

COVID-19 Testing Plan

Updated August 2023

Graphical user interface, text, application

Description automatically generated

Citation: Te Whatu Ora – Health New Zealand. 2023. *Testing Plan for COVID-19 in Aotearoa New Zealand*. Wellington: Te Whatu Ora – Health New Zealand.

Published in June 2023 by Te Whatu Ora – Health New Zealand  
PO Box 793, Wellington 6140, New Zealand

ISBN 978-1-99-106713-5 (online)



This document is available at [tewhatuora.govt.nz](https://www.tewhatuora.govt.nz/)

|  |  |
| --- | --- |
| **CCBY** | This work is licensed under the Creative Commons Attribution 4.0 International licence. In essence, you are free to: share ie, copy and redistribute the material in any medium or format; adapt ie, remix, transform and build upon the material. You must give appropriate credit, provide a link to the licence and indicate if changes were made. |

Acknowledgements: Te Whatu Ora would like to acknowledge the Communicable Disease Network Australia and the Australian Public Health Laboratory Network Revised Testing Framework for COVID-19 in Australia for helping guide the content of this plan.

Contents

[Introduction 4](#_Toc137049063)

[Part One 4](#_Toc137049064)

[Background 4](#_Toc137049065)

[Purpose of the COVID-19 Testing Plan 4](#_Toc137049066)

[Factors affecting testing decisions 5](#_Toc137049067)

[Local planning and protocols 5](#_Toc137049068)

[Strategic context 6](#_Toc137049069)

[Purpose of testing in response to COVID-19 6](#_Toc137049070)

[Equity and advancing equitable access and outcomes 9](#_Toc137049071)

[Priority access to COVID-19 Testing 9](#_Toc137049072)

[Data collection requirements for COVID-19 Testing for monitoring purposes 13](#_Toc137049073)

[Part Two 15](#_Toc137049074)

[Testing response framework 15](#_Toc137049075)

[Context 15](#_Toc137049076)

[Utilisation of testing in Aotearoa New Zealand 15](#_Toc137049077)

[Target groups for testing 16](#_Toc137049078)

[Introduction to Testing Guidance 17](#_Toc137049079)

[Testing considerations 18](#_Toc137049080)

[Facilities with an increased risk of viral amplification 18](#_Toc137049081)

[Asymptomatic staff screening 19](#_Toc137049082)

[Visitors to healthcare facilities 19](#_Toc137049083)

[Boarding schools and tertiary student residences 19](#_Toc137049084)

[Community gatherings - testing 20](#_Toc137049085)

[List of Guidance Documents for Specific Settings 20](#_Toc137049086)

[Appendix 1: Table A1: Recommended Testing by Target Group 22](#_Toc137049087)

[Appendix 2: Table A2: Surveillance in Aotearoa New Zealand (as at date of publication) 23](#_Toc137049088)

# Introduction

The Testing Plan has been divided into two parts for ease of use:

* Part One provides the overarching and strategic information in relation to Testing
* Part Two provides an introduction to the operational testing guidance documents and a summary of important information in relation to settings and facilities.

# Part One

## Background

Aotearoa New Zealand’s COVID-19 response has continually evolved as both the virus and our ability to manage it has changed.

From our initial elimination strategy, we have shifted to a minimisation and protection approach. Protecting lives and livelihoods remains the goal of the Government’s COVID-19 response, however it is now possible to do this with fewer requirements, giving greater certainty to people, businesses and communities. Our focus has changed with the introduction of vaccines and antivirals, and with recognition that elimination of community transmission is no longer an appropriate objective. In response, our approach to testing has changed, but remains a key tool of our response to, and management of, COVID-19.

There are no longer any COVID-19 policy settings in place. This means that, as with other notifiable diseases, public health management of COVID-19 will be guided by the provisions of the Health Act, supported by best practice guidance in the Communicable Disease manual and national Infection Prevention Control (IPC) guidance documents.

There is recommended guidance for isolation and mask use, which can be found on the [Unite Against COVID-19 website.](https://covid19.govt.nz/)

## Purpose of the COVID-19 Testing Plan

The Testing Plan for COVID-19 (the Plan), which has been revised for the May-October 2023 period, outlines target population groups and associated methods of testing.

The Plan is responsive not only to the disease prevalence, but also to its significant impact on healthcare and other sectors of society.

