

GUIDELINE	
Clinical Care of Paediatric Patients During the COVID-19 Pandemic (V16)	
Scope (Staff):	All staff
Scope (Area):	PCH
Child Safe Organisation Statement of Commitment	
CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.	

This document should be read in conjunction with this [DISCLAIMER](#)

Contents

Aim	3
Key Points.....	3
Case definitions	3
Who to test for SARS-CoV-2?.....	4
Symptomatic patients.....	5
Asymptomatic patients	5
How to test.....	5
Nasopharyngeal specimen collection and transport for COVID-19 NAAT (PCR):	5
Sampling for the purposes of rapid antigen testing (RAT):.....	7
COVID-19 NAAT test reporting	7
Positive COVID-19 NAAT results.....	7
COVID-19 serological testing	7
Other Investigations in the Setting of Acute COVID-19 Infection	8
Infection control principles.....	8
Transmission-based precautions	8
Inpatient de-escalation of isolation & transmission-based precautions	8
Aerosol generating procedures (AGPs)	9
Admission procedures	12
Staff Allocation.....	12
Management of positive COVID-19 cases	13

CAHS COVID-19 Resources: Guideline

Management based on clinical manifestation	13
Management based on severity of illness	13
Mild Illness	13
Moderate Illness	13
Severe Illness	13
Critical Illness.....	14
Disease modifying treatments.....	14
Paediatric Inflammatory Multisystem Syndrome Temporally associated with SARS-CoV-2 (PIMS-TS).....	16
Long COVID	16
Discharge of positive COVID-19 patients from PCH.....	18
Appendix 1: Definition of Illness Severity for Children and Adolescents	21

Aim

To provide guidance on the clinical care of paediatric patients diagnosed with SARS-CoV-2 infection and those identified as a close contact.

Key Points

- These guidelines are based on current available knowledge and will change as more evidence becomes available about SARS-CoV2 infection and the disease it causes, COVID-19.
- Most children with COVID-19 have a mild illness which may be indistinguishable from other common endemic viral illnesses (e.g. respiratory syncytial virus (RSV), influenza A/B).
- Pre-existing treatment protocols and guidelines for common paediatric conditions such as bronchiolitis, croup, viral wheeze/asthma and lobar pneumonia should be followed in addition those covering the management of COVID-19.
- All efforts should be made to reduce the need for aerosol generating procedures (AGPs), and especially so in COVID-19 positive patients and close contacts. If an AGP is required, HCWs should use a fit tested particulate filtration respirator (PFR) and protective eyewear.
- In alignment with the WA Health mandatory policy for the [Identification and use of personal protective equipment \(PPE\) in the clinical setting during the COVID-19 pandemic](#), it is advised that all COVID-19 positive patients and close contacts admitted to hospital are admitted to a single room, preferably a negative pressure isolation room (NPIR). If unavailable, a single room with door closed and HEPA filter in place is a reasonable alternative. Personal Protective Equipment (PPE) consistent with Standard, Contact & Airborne precautions (gown, gloves, P2/N95 respirator and protective eyewear) should be used when entering the room of a COVID-19 positive patient or close contact.

Case definitions

Refer to the [COVID-19 Communicable Diseases Network of Australia \(CDNA\) Guidelines for Public Health Units](#) for up to date information & case definitions.

Patients who meet the following confirmed and probable case definitions should be managed as a positive COVID-19 case:

Confirmed case

The confirmed case definition intends to capture newly diagnosed cases with laboratory definitive evidence to support a diagnosis.

Laboratory definitive evidence:

- Detection of SARS-CoV-2 by nucleic amplification acid testing (NAAT); or
- Isolation of SARS-CoV-2 in cell culture, with confirmation using a NAAT; or
- SARS-CoV-2 IgG seroconversion or a four-fold or greater increase in SARS-CoV-2 antibodies of any immunoglobulin subclass including 'total' assays in acute and convalescent sera, in the absence of vaccination

Probable case

A probable case includes individuals who have laboratory suggestive evidence.

