the palate. Leave the swab in place for a few seconds to absorb secretions. Swab both nostrils (nasopharyngeal areas) with the same swab.
- b) Oropharyngeal swab (that is, a throat swab): Swab the tonsillar beds, avoiding the tongue.

To conserve swabs the same swab that has been used to sample the oropharynx should be utilised for nasopharynx sampling.

Please note: A second swab is no longer necessary for influenza testing. Testing for other respiratory viruses (for example, multiplex PCR) can be undertaken on the same specimen.

Blood (serum) for storage for serology at a later date.

Note. Swab specimens should be collected only on swabs with a synthetic tip (such as polyester, Dacron® or Rayon, flocked

2. preferred) with aluminium or plastic shafts. Do not use

calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing. For transporting samples, recommended options include viral transport medium (VTM) containing antifungal and antibiotic supplements, or Liquid Amies medium which is commonly available. Avoid repeated freezing and thawing of specimens.



Specimen collection

When collecting a nasopharyngeal or oropharyngeal specimen:

- Use droplet and contact precautions, which means a single-use face mask, eye protection and gown and gloves. Collect 1 flocked swab.

When collecting lower respiratory specimen(s):

- Use contact and airborne precautions, which means a P2 respirator, eye protection, gown and gloves. Collect in a room with negative pressure if available.

VIDRL testing algorithm

Specimens will be tested by a pan-coronavirus assay, run twice daily with results available within 3-4 days. A real time Wuhan Coronavirus assay will report COVID-19 detected or not detected.

Repeat testing

This could be contemplated when there is a high index of clinical suspicion, but should be discussed with the clinical team and DHHS Victoria prior to collection of samples.

Links

<https://www.health.gov.au/health-topics/novel-coronavirus>

<https://www2.health.vic.gov.au/about/news-and-events/healthalerts/pneumonia-cluster-china>

[https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected)

Please note we are closely monitoring this situation and will update the above as further information becomes available.

A/Prof Owen Harris and Dr Linda Dreyer, Microbiologists 23/03/2020