For convenience, the plan generally refers to “testing” in terms of both the analytic method used to test samples and the sample collection methodology. These two components of the testing process are related. For example, self-collected samples used for Rapid Antigen Testing are generally not suitable for PCR analysis or subsequent Whole Genome Sequencing. Rapid Antigen Test methods on the other hand are intentionally designed to facilitate self-sample collection and home testing. The plan considers the following scenarios:

* changes in disease prevalence from low to high (peaks and troughs in case numbers)
* introduction of one or more significant variants of interest and/or concern (VOI, VOC)
* changes to public health and infection prevention and control (IPC) measures, that may result in changes in case rates in specific groups
* significant impact on response capacity of specific health and other systems at national, regional, and local levels (for example, aged residential care (ARC), hospitals, primary care, laboratories, other specific providers)
* evidence of significant impact on specific population groups (for example, Māori, Pacific people, residents of Aged Residential Care facilities, oncology patients, children); and
* any scenario where there is an identified significant increase/decrease in risk, which would require a change in the approach to testing.

## Factors affecting testing decisions

Overall, the decision to test and which method to be used will be influenced by:

* likelihood of the person returning a positive test result (presence of symptoms and/or risk of exposure)
* testing purpose (clinical care, prevention of onward transmission, public health intelligence)
* transmission rates within a specific community or setting
* residence or work settings; and
* availability and turn-around time (TAT) of the testing method.

Guidance: Testing Technologies and Modalities can be found here

## Local planning and protocols

At regional and local levels and within specific settings, both the recommended advice within this Plan, as well as specific testing guidance documents, need to be considered and incorporated when implementing protocols for testing patients, employees/contractors, and visitors to facilities.

RAT and PCR testing recommendations in local and regional documentation should align with the Testing Plan and guidance documents across all settings and facilities.

## Strategic context

Testing to detect COVID-19 remains an essential tool of the public health response under our current settings and in the pathways for managing COVID-19 in the community and in hospitals.

This plan is underpinned by the following principles:

* **Preparedness:** we are ready to respond to new variants with appropriate measures when required (tools in place, including surveillance, to inform a response)
* **Protective and resilient**: we continue to maintain resilience across the system and protect those at higher risk of severe illness due to COVID-19. The Plan has been developed in conjunction with other Government guidance and plans for COVID-19, including the *Surveillance Strategy* and *Surveillance Plan*[[1]](#footnote-1).

## Purpose of testing in response to COVID-19

Testing is a process which starts with the recognition of an indication for testing and ends with an intervention undertaken based on the result of the test. As noted above, this plan generally refers to both sample collection and analysis of the sample as part of the test but in fact these are two distinct components of the process.

In some instances, the same sample method can be used with different analytic methods. Both sample collection and analytic methods have important properties, such as sensitivity, that need to be considered when interpreting results.

The combination of sample collection and analytic method (referred to as test) as part of this process, is partly dependent on the planned interventions - public health, infection prevention control measures, or clinical management - based on the result of the test.

There are two main purposes for testing, each of which has a specific aim and method to inform decision makers. These are:

* **Diagnosis** of symptomatic people (for clinical and public health purposes)
* **Surveillance** (population or subpopulation level)

While these purposes for testing activity are distinct the methods are not independent. As the NZ epidemic has progressed methods used to diagnose cases having increasingly become the main source of human surveillance data. This is primarily because of the removal of asymptomatic testing at the border, for designated high risk worker categories, or universal testing in healthcare settings. The main exemption to this trend is wastewater testing that continues as a surveillance only methodology.

The recommended type of test to be performed and the breadth of testing undertaken for each purpose will vary dependent on the overall context of COVID-19 and public health measures in place at the time.

### 1. Diagnosis

Diagnostic testing supports clinical and public health decisions by confirming or not confirming a diagnosis. It is part of a clinical and/or public health management pathway for an individual or population group and is undertaken based on the signs and symptoms of a disease (for example, symptoms compatible with COVID-19).

### 2. Surveillance

Surveillance testing is used to monitor frequency and distribution of infections and provide scientific and public health intelligence to improve our understanding of the epidemiology and presentation of a disease, efficiency and efficacy of its management, and associated outcomes. It assists in supporting and informing public health decision making and actions at national, district, and local levels within Aotearoa New Zealand.

Testing is an essential tool in providing COVID-19 intelligence, with relevant data used alongside information sourced from other areas (e.g., clinical, behavioural insights, surveys and international experience).

There are several objectives of surveillance:

* early warning of changes in epidemiological profiles
* monitoring morbidity and mortality trends
* burden of disease on healthcare capacity to enable a proportionate response to the continually changing status of the pandemic (e.g., healthcare workers, hospitalisations, and intensive care unit admissions)
* monitor priority groups (e.g., Māori) and settings (e.g., borders)
* monitoring and early detection of new VOC; or
* enhanced surveillance to monitor those at the highest risk of disease, including:
* characterisation of variant transmissibility; severity, and immune evasion
* determining the rate of long COVID-19, and assessing contributing risk/immune factors
* determining correlation of protection; and
* measuring antibodies to estimate cumulative population immunity compared to reported case rate, and further understanding of immunity from infection *vs* immunity.

