Clinical Guideline

Health
Hunter New England
Local Health District

Managing COVID-19: Summary of processes for providing a safe environment for staff, patients and visitors

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 28 March 2022
Target audience	All staff
Description	This guideline provides guidance on all aspects of COVID-19 management within HNELHD

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Keywords	COVID-19, COVID, SARS-CoV-2
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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:

- N/A

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GLOSSARY

Acronym or Term	Definition
Confirmed COVID-19	Positive PCR or rapid antigen test (RAT)
Staff	Includes employees, Visiting Medical Officers (VMOs), volunteers, contractors, students and other visiting practitioners
Suspected COVID-19	For the purposes of this clinical guideline, 'suspected COVID-19' refers to patients who meet that enhanced testing criteria or are awaiting results of a COVID-19 PCR or rapid PCR test

PURPOSE AND RISKS

The COVID-19 pandemic has resulted in significant cases and deaths globally. Since the first cases in Australia were detected in January 2020, HNELHD has worked extensively to suppress the spread of COVID-19. With the availability of COVID-19 vaccines, we are now transitioning from a COVID-19 pandemic to an endemic.

All Hunter New England Local Health District (HNELHD) facilities are required to provide care to suspected and confirmed COVID-19 patients within their service capability, in some circumstances this will be the provision of care while arranging and awaiting transfer. This guideline outlines the processes and public health measures for ensuring that HNELHD is able to provide a safe environment for staff, patients and visitors across our 39 health facilities, providing care to COVID-19 patients alongside our normal provision of healthcare to the 1 million people in our district.

Risk Category: Clinical Care & Patient Safety

1. Keeping HNELHD Facilities Safe

1.1 Visitors to HNELHD Facilities

Visitor restrictions remain in place across NSW and are dependent on local transmission rates and conditions. The Visitors to HNELHD Facilities during COVID-19 Pandemic guideline provides HNELHD guidance on the current restrictions and exemption processes.

All visitors will be screened for COVID-19 risk factors and symptoms, and will be required to wear a face mask at all times inside the healthcare facility.

Guidance:

- HNELHD – Visitors to HNELHD Facilities during COVID-19 Pandemic
- NSW Health – Guide to Hospital Visitation
- CEC – COVID-19 Infection Prevention and Control Manual

1.2 Risk Assessing Staff

Any staff member who is unwell or has COVID-19 symptoms should not attend work, and should immediately obtain a COVID-19 test.

Staff who have been identified as a COVID-19 contact are to be risk assessed by their manager and follow the requirements of the specified risk management plans according to their contact status outlined in Risk Assessment: Staff identified as COVID-19 Cases or Contacts.

1.3 Staff and Students - Keeping Safe in the Workplace

To reduce the risk of exposure and potential for spreading of COVID-19 in our facilities, the CEC has defined the top things that staff can do to keep themselves and colleagues safe:

- Comply with Infection Prevention and Control guidelines including hand hygiene and don't become complacent in shared spaces including the tearoom, a mask must be worn except for eating and drinking.
- Be mindful in tearooms and other shared spaces such as offices, storerooms and handover areas – remember to wear a mask.

- Managers - Roster the same people together where practical, allocating to specific departments/areas and allocating breaks with staff from the same ward/unit.
- Get tested - timing is critical. Ensure staff get tested as soon as they display even the mildest of symptoms or after any unprotected close contact with a person with COVID-19.
- Use the correct PPE including mask and eye protection to reduce the risk of spreading COVID-19. PPE is required at all times.
- Maintain physical distancing. Make sure there is 1.5m between health workers and patients/carers/visitors and colleagues where practical. Stand to the side where possible during procedures such as during clinical examination or when assisting in patient care.

1.4 Staff Vaccination

The term 'staff' includes employees, Visiting Medical Officers (VMOs), volunteers, contractors, students and other visiting practitioners.

All NSW Health staff are required under the Public Health Order to be fully vaccinated, unless they have been granted a medical exemption.

Staff who are vaccinated when not on duty are eligible for a special leave payment of two hours per COVID-19 vaccination. Employees must provide evidence of the COVID-19 vaccination and date of COVID-19 vaccination

If an employee receives the vaccine and experiences an adverse reaction, they may access paid sick leave entitlements. Where sick leave is exhausted, special sick leave may be granted on a case by case basis.

Guidance:

- NSW Health – Mandatory Vaccination for Healthcare Workers: FAQ
- NSW Health – Booster Vaccination – Frequently Asked Questions

1.5 Staff – Paid Special Leave

Paid special leave provisions for employees has been introduced to support staff during the pandemic. Staff may be granted paid special leave up to 20 days in total if they are unable to work because they are:

- Self-isolating in line with public health advice due COVID-19 exposure
- Caring for family members sick with COVID-19
- Caring for family members due to closure of school/day care
- Unable to attend work due to transport disruptions or workplace closure
- A vulnerable health worker who following completion of a risk assessment is unable to be redeployed to a lower COVID-19 risk environment and is unable to work from home or self-isolation.

Staff who are excluded from the workplace for self-isolation may be granted paid special leave to enable self-isolation where required:

- After visiting a NSW COVID-19 Case Location where the advice for the location on the date/ time visited is: 'Self-isolate and get tested immediately'
- Following contact with a confirmed COVID-19 case
- Where a Health Care Worker has been directed via Public Health advice not to attend work due to COVID-19 contact

2. COVID-19 Testing

2.1 Testing Criteria and Surveillance Testing

All patients with COVID-19 symptoms or epidemiology risks are required to have SARS-CoV-2 testing. The COVID-19 Surveillance and Testing in HNELHD Facilities guideline provides guidance on the testing including surveillance testing for clinical situations and according to risk

alert level.