Laboratory suggestive evidence:

- Detection of SARS-CoV-2 by rapid antigen testing (RAT)

Close contact

A COVID-19 close contact is defined as:

- A household member or intimate partner of a person with COVID-19 who has had contact with them during their infectious period.
- Someone who has had close personal interaction with a person with COVID-19 during their infectious period, where they spent 4 hours of cumulative contact with them in a residential setting (including a home, residential care facility, boarding school, maritime vessel, or other accommodation facility) in any 24-hour period where masks have been removed by both people during the period of contact.
- Someone who has been advised by WA Health that they are a close contact

Reinfection

A subsequent confirmed or probable SARS-CoV-2 infection in a person with a recent history of confirmed or probable COVID-19 that is determined to be separate to the first infection based on clinical, epidemiological &/or laboratory findings.

WA Health recognises that reinfection can occur as early as 4 weeks after release from isolation.

Who to test for SARS-CoV-2?

- SARS-CoV-2 NAAT remains the gold standard for diagnosing acute *symptomatic* SARS-CoV-2 infection in the hospital setting and should be requested where system capacity allows.
- SARS-CoV-2 RAT offers a suitable alternative to diagnosis, especially in the community setting.
- All people who have new or worsening symptoms (clinical features) of COVID-19 infection as listed below should be tested for SARS-CoV-2:
 - **Acute respiratory symptoms** (cough and/or sore throat and/or rhinorrhoea/nasal congestion and/or shortness of breath), **or**
 - **Fever $\geq 37.5^{\circ}\text{C}$** or history of fever (e.g. night sweats or chills) where no other cause is identified* (* Patients who have an alternate cause for their fever identified {e.g. urinary tract infection, appendicitis} do not meet this diagnostic criterion), **or**
 - **Loss of taste or smell** (less common with new variants).

Other non-specific symptoms of COVID-19 that should prompt consideration for COVID-19 testing include unexplained fatigue, headache, myalgia, diarrhoea, nausea/vomiting and loss of appetite.

Symptomatic patients

- All patients with clinical features of COVID-19 infection (as outlined above) should be tested for SARS-CoV-2 using a NAAT if being admitted to hospital. For PCH, the Biofire respiratory panel is recommended which includes SARS-CoV-2 in addition to several other common viral and bacterial respiratory pathogens.
- Anyone with COVID-19 compatible symptoms 4 or more weeks after their release from isolation should be tested for SARS-CoV-2.
- For outpatients, if the appointment cannot be postponed or performed via Telehealth, a COVID-19 RAT is suitable to guide the necessary infection control risk mitigation plan and transmission-based precautions for the duration of the patient visit.
- In the community setting following a positive test for SARS-CoV-2, further testing is not recommended during the associated isolation period and is not required for the purpose of release from isolation.
 - In the hospital inpatient setting, decisions to de-isolate a patient, and the necessity for repeat COVID-19 RAT, should be discussed with the Infection Prevention & Control team.

Asymptomatic patients

- As we progress through the pandemic, testing recommendations for asymptomatic individuals have changed as outlined in the [WA Health COVID-19 Framework for System Alert & Response \(SAR\)](#), based on hospital activity and health system and pathology capacity.
- As the overall prevalence of infection in the community declines, SARS-CoV-2 testing will increasingly be targeted to symptomatic patients. Asymptomatic screening/surveillance with SARS-CoV-2 RAT will be confined to:
 - Cohorts of patients with a higher risk of severe disease
 - Identified COVID-19 close contacts.

Refer to the WA Health SAR and Testing Criteria for [SARS-CoV-2 in Western Australia #40](#) for further details.

How to test

Nasopharyngeal specimen collection and transport for COVID-19 NAAT (PCR):

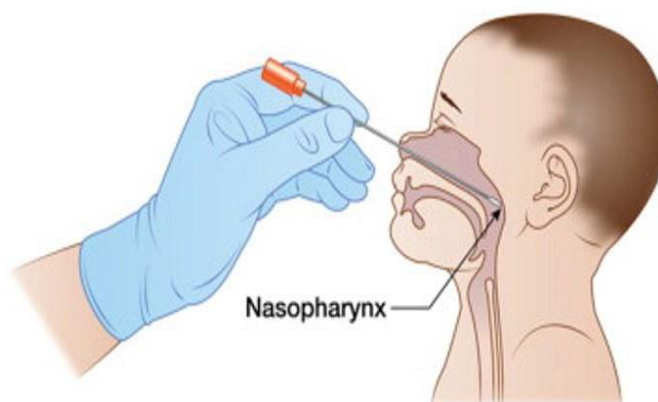
- Clinicians must complete a pathology request form & should include patient symptoms & presence of COVID-19 risk factors (i.e. household close contact)
- For patients admitted to PCH through the Emergency Department or on the wards, a rapid respiratory virus PCR panel (“Biofire respiratory multiplex PCR”) should be requested.