### 3. Screening

It should be noted that asymptomatic (screening) testing for COVID-19, with the exception of close household contacts to a known case, is no longer generally recommended in community, healthcare settings or facilities. Where appropriate, measures including adherence to Public Health IPC practices and vaccination and hybrid immunity are considered sufficient under the current settings.

### NZ COVID-19 Surveillance Strategy and Surveillance Plan

There are active and passive surveillance programmes in place in Aotearoa New Zealand which are described in the [COVID-19 Surveillance Strategy and Surveillance Plan.](https://www.tewhatuora.govt.nz/for-the-health-sector/covid-19-information-for-health-professionals/covid-19-surveillance-strategy)

The COVID-19 Surveillance Strategy and Surveillance Plan, updated 22 December 2021, are currently under review to ensure that COVID-19 surveillance systems and programmes remain fit for purpose, including community infection and seroprevalence surveys. This Plan should be considered in conjunction with the [Surveillance Strategy and Surveillance Plan](https://www.tewhatuora.govt.nz/for-the-health-sector/covid-19-information-for-health-professionals/covid-19-surveillance-strategy).

### Variants of Interest and Concern (VOI and VOC)

The purpose of whole genome sequence (WGS) testing for COVID-19 positive people is to detect and monitor variants and their impacts. Samples collected at home, or in other settings, for analysis using a Rapid Antigen Test are not suited to further analysis with Whole Genome Sequencing

Consequently, collection of another sample for a polymerase chain reaction (PCR) test may be required for symptomatic people who meet the following criteria:

* overseas travel history to areas where there are identified VOCs
* people who are hospitalised with COVID-19 infection; and
* priority population groups who are at higher risk of producing a mutation of the virus, that creates a new variant.

Key response measures within the Strategic Framework for [COVID-19 Variants of Concern](https://www.health.govt.nz/covid-19-novel-coronavirus/covid-19-response-planning/variants-concern-framework-summary#:~:text=There%20is%20a%20high%20likelihood,severe%20variants%20that%20could%20emerge.) have been identified, as a combination of baseline measures and extra measures that would be used with more severe VOCs.

The Plan will be updated with further information as required when the Strategic Framework for COVID-19 Variants of Concern is updated.

Any new VOCs or VOIs will be assessed through the Public Health Risk Assessment process and subsequent testing response to support public health action, which will be communicated through this process to providers.

## Equity and advancing equitable access and outcomes

In Aotearoa New Zealand, people have differences in health management and outcomes that are not only avoidable, but also unfair and unjust. Equity recognises that people with different levels of disadvantage require different approaches and resources to obtain equitable health outcomes.

For each testing option, different approaches to service delivery and commissioning are required to ensure they are fit for purpose.

Therefore, the Plan and response measures need to continue empowering and supporting community groups and advocates to make decisions to respond directly to health and wellbeing needs and challenges in their communities.

## Priority access to COVID-19 Testing

People who experience the highest level of inequity and/or greatest risk of harm or poor health outcomes are identified in the priority groups for access to COVID-19 Testing.

The Plan prioritises people who have higher rates of morbidity, hospitalisation and length of stay, mortality, and hardship due to COVID-19. Expedited access to testing and accurate early identification of infection in these groups allows early intervention and treatment and support to reduce the burden of disease for individuals and their whānau.

**Priority people**are defined as those who are inequitably impacted by COVID-19. People in this group are eligible for targeted assessments regarding additional clinical and social support. The COVID-19 pandemic has exacerbated existing inequities for specific groups, including:

* **Māori** who experience greater inequity and disadvantage due to COVID-19 resulting in poorer outcomes.
* **Pacific People** who have had the highest age-standardised hospitalisation rates for COVID-19, and experienced age-standardised mortality rates 2.4 times greater than European and other population groups.

Other priority groups within our population who may also experience inequity due to poorer health or social outcomes and/or barriers to accessing testing include:

* **Elderly (65 years and over)** experience inequity as this age group collectively has the highest rate of poor outcomes including total numbers hospitalised, average length of stay and/or death from COVID-19. Māori and Pacific people are overrepresented in case numbers for the 65 years and over age group as well as other age groups.
* There is evidence that elderly people in Aged Residential Facilities are at higher risk than people of a similar age in independent living. This observation may not apply to Māori or Pacific populations who are less likely to reside in ARC facilities.
* **Disabled people (**including tāngata whaikaha Māori and Pacific disabled people) experience inequities due to greater barriers to access, and for some within this group, increased susceptibility to COVID-19 infection and/or complications.
* **People with** **severe mental health and addiction**.
* **Other inequitably impacted populations** including refugee and asylum seekers, remote and rural people1, rough sleepers and those in transitional housing, and those not enrolled in primary practices.