2.2 SARS-CoV-2 Testing

Types of SARS-CoV-2 tests currently recommended:

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 (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

Guidance:

- HNELHD – COVID-19 Pathology Intranet Page
- NSW Pathology – Testing Information
- NSW Health – COVID-19 Testing Clinics

2.3 Pathology Providers

NSW Pathology processes SARS-CoV-2 swabs for inpatients and patients presenting to emergency department of HNELHD facilities, Hospital in the Home (HiTH) patients, community screening clinics and staff following an exposure incident. Swab collection is to be conducted

by HNELHD or NSW Pathology staff and specimens sent to NSW pathology for testing.

The Hospital in the Home (HiTH) team provide a COVID-19 testing service for patients who are not able to attend a clinic, are in isolation or do not have the ability to attend a drive-through testing clinic.

Most HNELHD facilities will no longer provide routine community walk-in testing clinics at hospitals due to the additional risk to facilities with increased community transmission. Community members are encouraged to access testing clinics including drive-through clinics provided by NSW Pathology at University of Newcastle and private pathology partners in the community. Private pathology partners in the HNELHD area include:

- 4 Cyte Pathology – phone 13 42 98
- Douglas Hanly Moir Pathology – phone (02) 9855 5222
- Histopath Diagnostic Specialists – phone (02) 9878 8111
- Laverty Pathology – phone (02) 9005 7000
- Medlab Pathology – phone 1300 633 522

2.4 Staff Surveillance Testing

Surveillance testing of staff working in high risk areas should be undertaken as outlined in the COVID-19 Surveillance and Testing in HNELHD Facilities according to risk alert level.

Guidance:

- HNELHD – COVID-19 Surveillance and Testing in HNELHD Facilities
- HNELHD – Healthcare Worker SARS-CoV-2 Surveillance testing for COVID-19 Hotel Sites
- HNELHD – Healthcare Worker COVID-19 Surveillance testing Register

3. Population Health Unit

Due to extensive community transmission, NSW Health has moved to automated identification and management of lower risk contacts and self-managed contact tracing, testing and quarantine of positive cases.

The Population Health Unit (PHU) is prioritising active contact tracing efforts toward highest risk settings only, such as aged care, disability care, correctional services, and Aboriginal communities.

Guidance:

- Department of Health – CDNA National Guidelines for Public Health Units
- NSW Health – Control Guideline for Public Health Units
- NSW Health – Self-isolation and Testing
- NSW Health – Testing positive for COVID-19
- NSW Health – Information for people exposed to COVID-19

3.1 Release from Isolation

Release from isolation criteria considers both patient factors and settings, and therefor varies between community and hospital settings. Patients in the community must meet NSW Health criteria for release from isolation. Inpatients release from isolation criteria is outlined in the Inpatient Clinical Management of COVID-19 in Adults or Inpatient Clinical Management of COVID-19 in Paediatrics guidelines.

4. Infection Control

The primary mechanism of transmission of SARS-CoV-2 is via direct or indirect contact with infected respiratory droplets. Most transmission occurs through close contact, though pathogens can also be spread via airborne transmission through small aerosols.

SARS-CoV-2 replicates in the respiratory tract and the highest viral load is just prior to symptom onset or in the first 5 days of symptoms. Transmission also occurs with asymptomatic infection. The incubation period for COVID-19 ranges from 1 to 14 days, with the median incubation period of 5 to 6 days. COVID-19 appears to be infectious from 1-3 days prior to and for up to 9 days after

symptom onset. Immunocompromised patients may excrete infectious virus for much longer, while vaccinated patients excrete virus for shorter periods (3-5 days).

4.1 Patient Zones and Placement

Zoning refers to the grouping of patients with the same condition in the same area. The goal of zoning is to minimise the interaction between infectious patients and non-infected patients as much as possible. The CEC COVID-19 Infection Prevention and Control (IPAC) Manual recommends the following zoning be applied in the management of COVID-19:

- Red zone – COVID-19 positive patients
- Amber zone – COVID-19 high risk contacts or suspected cases
- Green zone – patients that have been cleared of being COVID-19 cases or contacts

Patients with confirmed COVID-19 are to be managed under contact + droplet + airborne precautions in a locally designated RED ZONE area. Patients with suspected COVID-19 are to be managed with contact + droplet + airborne precautions in isolation until a negative result is available.

Negative pressure rooms with ≥12 air changes per hour are to be used where available. If negative pressure rooms are unavailable, use negative flow rooms, or if unavailable use single rooms with the door closed. Where single rooms are not available, confirmed COVID-19 patients may be cohorted based on additional risk assessments and in consultation with Infection Prevention Service. Use of air purifiers are recommended in positive air flow areas of COVID-19 RED zones and emergency department waiting rooms (not for use in negative flow/pressure rooms) where adequate negative flow ventilation is not available or where a doffing area requires protection.

4.2 Person Protective Equipment (PPE)

Every patient encounter requires standard precautions with staff wearing a surgical mask and eye protection (safety glasses, mask visor, goggles or a face shield). Hand hygiene before and after every patient interaction is an essential practice for healthcare staff, patients and visitors to reduce cross-infection. The 5 moments of hand hygiene; before touching patient, before a procedure, after a procedure or body fluid exposure, after touching a patient and after touching a patient's surrounding, are to be adhered to at all times in healthcare facilities.

