Clinical Guideline

Health
Hunter New England
Local Health District

COVID-19 Surveillance and Testing in HNELHD Facilities

Sites where PCP applies	All HNELHD facilities
This PCP applies to:	
1. Adults	Yes
2. Children up to 16 years	Yes
3. Neonates – led than 29 days	Yes
	Approval gained from the Children, Young People and Families Network on 3 February 2022
Target audience	All staff
Description	This guideline provides information on the types of SARS-CoV-2 testing and guidance on the appropriate tests for clinical situations in HNELHD facilities.

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Keywords	COVID-19, COVID, SARS-CoV-2, PCR, Rapid PCR, RAT, Rapid Antigen
Document registration number	HNELHD CG 21_71
Replaces existing document?	Yes
Registration number and dates of superseded documents	HNELHD CG 21_71 Version Six from 28 January 2022; Version Five from 25 January 2022; Version Four from 17 January 2022; Version Three from 23 December 2021; Version Two from 17 December 2021; Version One from 15 December 2021

Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics:

- Communicable Disease Network Australia (CDNA)

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GLOSSARY

Acronym or Term	Definition
COVID-19 symptoms	People who have at least one of the following COVID-19 like symptoms should test for SARS-CoV-2: • Fever (≥37.5 °C) or history of fever (e.g. night sweats, chills); or • Acute respiratory infection (e.g. cough, shortness of breath, sore throat); or • Loss of smell or loss of taste Other non-specific symptoms of COVID-19 include: fatigue, headache, runny nose, acute blocked nose (congestion), muscle pain, joint pain, diarrhoea, nausea/vomiting and loss of appetite.
Epidemiological Risks	People who have higher risk of exposure to SARS-COV-2 include: • Close contacts of COVID-19 cases • People who provide care for COVID-19 cases (e.g. Health care workers) • Domestic and international aircrew • International arrivals • Workers in managed quarantine facilities
Fully vaccinated	Completed the approved dosing schedule for a TGA registered or recognised COVID-19 vaccine > 7 days prior to presentation and does not meet criteria for immunocompromise
Immunocompromise	Haematological diseases or cancers; Solid organ transplant recipients on immune suppressive therapy; Bone marrow transplant recipients or chimeric antigen receptor T-cell (CAR-T) therapy recipients or those with graft host disease; Non-haematological cancer; Survivors of childhood cancers; Chronic inflammatory conditions requiring medical treatments; Primary or acquired immunodeficiency See Australian Technical Advisory Group on Immunisation (ATAGI) guidance for further information
Not fully vaccinated and/or immunocompromised	Vaccination status is unknown or not completed as per the approved dosing schedule; those who have received vaccination with a vaccine not registered or recognised by the TGA; or those with immunocompromise irrespective of vaccination

PURPOSE AND RISKS

The appropriate use of SARS-CoV-2 testing and surveillance testing is required to ensure early diagnosis and management of patients with COVID-19, safety of staff, patients and visitors, and bed and patient management in health facilities.

The Communicable Disease Network Australia (CDNA) recommends enhanced testing criteria is used due to high levels of community transmission, which requires testing individuals who meet either the COVID-19 symptoms or epidemiological risks criteria.

This guideline outlines the type of SARS-CoV-2 tests available and provides guidance on appropriate use in specific clinical areas within HNELHD facilities.

Risk Category: Clinical Care & Patient Safety

1. Screening

Screening of all patients should occur at the first point of contact with the health system and include symptom check, epidemiological risk status, vaccination status, immunocompromised assessment and previous COVID-19 infection assessment, in order to identify patients who require SARS-CoV-2 testing.

2. SARS-CoV-2 Test Information

The following table outlines the types of SARS-CoV-2 tests available and locations of laboratories providing a service to HNELHD facilities:

Test (turn-around time)	Summary	Collection Procedure	Laboratory Location
Standard PCR (24-48 hours)	High sensitivity and specificity with positive results most likely indicating infection – almost no occurrences of false positives.	Deep nose and throat swab	NSW Health Pathology JHH, Tamworth
Rapid PCR E.g. Xpert Xpress assay, Roche LIAT (run time 2 hours)	Provides an urgent result in 1-4 hours. Requires approval by attending consultant. Document approval on the request form or e-order by adding the name of the approving consultant and their direct phone number. High sensitivity and specificity with positive results most likely indicating infection – almost no occurrences of false positives.	Deep nose and throat swab	NSW Health Pathology Armidale, Belmont, Calvary Mater, JHH, Maitland, Manning, Tamworth St Vincent's Pathology Moree, Narrabri
Rapid Antigen Test (RAT) (10-15 minutes)	Detects viral antigen specific to SARS-CoV-2, the presence of which implies infection. There are various brands available and HNELHD is currently being supplied with both nasal and oral tests. Staff are required to read and follow all manufacturer requirements for the specific test. Nasal swabs generally require insertion of the swab into the nostril with the swab being rotated slowly at least 5 times for 5-15 seconds, and then repeated in the other nostril. Oral swab tests generally require insertion of the swab into the mouth with the swab being rotated slowly against the cheek and tongue 10 times and then held in the mouth for 1-2 minutes. The person must not eat, drink or brush their teeth for at least 30 minutes prior to doing an oral RAT. Oral swabs will generally be used for maternity participants in care, parents/carers of paediatric admissions and staff.	Nasal or oral swab	Point of care testing only
Serology (72 hours)	Detects exposure to natural infection	Serum	NSW Health Pathology JHH

3. Testing in Clinical Situations

SARS-CoV-2 testing should be undertaken using the appropriate test as determined by comprehensive screening and the clinical situation. Surveillance and testing of patients **must not** interfere with clinical care. If a SARS-CoV-2 test or result is not available, the patient's consultation, investigation or treatment should proceed using a risk assessment and implementation of appropriate patient placement and PPE.

All patients with COVID-19 symptoms or epidemiological risks require a SARS-CoV-2 test and must be isolated pending result. If an urgent result is required, rapid PCR or RAT should be used.

Re-testing of a patient by either PCR or RAT within 1 month of release from COVID-19 infection isolation is NOT usually indicated.

The table below outlines the recommended test type according to clinical situation and risk alert. Any variation from recommended testing should be discussed with Operational Executive Directors.

	AMBER **Moderate to High Transmission**	**RED** **High Transmission, Outbreaks**
ED presentations – Adult	Symptomatic*: Rapid PCR or standard PCR	Test all presentations with RAT
ED Presentations – Paediatric	Symptomatic*: Rapid PCR or standard PCR	Test all presentations with RAT~
Adult parents/carers staying with hospitalised children	No routine testing	RAT test on child's admission and when child being tested
Admissions – Adult and Paediatric	Symptomatic*: Rapid PCR Unvaccinated elective admissions: standard PCR at community testing clinic 72 hours prior to admission	Test all admissions with RAT~ Retest with RAT on day 4 and every 72 hours whilst inpatient
ICU Admissions – Adult and Paediatric	Symptomatic*: Rapid PCR Unvaccinated elective admissions: standard PCR at community testing clinic 72 hours prior to admission	Test all admissions with RAT If ICU admission <72 hrs retest at discharge from ICU If ICU admission >72 hrs retest on day 4 and every 72 hrs
Surgery – Emergency	Unvaccinated or symptomatic*: Rapid PCR	All patients: rapid PCR or RAT if time critical
Surgery – Elective including procedures e.g. interventional radiology, endoscopy	Unvaccinated: Standard PCR at community testing clinic 48 hours prior to admission	Test all admissions with RAT
Mental Health Acute Facility admissions	All patients: RAT on admission and every 72 hours whilst inpatient Symptomatic*: Rapid PCR	
Outpatient appointments including antenatal care, perioperative clinic	Symptomatic*: not to attend appointment; standard PCR at community testing clinic	Telehealth where possible Symptomatic* not to attend appointment; RAT at community testing clinic
Birthing Unit presentations	Unvaccinated: RAT on presentation	All patients: RAT on presentation
Maternity participants in care	Unvaccinated: RAT on presentation	RAT on arrival and every second day whilst attending postnatal ward or every 72 hours whilst attending NICU
Dialysis units	All patients: RAT on presentation	All patients: RAT on presentation
Chemotherapy/radiotherapy appointments	All patients: RAT on presentation	
Drop-in clinics (SH clinics, D&A)	Unvaccinated: RAT on presentation	All patients: RAT on presentation
Community Health appointments and home visits	Symptomatic*: not to attend appointment; standard PCR at community testing clinic	Telehealth where possible Symptomatic*: not to attend appointment; RAT at community testing clinic

* Symptomatic indicates any patient with symptoms or epidemiological risks for COVID-19

~ Check manufacturer instructions before use in children, most RAT brands <u>are not suitable</u> for children <2 years. Children <3 months require PCR. Children 3 months to 2 years, use Quidel Sophia RAT or arrange PCR.