The following groups are those at higher risk of severe illness from COVID-19 **(vulnerable people):**

* **People with high-risk medical conditions (long-term health conditions and/or immunocompromised)** are [inequitably impacted due to increased susceptibility to COVID-19 infection and/or complications](https://covid19.govt.nz/prepare-and-stay-safe/people-at-higher-risk-of-severe-illness-from-covid-19/)
* **Pregnant people**

Note this group also includes Māori, Pacific people and the elderly over 65.

### Te Tiriti o Waitangi and Māori

The COVID-19 pandemic has seen Māori experience greater inequity and disadvantage resulting in poorer outcomes compared to non-Māori. It is critical that the needs of Māori, and the commitments made under Te Tiriti o Waitangi, are central to the health and disability response to COVID-19.

The principles of Te Tiriti o Waitangi provide the foundations for meeting our obligations under Te Tiriti in our day-to-day work. All levels of our health and disability system need to be responsive to Māori, ensuring that the principles of Tino Rangatira, Equity, Active Protection, Options, and Partnership[[2]](#footnote-2) are reflected in practice.

Specific guidance has been developed to support healthcare providers with COVID-19 testing services in relation to Māori to ensure there is continued access to services, along with support where it is needed.

The following should be used to promote and advance culturally safe practices for all priority groups and settings:

* proactive collaboration and formal engagement with Māori subject matter experts/advisors/iwi and Māori providers to inform managing delivery testing gaps for Māori
* timely, consistent, and easily understood communication, including promoting health literacy for individuals, whānau and community; and
* creating culturally safe environments for individuals and their whānau

### Pacific People

The COVID-19 pandemic has seen Pacific people experience the highest hospitalisation rates for COVID-19, and experienced mortality rates 2.4 times greater than European and other population groups[[3]](#footnote-3).

Key issues have centred on response and preparedness challenges which included access to resources, the siloed agency conditions to support localised agile responsive models of care, and appropriate and timely communication of public health messages. Despite this, the Pacific community rallied, and Pacific providers and churches provided a critical part of the response.

Pacific providers, churches, and communities must be actively engaged and prioritised in local and regional tactical approaches to COVID-19 testing. A specific Pacific ethnic approach should be facilitated where appropriate to maximise opportunities for equity of access to testing.

Specific guidance has been developed to support healthcare providers with COVID-19 testing services in relation to Pacific to ensure there is continued access to services, along with support where it is needed.

### Disability Community

Our objective is to provide accessible testing for disabled communities, treating its members and their whānau with dignity and respect. Disability Support Services recipients have been 4.2 times more likely to be admitted to hospital for COVID-19 compared to the rest of population, and 13 times more likely to die of or with COVID-19 over the course of the epidemic.

Close engagement with disabled people, their representative organisations and whānau, Whaikaha, along with providers, local advisory groups, carers, and support providers will provide tactical advice on how both national and regional testing services can best respond to the needs of disabled people and their whānau.

### Barriers to access and disincentives

There are a range of barriers and disincentives to testing access and uptake. These are both perceived and real, across diverse population groups including Māori, Pacific and disabled peoples.

Continuing to identify and understand these barriers will support decisions and actions aimed at enhancing more equitable and widespread national access to COVID-19 testing across Aotearoa New Zealand.

Barriers and disincentives to testing vary by population groups, location, and type of testing modality, but may include:

* perceived need to test: self-assessment of severity or likelihood of COVID-19 or other viruses
* the process: expectations and experience of discomfort, inability (for financial, family obligation or other reasons) to isolate home after testing as recommended.
* financial: perceived and real costs of testing/visiting primary care facilities (getting to and from an appointment, the appointment itself, following recommended isolation advice after PCR testing or positive COVID-19 test result, lack of sick leave arrangements, financial hardship);
* visa status: new migrants, bridging and temporary visa holders may not realise they are eligible for free testing; and
* access for disabled people to get information on the time and method of testing, physical access to testing and health facilities, access to adequate transport and health facilities, and sensory environments.

### Community engagement in relation to Testing

Ongoing engagement with our communities is critical in ensuring the appropriate health messages for the current health care settings are reaching all sections of the community.

In particular, it is essential we focus on those communities at greatest risk of serious illness from COVID-19, including Māori and Pacific people, disabled people, the elderly and the clinically vulnerable.