All patients with confirmed or suspected COVID-19 are to be managed in isolation with contact + droplet + airborne precautions (P2/N95 respirator, fluid resistant gown, gloves and eye protection).

Avoid the use of nebulisers, instead use metered dose inhalers with spacers where possible.

All healthcare workers are to complete mandatory training in the correct use of PPE including donning and doffing. P2/N95 respirator masks are to be fit tested before first use and fit checked at every use.

Guidance:

- HNELHD – Person Protective Equipment – Who needs to wear what?
- HNELHD – Fit Checking and Fit Testing of Respirators
- HNELHD – Use of P2/N95 and Tight Fitting Respirators
- HNELHD – Powered Air Purifying Respirator (PAPR) System Management in HNELHD
- CEC – COVID-19 Infection Prevention and Control Manual
- CEC – How to Don and Fit Check P2 and N95 Masks

Posters:

- ACI – Combined Airborne and Contact Precautions
- NSW Health – How to Fit and Remove a Surgical Mask

Mandatory Training:

- Hand Hygiene (MHL 42063430)
- Infection Prevention and Control Practices (MHL 46777047 or MHL 48252740)

- Personal Protective Equipment for combined transmission-based precautions (MHL 294450660) including Donning and Doffing competency (MHL 319438161)

4.3 Management of Identified COVID-19 Contacts during Hospital Admission

Patients who are identified as a close contact, or casual contact during their hospital admission are required to be isolated in a single room, managed with contact + droplet + airborne precautions and have a COVID-19 test.

Casual contacts who receive a negative test result are to be managed as COVID-19 negative and can be removed from isolation. Close contacts are required to complete 7 days of isolation from time of exposure regardless of COVID-19 swab result, and are to be managed with contact + droplet + airborne precautions in isolation with repeat testing on day 6 post exposure.

All mariners from international vessels who are inpatients in HNELHD facilities should be tested by RAT or PCR and risk assessed. If they are asymptomatic, have a negative RAT or PCR, and there are no known cases of COVID-19 on their ship, then they can be managed as COVID-19 green.

Guidance:

- HNELHD – Management of COVID-19 Contacts in Inpatient Settings
- NSW Health – Information for people exposed to COVID-19

4.4 Management of COVID-19 Exposure Incidents and Outbreaks in Healthcare Facilities

The increasing number of COVID-19 cases in NSW Health Facilities increases the risk of exposure incidents and outbreaks occurring. Management of an exposure incident or outbreak is outlined in the Management of COVID-19 Exposure Incidents and Outbreaks in HNELHD Facilities guideline. Managers are responsible for ensuring that all steps of the process are completed including risk assessments, manager's checklist and required notifications.

In circumstances where a staff member is identified as requiring isolation and is not able to isolate safely at home, they may be able to access Staff Supported Accommodation.

Guidance:

- HNELHD – COVID-19 Exposure Incidents or Outbreaks in HNELHD Facilities
- HNELHD – COVID-19 Staff Supported Accommodation Fact Sheet
- HNELHD – COVID-19 Staff Supported Accommodation Referral Form
- NSW Health – Health Care Worker COVID-19 Exposure Risk Assessment Matrix
- NSW Health – Management of Patient or Visitor COVID-19 Exposures in Healthcare Facilities

5. Emergency Department

5.1 Screening and Triage

All patients presenting to the emergency departments are required to wear a surgical mask throughout their attendance in the department, unless contraindicated

All patients are to be screened for COVID-19 on arrival to the emergency department and allocated to either a GREEN, or RED zone area of the waiting room, or escorted to an appropriate zone in the emergency department.

COVID-19 testing either with rapid antigen test (RAT) or PCR is to be undertaken in line with the COVID-19 Surveillance and Testing in HNELHD Facilities guideline according to current risk alert level.

COVID-19 vaccination status is to be established at triage and documented in the patient's healthcare record.

5.2 Green and Red Zones

Separation of GREEN, and RED patients in the waiting room and emergency department significantly impacts on the potential for exposure and subsequent isolation of patients, staff and visitors. Attention is to be given in planning the zones and flow of COVID-19 RED patients

through the emergency department, ensuring no exposure to staff, patients and visitors.

The emergency department waiting room is to be divided into GREEN, and RED zones, with clear separation using existing walls or short-term structures, where possible, to create individual spaces/rooms. Encourage physical distancing to ensure 1.5 metres of space between people where appropriate and practical. Place chairs >1.5 metres apart, consider floor markings of physical distancing areas and signage.

In facilities where the waiting room is not able to be divided into separate zones, there is to be a clear process for placing suspected and confirmed COVID-19 patients directly into the allocated RED zones in the emergency department.

There is to be designated RED zone areas or beds within the emergency department. These areas are to be separate from each other where possible and clearly identified with signs visible. All staff working in these zones are to wear contact + droplet + airborne precautions at all times. Negative pressure rooms are to be used where available, if unavailable use alternative rooms in the following order: negative flow rooms, single rooms with the door closed or cohorted areas. If open resuscitation areas are required, there is to be at least 3m between patients with the curtain drawn.

