

# Memorandum



**To:** Clinicians, Managers and Lab staff  
**From:** Chris Mansell clinical microbiologist  
**Date:** 23 March 2022

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**Subject:** Waikato Hospitals COVID Testing Pathways

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For information and interest. We change these from time to time as the outbreak situation, specimen numbers, staffing and test equipment fluctuate.

## Transport to the lab

This is often the slowest part of the process. If you need a result within a time frame, it is well worth walking it up to Specimen Reception at Level 3 Waiora bldg. and letting us know it's urgent.

## **Standard**

PCR for nasopharyngeal swabs (NPS) is the gold standard method and we use a variety of platforms, providing results within the same working day the specimen arrives in the lab. Samples arriving before 12:00 will usually have results reported by 16:00. From 12:00 to 22:00, samples are tested by GeneXpert® PCR and typically reported within 2 hr of receipt in the lab. PCR is not available from 22:00 to 08:00.

## **Stat testing**

Patients at Emergency Dept, Delivery Suite, the 4 rural hospitals and some other locations are tested by a non-PCR Nucleic Acid Amplification Test (NAAT). We use the Abbott ID NOW®. Testing is available 24/7. Special dry swabs are used and transported to the lab for processing. Results are usually available within 20 minutes of arrival in the lab. ID NOW® is considered a definitive result and does not need to be checked by a PCR test. ID NOW® is not quite as sensitive as PCR and there are some more critical patient groups who have PCR instead, in the first instance.

## **Rapid Antigen Tests**

Within the hospital, these are performed by trained staff and the results entered into the hospital computer system. This is a "Supervised RAT". The swab does not need to go as far into the nose as the NPS, so is a lot more comfortable and people can have these done day after day if needed. RAT will pick up most people as they become infectious but sometimes only after a day or two of symptoms. In some situations, such as after exposure to a known case, in order to return to work, daily testing will be required for a period. If your patient has an unexpected or awkward positive (or negative) RAT, the first step is to have it repeated straight away by an experienced operator, with close attention to technique, mixing, number of drops used and the time of reading. We've seen a few false positives, so inpatients picked up by RAT should all also be confirmed by a standard NPS PCR test. Self-administered RAT test results should be uploaded to the national database via one of the web portals but are not visible on the hospital system.