One way this is being achieved is through community providers supporting access to testing services for priority people and those at higher risk of illness from COVID-19 (vulnerable people) by enabling expanded access to, and acceptability of, COVID-19 testing services within Aotearoa New Zealand.

They also play an important role for priority people in identifying positive cases and connecting these people with the appropriate health and welfare services within their community.

## Data collection requirements for COVID-19 Testing for monitoring purposes

All laboratory data information and collection requirements should be aligned with data privacy impact statements and Māori data sovereignty guidelines.

To understand the amount of testing being conducted for SARS-CoV-2 across Aotearoa and in what settings, it is crucial to understand the:

* demographic (who is being tested)
* if testing is based on symptomology and/or absence of symptoms
* geographic region or by facility (where testing is occurring) distribution of testing
* type of test being performed and if all results are reported
* age group
* sex/gender
* ethnicity
* rates of testing for Māori and other ethnic groups in different settings (community, primary care, secondary care)
* referrer type

Central collation and reporting at the national level provides a denominator for calculating test positivity rates and informs an understanding of how equitably testing is being implemented and accessed nationally, regionally and at a locality level. This information also identifies key demographic groups or geographic regions where increased public health, and testing efforts may be required.

In addition, it is important to understand national and provider testing activity to assess capacity and throughput and monitor service risks. The following information from tests should continue to be assessed to support improvements in quality and service delivery:

* age group
* sex /gender
* ethnicity
* geographic region and referrer type
* test type
* by laboratory or testing device
* referrer or provider
* tests performed by test type
* turn-around times with KPIs

### Changes in local testing regimes that impact on data collection

It is essential for interpretation of laboratory information for surveillance programmes for providers to notify if they change testing regimes that may impact on data interpretation and comparability and cumulative reporting; including targeted groups tested and use of test modality.

# Part Two

Part two of the Testing Plan has been divided into two sections for ease of use:

* Testing Response Framework
* Introduction to Testing Guidance

# Testing response framework

## Context

This section contains information on how the Plan intends to optimise utilisation of the available laboratory testing capacity and capability and have non-laboratory tests available to support the response as needed, whilst taking an agile approach.

## Utilisation of testing in Aotearoa New Zealand

The recommended use of tests/methods will be narrowed and widened dependant on the impact COVID-19 is having at a given time, on our communities, healthcare services or within specific environments. The testing technologies available and the recommended use of them are described in Appendix 1 - Table 1A - Recommended testing for Target Groups*.*

The below six considerations should be taken into account to determine the most appropriate testing modality and delivery for COVID-19 and other respiratory illnesses:

* **Who** is being tested
* **Why** the person is being tested (purpose). The test may be to support a clinical decision concerning the use of antiviral medications for the individual. It may also ensure that the case is aware of the recommendation to isolate and prevent transmission to the high-risk population. The test result may inform actions for an individual, whānau or community, facility or a combination of these
* **What** viral or other pathogens need to be ruled in/out
* **Which** is the best test to achieve the purpose in a culturally, logistically, and equitably acceptable way for the testing recipient, and in a practical and cost-effective way for the system
* **Where** the testcan be accessed- ease of access to and from collection site; and
* **When** the test result is needed for action - timeliness of results for public health and clinical decision making.

These considerations must be weighed up, and underpinned, by a Te Tiriti o Waitangi and health equity response as described in the Plan which has implications for each consideration.

The mode and service delivery models vary in some settings to enable access and meet turn-around requirements for various priority population groups. Further information can be found in the Testing Technologies and Modalities guidance.

## Target groups for testing

For most people, symptomatic infection with SARS-CoV-2 results in a self-limiting illness.

People and populations who should be prioritised for access to testing to address inequities are described in the *priority access to COVID-19 testing* section of this Plan. Needs of our priority populations should be considered first and foremost in any of the target groups and settings described below.

The priority for testing should extend not only to those at greatest risk of serious illness but to those most likely to come in to contact with the highest risk groups. For example, this would include children living in whanau Māori homes that include older whanau or other household members at high-risk of hospitalisation or death due to COVID-19 such as multigenerational households.

In the current Plan, three groups are targeted for testing, as outlined below.

### People with COVID-19-compatible symptoms (diagnostic testing)

The purpose of testing people with symptoms is early detection of cases and improving COVID-19-related health outcomes by supporting timely:

* Access to antiviral therapeutics for those [eligible](https://pharmac.govt.nz/news-and-resources/covid19/access-criteria-for-covid-19-medicines/covid-antivirals/); and
* To identify cases so they can take action to prevent onward virus transmission in communities and to those at highest risk of inequitable outcomes.
* A minimum isolation period of 5 days is recommended for all cases even if you only have mild symptoms.
* If you still feel unwell after you have completed 5 days of isolation, we recommend you stay home until you have recovered.
* After completing the recommended isolation, we recommend you wear a mask if you need to visit a healthcare facility or an aged residential care facility, or you have contact with anyone at risk of getting seriously unwell with COVID-19 up until 10 days after your symptoms started or you tested positive. This is because some people are infectious for up to 10 days.