5.3 Determining Admission or Community Care

Clinical management of COVID-19 patients is continuously being reviewed and updated as new evidence emerges. All patients are to be assessed for appropriateness of community care or need for hospital admission. If a patient discharges against medical advice, ensure they are aware of their requirement to self-isolate, refer to COVID Care in the Community (CCiC) or COVID Kids @ Home, and document plan to return.

Adult patients

Consider the Agency for Clinical Innovation (ACI) defined disease severity and red flags for deterioration in decisions about most appropriate care location:

Observations	Mild	Moderate	Severe	Critical
Oxygen saturations (room air) Undertake an ambulatory SpO2 for exertional hypoxia	>95% If any exertional hypoxia noted discuss with your inpatient admission team	92-95% including exertional desaturations	<92%	Any/all of the severe assessment observations and: • hypoxia despite oxygen therapy • hypotension or shock • impairment of consciousness • other organ failure
Respiratory rate	10-25	8-10 and 25-30	< 8 and > 30	
Heart rate	50-120	40–50 or 120-140	<40 or >140	
GCS	15	15	≤14	

RED FLAGS – A person presenting with these signs and symptoms should be flagged as a higher risk for further deterioration	
Severe GI symptoms – diarrhoea, vomiting, abdominal pain > 4x/day	**Hypotension including symptomatic postural hypotension**
Syncope	**Transient hypoxia** – mild hypoxia is escalating to major hypoxia quickly with the Delta strain
Chest pain	**Silent hypoxia** – without tachypnoea **OR** subjective symptoms of shortness of breath – **more prevalent in older populations**
Persistent tachycardia	**Confusion**

Adult patients with mild symptoms can be self-managed in the community or with the support of their GP or COVID Care in the Community (CCiC), see section 7. Adult patients with oxygen saturations <95% on room air, or with moderate or severe disease require admission for inpatient care. All patients with severe disease are at high risk of deterioration and require immediate escalation of care to ICU, including early transfer to a facility with ICU capabilities.

Consideration must be given to the severity of illness and the service capability of the facility when determining the most appropriate location for admission. Patients requiring specialty care (e.g. maternity, mental health, paediatrics) require further discussion with the relevant medical teams to determine the appropriate location and facility for admission.

Discuss all suspected or confirmed COVID-19 adult cases potentially requiring admission with the COVID-19 Consultant for the facility.

Paediatric patients

In paediatric patients, consider red flags that may indicate severe disease and discuss all possible admissions with the COVID Kids @ Home Medical Lead on 0438 141 930:

- Inadequate oral intake: <3 wet nappies in 24 hours, <2/3 oral intake, dizziness, syncope
- Respiratory deterioration: significant change in work of breathing
- Cardiac symptoms: chest pain not responsive to analgesia, sweatiness, palpitations or dizziness
- Vomiting, abdominal pain or diarrhoea > 4/day
- Increased lethargy
- Fever lasting > 5 days
- Rash/conjunctivitis > 5 days after symptom onset
- Parent is worried
- Clinician is worried

5.4 Signage and Guidance

Signage

- NSW Health – COVID-19 Symptoms and Testing
- NSW Health – Physical Distancing - Sitting 1.5m apart
- NSW Health – Please Sit Here Sticker

Guidance:

- HNELHD – Non-invasive Ventilation (NIV) or High Flow Nasal Oxygen in Suspected COVID-19 Patients in Level 1-3 Emergency Departments
- HNELHD – High Flow Nasal Oxygen and Nebulised Adrenaline in Suspected COVID-19 Paediatric Patients in Level 1-3 Emergency Departments
- ACI – Emergency Department Assessment and Management of COVID-19 in Adults

6. Inpatient Clinical Management of COVID-19 Patients

Patients with confirmed COVID-19 are to be managed under contact + droplet + airborne precautions in a locally designated RED ZONE area or bed. Patients with suspected COVID-19 who are awaiting test results are to be managed with contact + droplet + airborne precautions in isolation.

6.1 Adult Inpatient Management

HNELHD Inpatient Clinical Management of COVID-19 in Adults clinical guideline provides extensive guidance on the management of inpatients with COVID-19. Key points include:

1. Manage all suspected and confirmed COVID-19 patients with contact, droplet and airborne precautions (P2/N95 respirator, eye protection, fluid resistant gown or apron, gloves)
2. Consider budesonide, sotrovimab or nirmatrelvir/ritonavir in patients with early disease, not requiring oxygen and risk factors for deterioration
3. Give supplemental oxygen to maintain SpO_2 > 92%. If unable to maintain target SpO_2 escalate to continuous positive airway pressure (CPAP)

4. Refer for ICU assessment if requiring >4L/min of O_2 to maintain target SpO_2 (all facilities except John Hunter Hospital), OR unable to maintain target SpO_2 with CPAP or non-invasive ventilation (NIV), or rapidly worsening tachypnoea or hypoxaemia (if at John Hunter Hospital)
5. If requiring supplemental oxygen commence dexamethasone and remdesivir
6. If, despite the above, there is an escalating oxygen requirement and severe pneumonitis, consider EITHER baricitinib, tocilizumab, or sarilumab

Guidance:

- HNELHD – Inpatient Clinical Management of COVID-19 in Adults
- HNELHD – Use of COVID-19 Disease Modifying Medications

6.2 Paediatric Inpatient Management

HNELHD Inpatient Clinical Management of COVID-19 in Paediatrics clinical guideline provides extensive guidance on the management of inpatients with COVID-19. Key points include:

1. Manage all suspected and confirmed COVID-19 patients with contact, droplet and airborne precautions (P2/N95 respirator, eye protection, fluid resistant gown or apron, gloves)
2. Consider hospital admission if SpO_2 <94% on room air
3. Give supplemental oxygen to maintain SpO_2 > 92%. If unable to maintain SpO_2 > 92%, consider HFNP only after consultation with paediatric, ICU or ED Consultant.
4. If requiring high flow nasal prong (HFNP) oxygen, NIV or invasive mechanical ventilation, consider administration of dexamethasone

Paediatric patients with confirmed COVID-19 are able to have one parent/caregiver stay with them. The nominated parent/caregiver must not leave the ward until the patient is discharged, they are not able to access other services within the hospital (e.g. ward kitchen, cafe, newsagency, food outlet). No additional visitors are allowed. Parents/caregivers with suspected or confirmed COVID-19 are not to attend the hospital unless an exemption is granted by hospital executive. If a paediatric patient with confirmed COVID-19 requires transfer to another location within the hospital (e.g. operating theatres or medical imaging), the parent/caregiver is not to accompany the patient and is to stay in the patients room.

COVID-19 negative paediatric patients who have parents/caregivers receiving hospital care for confirmed COVID-19 may require hospitalisation as an alternate care arrangement and will often be deemed as close contacts. Care should ideally be as close to home as possible, aim to keep families together wherever possible, and ensure safe, age appropriate care that is child/adolescent and family focused.

Guidance:

- HNELHD – Inpatient Clinical Management of COVID-19 in Paediatrics
- NSW Health - Alternate Care Arrangements – Children and Adolescents of Parents Hospitalised with COVID-19

6.3 Maternity Management

Management of pregnant and birthing women with suspected and confirmed COVID-19 is coordinated through the M&G COVID-19 Consultant. All maternity services are required to provide care within their service capability either while arranging and awaiting transfer or in circumstances where transfer cannot be achieved (e.g. imminent birth).

Each maternity service is required to have at minimum:

- An identified isolation space, desirably with negative pressure but at a minimum a single room with an ensuite and closed door. The room must be adequately sized to accommodate labour and birth care, including potential neonatal resuscitation, in circumstances where transfer cannot be achieved
- Equipment required for clinical care which is dedicated to the isolation room

- Sufficient PPE supplies for staff to safely provide required clinical care
- Processes for continued inclusion of the woman's nominated Participant in Care including means of identification and screening, and for sourcing self-isolation exemptions where appropriate
- Collaborative plans for managing women who require emergency OT care including for birth or postpartum indications such as PPH management
- Ability to keep well newborns co-located with their mothers in isolation until discharge or transfer
- Processes for terminal cleaning of the room and contents following the woman's departure

A COVID-19 Maternity Plan is to be developed for each maternity service in HNELHD, which outlines all maternity care for the individual service. Current Maternity Plan templates are available through WHAM network. Maternity patients with confirmed COVID-19 who do not require hospital admission are supported through Maternity COVID-19 Virtual Care Program.

Guidance:

- HNELHD – COVID-19 Response Measures for Level 2, 3 and 4 Maternity Services
- NSW Health – Guidance for Child and Family Health Services

6.4 Management by Newborn Services

Newborn services provide care to infants born to women with suspected or confirmed COVID-19 at the time of birth. An infant born to a woman with suspected or confirmed COVID-19 is a close contact of the mother. An infant born to a woman who is a close contact of a case of COVID-19 is also managed as suspected COVID-19.

- Maternity team will notify Newborn Services of every suspected or confirmed mother with COVID-19 or if the mother is an asymptomatic close contact of a case of COVID-19
- The neonatal paediatric team should attend the birth as clinically required and follow usual attendance procedure
- In most circumstances, when mother and newborn are both able to be cared for in isolation, and admission to NICU is not required for another medical issue, co-location can occur in the maternity orange/red zone.
- An infant born to a mother with suspected or confirmed COVID-19 alone (i.e. no other neonatal criteria) is not an indication for admission to NICU unless temporary separation has been agreed.
- If admission to NICU is required at birth (for example due to prematurity) or from maternity orange/red zone (for example infant becomes symptomatic with respiratory symptoms or hypoglycaemia) infant to be transported in closed isolette by NICU staff in PPE according to clinical care requirements.
- Where the mother is a close contact or has suspected or confirmed COVID-19), the infant should be cared for in closed incubators (humidicribs) and, when available in a single room
- Routine testing of asymptomatic infants is not recommended. Indications for testing in the neonatal period may include:
    - A Suspected horizontal transmission leading to symptomatic infection (e.g. fever, acute respiratory illness not otherwise explained) from a COVID-19 positive parent/ caregiver/household contact, healthcare worker, or where transmission is suspected in a particular setting such as a ward cluster.
    - Suspected congenital infection / vertical transmission (e.g. congenital pneumonia in an infant born to a mother with suspected / proven COVID-19)

Guidance:

- HNELHD – Clinical Management of COVID-19 by Newborn Services
- NSW Health – Guidance for Neonatal Services

7. Community Management of COVID-19 Patients

All COVID-19 cases receive an automated NSW Health questionnaire to complete on registration of PCR result by pathology or self-registration of RAT result through Service NSW. The questionnaire responses guide the appropriate management plan for the patient according to the ACI Caring for adults and children in the community with COVID-19 Flowchart and protocols and ACI Caring for adults and children in the community with COVID-19 Clinical and risk assessment.