4. Test results

Initial patient disposition post emergency department can be determined on RAT result:

- Positive RAT result – manage as COVID-19 positive
- Negative RAT result and no symptoms – manage as COVID-19 negative
- Patients with a negative RAT result AND symptoms consistent with COVID-19, require a multiplex PCR and are to remain in isolation pending results

Ward clinicians may request confirmatory SARS-CoV-2 PCR for RAT positive inpatients who are likely to require sotrovimab or other disease modifying treatment

If high pre-test probability of COVID-19 and initial SARS-CoV-2 result is negative, continue to isolate and arrange repeat testing ideally on a different platform in consultation with microbiologist as soon as possible.

5. Recording test results

Positive PCR results are notified directly to NSW Health by pathology and accessible in the patient's healthcare record in CAP. Automated alerts are added to iPM and electronic patient journey board (EPJB) daily.

Reporting of positive RAT through the Service NSW app or website was launched on 12 January 2022. Updates to systems are currently occurring to allow for automated reporting of positive RAT results for inpatients. In the interim the following process is to be completed:

- The clinician performing the RAT **must record the results** in the patient's healthcare record
- **A manual alert must be placed on the EPJB in the I/R column**
- The new positive RAT result is to be reported onto NSW Health using the Service NSW app or website by the patient. If the patient is not able to complete the Service NSW notification**, staff in the ward that has performed the test or received the patient from ED** are responsible for completing the notification on the patient's behalf using the third party notification option. Confirmation of NSW notification is to be included in the patient's healthcare record.

6. Population Health Led Rapid PCR Testing

Population Health Unit led rapid PCR testing of non-admitted patients requires communication with the Bed Manager who will liaise with the laboratory to confirm capacity, and arrange an appropriate location and time for the individual to present to the facility for testing.

Facility	Bed Manager	Laboratory Hours	Laboratory
Armidale Hospital	0428 256 040	On-demand 24/7	(02) 6776 9835
Belmont Hospital	Ext. 32669	8am to 11pm	(02) 4923 2700
Calvary Mater Hospital	Ext. 50568	On-demand 24/7	(02) 4014 3057
John Hunter Hospital	Ext. 23965	On-demand 24/7	6:30am to 11pm (02) 4921 4000 11pm to 6:30am (02) 4921 4421
Maitland Hospital	Ext. 52803	On-demand 24/7	(02) 4939 2135
Manning Hospital	(02) 6592 9014	On-demand 24/7	(02) 6592 9017
Tamworth Hospital	Ext. 77265	On-demand 24/7	(02) 6767 7833

Note: rapid PCR machines may be temporarily located to regional facilities during an outbreak, and will require a local policy.

7. Staff Surveillance testing

The table below outlines the recommendation for staff surveillance testing according to clinical area.

	AMBER Moderate to High Transmission	RED High Transmission, Outbreaks
Staff in high-risk areas – ICU and ED	Consider RAT 2-3 times per week	
Staff in COVID-19 wards	Consider RAT 2-3 times per week	
Staff in transplant units, haematology and oncology wards	Consider RAT 2-3 times per week	
Staff in MPS	RAT every 72 hours	

IMPLEMENTATION, MONITORING COMPLIANCE AND AUDIT

1. This guideline and its roles and responsibilities are to be communicated to all relevant staff via Executive Directors, General Managers and Director of Medical Services.
2. The document will be communicated via the CE News and be available on the PPG and COVID-19 Intranet pages.
3. The leadership team who has approved the guideline are responsible for ensuring timely and effective review of the guideline. Evaluation will require ongoing review of the most current evidence as well as consideration of HNELHD service capabilities in the implementation of the clinical guideline.

REVISION HISTORY

Version	Date	Changes
Version 7	3 February 2022	Addition of pre-testing information for oral swabs; Changes to testing for maternity participants in care; addition of staff surveillance testing (section 7).
Version 6	28 January 2022	Addition of information on oral and nasal RAT swabs; addition of surveillance testing for staff at MPS.
Version 5	25 January 2022	Addition of guidance on testing not interfering with clinical care; addition of community health to testing table; formatting changes and new section 4.
Version 4	17 January 2022	Updates to testing for admissions, ICU admissions, Birthing unit presentations separated from general admissions, additional examples for surgery and outpatient appointments; Update to PCR requirements following RAT; Addition of reporting test results.
Version 3	23 December 2021	Minor updates; Addition of age restriction on RAT; Addition of Belmont rapid PCR capacity.
Version 2	17 December 2021	Significant updates to align with CEC COVID-19 Surveillance Testing in NSW Healthcare Facilities.
Version 1	15 December 2021	Original document