During winter and with the re-emergence of a range of pathogens that cause similar symptoms to COVID-19, consideration of alternative diagnoses is particularly important especially for Māori, Pacific people and those at higher risk of severe illness from COVID-19. For example, confirmation of a COVID-19 diagnosis may lead to different treatment for someone who otherwise would have been treated for influenza Note that people can be co-infected with more than one pathogen.

### People with known household exposure to SARS-CoV-2

The purpose of testing people in this group is to manage any outbreaks and reduce onward transmission of SARS-CoV-2.

All household contacts of known COVID-19 cases are recommended to RAT test daily for five days from the day when the first case in the household tested positive or developed symptoms (whichever is earliest), as they are at the greatest risk of infection.

Household contacts: for definition, testing, and management [see here](https://www.tewhatuora.govt.nz/for-the-health-sector/covid-19-information-for-health-professionals/covid-19-information-for-specific-sectors/covid-19-family-whanau-and-aiga-carers/).

### People within facilities at higher risk of SARS-CoV-2 exposure or environments where disease amplification is more likely

The purpose of testing symptomatic people in this group is reducing onward transmission of SARS-CoV-2 to people at greatest risk of hospitalisation and death.

This target group includes people:

* who have frequent, close, or extended contact with others who have the potential for greater exposure to SARS-CoV-2, including people who care for people with COVID-19 (for example, healthcare workers and support care workers).

Testing of the above target groups is summarised in Appendix 1 - Table 1A - Recommended testing for Target Groups.

# Introduction to Testing Guidance

COVID-19 Testing guidance documents have been developed to provide operational information for settings and facilities regarding recommended testing for COVID-19.

A list of all the Testing Guidance documents can be found at the end of this section.

## Testing considerations

The following should be considered when undertaking testing of patients:

* when screening, clinicians should consider the required sensitivity and specificity of the test as determined by the individual’s susceptibility to severe outcomes from COVID-19 infection and balance the risk of the planned procedures against test availability and TAT.
* assumed infection prevention control measures will be implemented as per local guidance (for example, streaming patients based on symptomology, known COVID-19 status and/or vulnerability) to reduce hospital-acquired infection transmission risk, and where not feasible, implement guidance for high transmission/surge.
* if a patient has had a known COVID-19 infection within the last 28 days of release from isolation and is symptom-free, repeat testing for COVID-19 not indicated.
* if an inpatient’s length of hospital stay is more than 48 hours, consideration may be given to repeat RAT screening during a surge in hospitalised COVID-19 cases as an indicator of higher local transmission.

## Facilities with an increased risk of viral amplification

Facilities where there could be an increased risk of viral amplification include aged residential care, community residential care, hospices, correctional and youth justice.

This is due to the close living conditions of the population groups within these types of facilities, making them more susceptible to severe outcomes due to COVID-19 infection as well as psychosocial impacts of isolation due to COVID-19.

Some facilities in rural or low socio-economic locations face additional challenges in caring for these groups, if they are affected by COVID-19 along with the staff.

People in these settings should be encouraged to test if symptomatic but should take precautions if symptomatic and test negative, as they may have other respiratory infectious disease.

Asymptomatic testing is not generally recommended unless considered a close household contact. The most important protective measures against COVID-19 and other respiratory pathogens in the workplace are ensuring that employees are supported to stay home when they have onset of respiratory symptoms, there is encouragement of mask wearing when individuals are working in close contact with others, and good hygiene practices are promoted.

Heating, ventilation and air conditioning should be optimised within available resources. Overcrowding should be avoided.

Some of these facilities may care for a larger proportion of priority populations, including those at higher risk of severe illness.

Vaccinations also can play a part in helping prevent and manage transmission and outbreaks of COVID-19 within facilities. Therefore, keeping residents (with their consent), up to date with their COVID-19 vaccinations is important.

As many of these individuals are residing in these facilities under the direction of either a health funder or government there is an additional obligation to provide a low- risk environment

## Asymptomatic staff screening

In general, asymptomatic testing of healthcare workers is not recommended if they are using risk assessment tools and applying systematic IPC measures which significantly reduce the risk of workplace exposure. It is essential that healthcare workforce is maintained to ensure ongoing care of people.