In HNELHD, management of high risk COVID-19 patients in the community is managed by COVID Care in the Community (CCiC) for adults and COVID Kids @ Home for paediatric patients up to 18 years. Management includes providing supportive care, monitoring for signs of clinical deterioration including early signs of respiratory failure and sepsis, taking steps to reduce the risk of transmission, and escalating care where required.

COVID Kids @ Home - 0438 141 930 or HNELHD-JHCHPaedHITHCOVID@health.nsw.gov.au

CCiC - HNELHD-GreaterNewcastleHITHCOVID@health.nsw.gov.au

Guidance:

- ACI – Caring for adults and children in the community with COVID-19 Flowchart and protocols
- ACI – Caring for adults and children in the community with COVID-19 Clinical and risk assessment
- HNELHD – Use of COVID-19 Disease Modifying Medications

7.1 Maternity COVID-19 Virtual Care

The Maternity COVID-19 Virtual Care Program provides maternity care and support through a virtual model to pregnant and postnatal women throughout HNELHD. The Maternity COVID-19 Virtual Care Program provides enhanced peri partum care in collaboration with CCiC, COVID Kids @ Home and the Public Health Unit.

Referrals can also be made directly to HNELHD-COVIDMaternity@health.nsw.gov.au

Guidance:

- HNELHD – Maternity COVID-19 Virtual Care

7.2 Support Services

COVID-19 cases and close contacts who require assistance with food and other essential supplies during isolation are able to access support through the NSW Health Isolation Support line on 1800 943 553.

Confirmed COVID-19 cases and close contacts who identify as Aboriginal or Torres Strait Islander are able to access additional holistic support through HNE Public Health Aboriginal Cultural Support Team. Referrals to hnelhd-phaboriginalcultrualsupport@health.nsw.gov.au

Confirmed COVID-19 cases and close contacts from a culturally and linguistically diverse (CALD) background are able to access additional support through Multicultural and Refugee Health. Referrals to HNELHD-COVIDMulticulturalSupport@health.nsw.gov.au

7.3 COVID-19 Hotels

Patient with confirmed COVID-19 who are unable to isolate safely at home but do not require hospital admission, may on occasion be admitted to a COVID-19 hotel. Medical management of patients is provided by the CCiTH and COVID Kids @ Home teams.

Patients considered for admission to the COVID-19 Hotels must:

1. Be confirmed COVID-19 positive
2. Be unable to self-isolate because of personal circumstance, for example:
    - They live in accommodation where self-isolation is not possible;
    - They have family members that are immunosuppressed;
    - They have no accommodation as they are transiting;

- They are non-compliant with Public Health Orders.

3. Not require hospitalisation
4. Be independent with personal care and/or have the support of an approved parent/carer while in the COVID-19 Hotel
5. Be assessed by the CCiC or COVID Kids @ Home team and determined to be suitable for admission to COVID-19 Hotels. Patients with complex medical histories will need to be assessed on an individual basis.

Patients requiring admission to COVID-19 Hotels are referred by the Public Health Unit (PHU) or inpatient clinical teams via HNELHD-COVIDhotels@health.nsw.gov.au

Guidance:

- HNELHD – Management of COVID-19 Hotels
- HNELHD – COVID-19 Confirmed or Close Contact Transfer and Discharge Flowchart

8. Patient Transfers

Coordination of transferring patients between wards/units must occur at a senior clinician level with a clear agreement of which specialty team will be responsible for transport.

The use of a pre-planned, dedicated route is essential with the use of a “clean” runner to ensure the route is clear of bystanders and equipment, push elevator buttons and open doors. Staff accompanying transfer must be restricted to essential staff only and be donned in contact, droplet and airborne precautions (gloves, fluid resistant gown, P2/N95 respirator mask, eye protection).

A surgical mask must be worn by patients including over any oxygen administration devices (e.g. nasal prongs, SFM, NRB, HFNO) during the transfer.

The decision to transfer patients on NIV between wards/units must be made by a senior medial officer. If possible, take the patient off NIV and consider transfer with Hudson mask or nasal prong oxygen (4-6L/min). If NIV needs to be maintained during transfer, ensure the NIV mask is well fitting with no or minimal leak and apply a viral filter to the expiratory limb of ventilator circuit.

Post transport decontamination via terminal cleaning must be carried out on the bed and all equipment used in the transport. Lifts used for patient transport are to be left to rest for 30 minutes and then terminally cleaned.

Guidance:

- Appendix 1 – Internal transfer of Suspected or Confirmed COVID-19 Patients
- ACI – Intra-hospital Transfers of Positive and Suspected COVID-19 Patients from the Emergency Department

9. Emergency and Elective Surgery

All patients are to be screened prior to surgery using the NSW Health COVID-19 Perioperative Screening Checklist or locally designated COVID-19 screening checklist.

COVID-19 testing is to be undertaken prior to surgery in line with the current NSW Alert Level as outlined in the COVID-19 Surveillance and Testing in HNELHD Facilities guideline.

Guidance:

- HNELHD – COVID-19 Management in Surgery and Level 3 Procedures

9.1 Surgery with COVID-19 Infection

Elective surgical procedures for patients with COVID-19 are to be delayed until the patient is no longer infectious, has fully recovered from COVID-19 and 8 weeks have passed since the onset of symptoms, unless delaying surgery outweighs the risks of proceeding.