If the healthcare workforce is significantly affected by COVID-19, service providers may undertake their own risk assessments to ensure safety of patients and the workforce which may include a local testing protocol.

## Visitors to healthcare facilities

Visitors to healthcare settings should follow the advice in the Te Whatu Ora guidance on mask use and visitor guidance for hospitals and other health disability care settings, which can be found [here](https://www.tewhatuora.govt.nz/for-the-health-sector/covid-19-information-for-health-professionals/covid-19-information-for-all-health-professionals/covid-19-infection-prevention-and-control-recommendations-for-health-and-disability-care-workers/personal-protective-equipment-guidance-for-healthcare-settings/).

## Boarding schools and tertiary student residences

Symptomatic people are included in the targeted symptomatic testing group.

In student residences, preventive measures are strongly recommended to stop onward transmission between residents.

If there is a high incidence of COVID-19 in a specific facility, all those with symptoms should be tested in line with the advice for the general population. The National Public Health Service will work in partnership with key agencies in the event of a large outbreak in education settings or residences.

## Community gatherings - testing

Community testing strategies may be incorporated into a localised response to protect Māori, Pacific, and other priority population groups and their whānau.

This includes the importance of collaboration and acknowledging community context which will ensure that the needs of their whānau and communities are central to their response.

Community groups and event planners need to work together to ensure the appropriate measures are considered when organising large gatherings to include:

* relevant public health messaging
* COVID-19 testing advice and where to obtain RATs
* COVID-19 vaccine advice

## List of Guidance Documents for Specific Settings

* Guidance: Hospitals and Secondary Based Care Facilities
* Guidance: Primary Care and other Clinic-based Settings which includes:
* Testing Operational Guidance for General Practice and Urgent Care
* Guide for diagnosis of COVID-19 reinfection, rebound, persistent infection and long COVID-19
* Guidance: Aged Residential Care and Community Residential Care Facilities and Hospices
* Guidance: Correctional and Youth Justice facilities
* Guidance: Testing for Māori and Pacific People within Healthcare Settings
* Guidance: Community Providers
* Guidance: To support access to testing for Disabled people
* Guidance: Testing for Businesses
* Guidance: Testing of International Arrivals
* Guidance: Testing Technologies and Modalities
* Guidance: Laboratory and Testing Operational Considerations

## Appendix 1: Table A1: Recommended Testing by Target Group

|  |  |  |
| --- | --- | --- |
| Symptomology | RECOMMENDED TESTING | |
| Factors for service managers to consider implementing testing and response to management of an outbreak: hospital bed capacity + laboratory testing capacity + capability + testing supplies + staffing levels + demands for testing services + case rates +hospitalisation rates | | |
| Symptomatic | **General population (community and self-testing)** | **RAT**  If RAT is negative, and COVID-19 symptoms persist, repeat RAT in 24 and 48 hours |
| **Facilities (Aged Residential Care, Community Residential Care, Hospices, Correctional and Youth Justice)**  **Hospitals**  **Outpatients**  **Emergency services** | **RAT (to inform clinical and public health management decisions)**  If RAT is negative, and COVID-19 symptoms persist, repeat RAT in 24 and 48 hours  PCR where a result can influence treatment options for priority people1 and those at risk of severe illness from COVID-19(vulnerable)2  (For all hospitalised positive PCR cases, refer samples for Whole Genome Sequencing WGS) |
| **Priority People1 and those at higher risk of severe illness from COVID-19 (vulnerable)2** | **SELF-TEST RAT**  If unable to self-test - ASSISTED RAT (Community Provider or GP)  If RAT is negative, and COVID-19 symptoms persist, repeat RAT in 24 and 48 hours  PCR where a result can influence treatment options |
| Symptomatic patient presenting to General Practice (GP) – please refer to the [COVID-19 Testing Operational Guidance for General Practice and Urgent Care](https://www.tewhatuora.govt.nz/assets/COVID-19-/Testing-Plan-and-Guidance/COVID-19-Primary-Care-and-Other-Clinic-based-Settings-Guidance.pdf) | | |
| Symptomatic international arrival | Self-test with **RAT** - if positive, get a **PCR** to enable Whole Genome Sequencing (**WGS**) | |
| Asymptomatic (household contacts) | **Household contacts**: for definition, testing, and management [see here](https://www.tewhatuora.govt.nz/for-the-health-sector/covid-19-information-for-health-professionals/covid-19-information-for-all-health-professionals/covid-19-advice-for-all-health-professionals#guidance-on-managing-community-cases-and-contacts)  No other asymptomatic testing is recommended | |

Priority people1 are defined as those who are inequitably impacted by COVID-19. People in this group are eligible for targeted assessments regarding additional clinical and social support. The COVID-19 pandemic has exacerbated existing inequities for specific groups, including: **Māori** who experience greater inequity and disadvantage due to COVID-19 resulting in poorer outcomes, **Pacific People** who have had the highest age-standardised hospitalisation rates for COVID-19, and experienced age-standardised mortality rates 2.4 times greater than European and other population groups. Other priority groups within our population who may also experience inequity due to poorer health or social outcomes and/or barriers to accessing testing include: **Elderly (65 years and over)** experience inequity as this age group collectively has the highest rate of poor outcomes including total numbers hospitalised, average length of stay and/or death from COVID-19. Māori and Pacific people are overrepresented in case numbers for the 65 years and over age group as well as other age groups **Disabled people** (including tāngata whaikaha Māori and Pacific disabled people) experience inequities due to greater barriers to access, and for some within this group, increased susceptibility to COVID-19 infection and/or complications. **People with severe mental health and addiction, other inequitably impacted populations** including refugee and asylum seekers, remote and rural people1, rough sleepers and those in transitional housing, and those not enrolled in primary practices.

The following group are those at higher risk of severe illness from COVID-19 **(vulnerable people)2 People with high-risk medical conditions (long-term health conditions and/or immunocompromised)** are [inequitably impacted due to increased susceptibility to COVID-19 infection and/or complications](https://covid19.govt.nz/prepare-and-stay-safe/people-at-higher-risk-of-severe-illness-from-covid-19/), **Pregnant people**. (Note this group includes Māori, Pacific people and the elderly over 65).

## Appendix 2: Table A2: Surveillance in Aotearoa New Zealand (as at date of publication)

|  |  |
| --- | --- |
| *Active SARS-CoV-2 testing surveillance* | |
| Sentinel site and syndromic surveillance; sampling and laboratory respiratory multiplex PCR testing | Influenza-like illness (ILI) syndromic screening includes COVID-19 testing within respiratory panels.  Severe Acute Respiratory (SARI) Syndromic Surveillance includes COVID-19 testing within respiratory panels.  *Ad hoc* targeted sampling and testing as directed by public health services. |
| COVID-19 specific testing surveillance | Whole Genome Screening for variants from border, community, and hospital NAAT[[4]](#footnote-4) positive cases to enable early detection of variants of concern and changes in virus.  ***Note*** the PCR testing is passive testing – collected during the course of clinical care - but the subsequent WGS is generally active surveillance.  Environmental - wastewater testing: targeted genotype testing to monitor rates and distribution of variants within a region(s) or targeted setting; estimate levels of infection via quantitation; presence/absence testing where appropriate. |
| ***Passive SARS-CoV-2 testing surveillance*** | |
| Captured as part of testing priority groups. | Community/Primary care: Laboratory based NAAT/RAT[[5]](#footnote-5) results - monitoring of NAAT testing and case rates.  Hospital: Laboratory/hospital based NAAT/RAT - monitoring of NAAT testing rates and results reporting.  Self-reported RATs - capture of all reported community performed positive RAT results. |

1. [COVID-19: Surveillance strategy 22 December 2021](https://www.tewhatuora.govt.nz/for-the-health-sector/covid-19-information-for-health-professionals/covid-19-surveillance-strategy#:~:text=The%20goal%20of%20the%20surveillance,Protection%20Framework%20will%20be%20part).) [↑](#footnote-ref-1)
2. 1Rural’ is defined according to the [Geographic Classification of Healthcare](https://storymaps.arcgis.com/stories/da035e374dbb4ea0ae3b31b6777924ad), based on the location of the patients home address, in defined regions R2 and R3.

   [Te Tiriti o Waitangi | Ministry of Health NZ](https://www.health.govt.nz/our-work/populations/maori-health/te-tiriti-o-waitangi) [↑](#footnote-ref-2)
3. 3[Public Health Agency. 2022. COVID-19 Mortality in Aotearoa New Zealand: Inequities in Risk. Wellington: Ministry of Health.](https://www.health.govt.nz/system/files/documents/publications/covid-19_mortality_in_aotearoa_inequities_in_risk_september_2022_29_sept.v2.pdf) [↑](#footnote-ref-3)
4. A Nucleic Acid Amplification Test, or NAAT, is a type of viral diagnostic test for SARS-CoV-2 that detects genetic material (specifically the ribonucleic acid (RNA) sequences). [↑](#footnote-ref-4)
5. Rapid Antigen Test, or RAT, is a is a rapid diagnostic test suitable for point-of-care testing that directly detects the presence or absence of an antigen. [↑](#footnote-ref-5)