Emergency surgery, including obstetrics, for patients with confirmed COVID-19 infection is to be undertaken after an individual risk assessment. Contact, droplet and airborne precautions are to be used where surgery proceeds.

9.2 Surgery after COVID-19 Vaccination

Patients are to be advised to have completed COVID-19 vaccination at least one week prior to surgery. If vaccination has occurred within one week prior to surgery, an individual risk assessment is to be undertaken and surgery delayed until 7 days post COVID-19 vaccination if there is no risk associated with delay.

Emergency surgery should not be delayed due to recent COVID-19 vaccination. The patient's healthcare team are to be aware of recent vaccination and monitor for surgical complications that may be attributed to vaccine related side effects.

Guidance:

- HNELHD – Management of COVID-19 in Surgery and Level 3 Procedures
- ACI – COVID-19 Living Evidence – Surgery
- ACI – Key Principles for Management of Surgery during COVID-19 Pandemic
- NSW Health – Updated Guidance for the Management of Surgery during COVID-19

10. Mental Health Services

COVID-19 surveillance screening of all patients requiring admission to acute mental health inpatient facilities is to be undertaken on presentation/admission.

- Patients with symptoms suspected to be COVID-19 require a PCR or rapid PCR test
- Patients with high epidemiological risk or positive RAT require a PCR or rapid PCR test
- Patients with no symptoms of COVID-19 require a rapid antigen test (RAT)

Confirmed COVID-19 patients are to be managed under contact + droplet + airborne precautions in a locally designated RED ZONE area. Patients with confirmed COVID-19 are to be monitored for clinical deterioration with a low threshold (equal to patients receiving care in the home) for transfer to an acute hospital if any signs of deterioration

Patients in adult acute inpatient facilities with no symptoms of COVID-19 are to be offered surveillance rapid antigen tests (RAT) twice a week. Patients in older persons and sub-acute inpatient facilities will be offered the opportunity for weekly surveillance RAT tests as part of an upcoming trial.

11. Outpatient Departments and Home Visiting Health Services

Outpatient and home visiting services are to incorporate risk screening, assessment and mitigation processes consistent with the CEC response and escalation framework as follows:

- Pre-screen all patients and others present at appointment (e.g. by phone call, SMS) no more than 24 hours prior to the appointment. Screening should occur again at time of appointment.
    - Advice patients who have COVID-19 symptoms to get tested and isolate.
    - Consider alternative methods of appointment if appropriate (e.g. telehealth) for patients who answer yes to exposure assessment. If an alternative method of appointment is not possible and it is not clinically urgent, reschedule the appointment. If the appointment is clinically necessary, contact the Public Health Unit for further advice.
- Staff, patients and others present at appointment must wear a mask at all times.
- Encourage physical distancing to ensure 1.5 metres of space between people where appropriate and practical whilst providing a service. In outpatient services, place chairs >1.5 metres apart, consider floor markings of physical distancing areas and signage.
- Ensure availability of PPE for all staff conducting home visits or outpatient appointments, including accessible supplies of alcohol-based hand rub, cleaning wipes for reusable equipment and waste disposal bags.

- Minimise the number of people present in the room in which the service is provided, (it is recommended that infants are accompanied by a parent/carer) and minimise close contact during the provision of service.
- Use alternative models of care such as telehealth technology where appropriate, especially for people who are vulnerable to severe illness such as elderly or immunocompromised people or to include people in appointments who otherwise would have not been able to attend (e.g. second parent for child and family health appointments).

Guidance:

- HNELHD – COVID-19 Risk Screening Assessment and Home Visiting Guide - CACS
- HNELHD – Maternity Postnatal Home-based Care
- NSW Health – COVID-19 screening and guidance for NSW Health outpatient and home visiting health services
- CEC – COVID-19 Infection Prevention and Control Manual

12. Disability Services

People with disability who have underlying health conditions and/or weakened immune systems may be at greater risk of more serious illness if infected with COVID-19. People with disability are also at potentially higher risk of infection with COVID-19 due to the following issues:

- Physical distancing can be difficult or impossible for some people with disability, particularly for those who rely on support and assistance from family members, carers and support workers
- Some people with disability also face barriers to implementing basic hygiene measures and safely wearing face masks due to physical, medical or behavioural reasons
- Some people with disability may not be able to communicate symptoms of illness

Due to these additional complexities, the following teams are available to provide advice and support to HNELHD clinicians who may be caring for a person with disability with COVID-19.

People with Intellectual Disability

HNELHD has a Specialised Intellectual Disability Health Team who can provide advice and guidance to HNELHD staff and GPs on management of patients with intellectual disability, across the lifespan.

The team are available Monday-Friday during business hours:
HNELHD-IntellectualDisabilityTeam@health.nsw.gov.au or call 02 49246067

Further information: HNELHD - Specialised Intellectual Disability Health Team

NDIS Participants

Many people with a disability are National Disability Insurance Scheme (NDIS) Participants. The National Disability Insurance Agency (NDIA) have a number of support measures in place to help NDIS participants and providers safely deliver and receive supports during the COVID-19 pandemic, including if a participant contracts COVID-19. The NDIA also offer support to the Public Health Unit where there is an outbreak in a disability setting.

For assistance or advice in supporting an NDIS participant in the community or as inpatient with confirmed COVID-19 or a close contact of COVID-19, email HNELHD-NDISTransition@health.nsw.gov.au

Further information:

- NSW Health – COVID-19 Advice for People with Disability
- NSW Health – Disability Service Providers
- NSW Health – Supporting People with Disability

13. Residential Aged Care Facilities (RACF)

Local Health Districts are responsible for providing support to RACF to implement infection prevention and control and management strategies following identification of a positive COVID-19 case. Key actions include:

- Establish the appropriate isolation & personal protective equipment (PPE) requirements
- Set up hand hygiene and PPE donning/doffing stations
- Assess if any residents in the section/building are using a nebuliser or a CPAP machine as they will require immediate assessment
- Review the screening and registration of staff, visitors and contractors entering the RACF. Ensure there are mechanisms to identify symptomatic people and registration of everyone
- Ensure that the local Public Health Unit (PHU) (1300 066 055) and Commonwealth Department of Health agedcareCOVIDcases@health.gov.au have been contacted.

HNELHD has established a process for management of a positive COVID-19 case in a RACF:

- Visitors – will be managed by the Population Health Unit
- Staff members – will be managed by Population Health Unit unless a HNELHD facility
- Residents – will continue to be cared for in the RACF if clinically appropriate. If multiple patients are unwell, the OMT will review and establish a management plan

Guidance:

- CEC – First 24 Hours: Managing an Outbreak of COVID-19 in a Residential Aged Care Facility
- NSW Health – COVID-19 Exposure Risk Determination in Aged and Disability Care Settings
- NSW Health – Guiding Principles for Safe and Efficient Admissions in RACF and Transfers to Hospital during COVID-19 Pandemic

14. Community HealthPathways

Patients with confirmed COVID-19 are assessed and managed by CCiTH and COVID Kids @ Home teams. Guidance for GPs is available in the instance that they are required to provide urgent assessment or support the CCiTH and COVID Kids @ Home teams in the delivery of care for pre-existing conditions.

Guidance**:**

- COVID-19 Care of Low Risk Self-care Patients
- Care of COVID-19 Positive Adult Patients in the Community
- Care of COVID-19 Positive Paediatric Patients

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.

REFERENCES

This Clinical Guideline is based on multiple references that are linked to within the body. The main sources of these are as follows:

- HNELHD – COVID-19 intranet pages or PPG Directory
- NSW Health guidelines and NSW Health Public Health Orders
- Clinical Excellence Commission (CEC)
- Agency for Clinical Innovation (ACI)
- NSW Communities and Justice
- Australian Government Department of Health

REVISION HISTORY

Version	Date	Changes
Version 4	28 March 2022	Updates to isolation requirement for mariners of international vessels admitted to hospital; updates of links throughout document.
Version 3	10 March 2022	Updates to visitor restrictions and screening, staff surveillance, release from isolation, patient zones and placement, exposure outbreaks, community management, support services; removal of intensive care, COVIS and inter-facility transfers.
Version 2	10 January 2022	Updates to visitor restrictions, staff risk assessment, testing criteria, management of exposure incidents and outbreaks in healthcare facilities, PHU management, release from isolation for positive cases, surgery management, and COVID-19 hotels; Removal of orange zones; Addition of RAT testing.
Version 1	26 November 2021	Original document

Appendix 1:

Internal Transfer of Suspected or Confirmed COVID-19

Guiding principles:

- Coordination of transferring a patient between units must occur at a senior clinician level with clear agreement of which specialty team will be responsible for transport
- The decision to transfer a patient on NIV lies with senior medical officers. If possible, consider transfer with a simple face mask or nasal prong oxygen (4-6L/min)
- A clear, pre-planned, designated route must be established with use of a 'clean' runner to ensure the route is clear of bystanders and equipment, push elevator buttons and open doors
- Staff accompanying must be restricted to essential staff only and be donned in a P2/N95 respirator, protective eyewear, gown and gloves, and minimise contact with surroundings
- The patient must wear a surgical mask including over oxygen delivery devices (with exception of NIV mask)

Plan	**Define Team/Roles** ▪ Transfer nurse ▪ "Clean" runner/s ▪ Porter / Wards person ▪ Cleaner for post transfer terminal cleans **Oxygen Delivery** ▪ Determine oxygen delivery device required for transfer ▪ Transfer on NIV or HFNO must be discussed and decided by a senior medical officer **Equipment** ▪ Full oxygen cylinder with suction ▪ Monitoring as appropriate ▪ Infusion pumps/syringes on bed pole (if applicable) ▪ Other equipment if deemed essential **Communication with Receiving Ward/Area** ▪ Estimated time of transfer + need for airborne precautions for those receiving handover ▪ Communication of equipment required to receive patient
Transfer	**Before Departure** ▪ Confirm the designated route is clear ▪ Final patient assessment (A, B, C, D) and equipment checks ▪ Apply surgical mask to patient (including over any oxygen administration device) ▪ Not required with NIV - instead optimise seal and apply viral filter to expiratory limb ▪ Confirm roles **Upon Arrival** ▪ Clinical bedside handover ▪ Transfer to ward bed and equipment ▪ Cleaning of equipment no longer required
Clean	▪ Doff PPE in doffing zone ▪ Re don PPE for cleaning of equipment ▪ All equipment used including pumps, syringe drivers, beds, lifts* must be cleaned prior to returning to usual location ▪ Doff PPE once cleaning completed and perform hand hygiene ▪ Re don PPE if required to return to clinical area *lifts must be spelled for 30 minutes with doors open prior to terminally cleaning