- Note that patients cannot be sent to the PCH PathWest Collection Centre for the purpose of COVID-19 swab collection as patient flow requirements for COVID-19 testing clinics cannot be maintained at this site.
- Use a single dry nasopharyngeal flocked swab for PCR testing:
 - Measure the distance from the nose to the ear to provide an estimate of the distance to insert the swab.
 - The swab should be inserted once into the nasopharynx by directing the swab in line with the nasal floor. This is a specific CAHS recommendation as multiple site sampling is potentially distressing for children without clear evidence of increased viral detection.
 - Once the swab has been inserted, leave for a few seconds to absorb secretions and then rotate on withdrawal.
 - Re-sheath swab following collection.
 - Do NOT pour transport medium into the sheath as they are not designed to hold liquid.
 - Place the specimen into a plastic specimen bag for transport to PathWest at QEII. Swab samples collected for COVID-19 PCR can be sent to the central specimen reception at PathWest QEII via the pneumatic tube system.
 - Urgent samples should be walked to PathWest Central Specimen Reception, Ground floor PP Block. No additional PPE is required for those delivering swabs.
- For further details, refer to the [Nasopharyngeal & Throat Swab Collection](#) procedure document in the CAHS Clinical Practice Manual.

Figure 1: Paediatric flocked swab and sheath



Figure 2: Collection technique for a nasopharyngeal swab



Sampling for the purposes of rapid antigen testing (RAT):

- The sampling requirements for COVID-19 RAT vary according to the specific kit in use
- Refer to the relevant kit insert for instructions on specimen collection and test performance.

COVID-19 NAAT test reporting

Positive COVID-19 NAAT results

- The treating team do not need to make a Public Health notification for a positive SARS-CoV-2 **PCR** result as an automatic notification will be generated by the testing laboratory.
- Families should be encouraged to [register](#) all positive COVID-19 RAT results online with WA Health.
 - Through this process those with specific risk factors may register for home monitoring with the WA COVID Care at Home program.
- If an inpatient, the treating team can register the positive COVID-19 RAT on the behalf of the patient.

COVID-19 serological testing

- Serology is not currently used for diagnosis of acute illness but may have a role in retrospective confirmation of past SARS-CoV-2 infection.
 - SARS-CoV-2 serology is recommended as part of the work-up for the Paediatric Inflammatory Multisystem Syndrome Temporally associated with SARS-CoV-2 (PIMS-TS).

Other Investigations in the Setting of Acute COVID-19 Infection

- The role of laboratory and radiological investigations is in working through differential diagnoses (including viral co-infection and/or secondary bacterial infection) and in the detection of complications.
- Investigations that may be indicated for positive COVID-19 cases dependent on clinical presentation include:
 - Chest x-ray
 - Bloods:
 - Assessment of end organ function including blood gas/lactate, FBP, UEC, LFTs, coagulation profile.
 - Inflammatory markers including C-reactive protein (CRP).
 - Sterile site cultures (blood, urine, etc.)

Infection control principles

Transmission-based precautions

- Standard precautions apply to all patients.
- In addition, contact and airborne precautions (Fit-tested PFR, protective eyewear, gown and gloves) are required for care of all patients who fulfil the positive COVID-19 case definition
 - This also applies to asymptomatic close contacts and symptomatic patients in the hospital environment who are awaiting COVID-19 test results.
- All efforts should be made to reduce the need for AGPs. Where required, healthcare workers (HCWs) should use a fit-tested PFR, protective eyewear, gown and gloves as per standard transmission-based precautions.
- The CAHS [Transmissible Diseases Index \(TDI\)](#) should be referred to for information on required transmission based precautions where an alternate infectious disease diagnosis or clinical syndrome exists.

Inpatient de-escalation of isolation & transmission-based precautions

- Children who require ongoing inpatient care following completion of 7 full days of isolation from the onset of acute illness should be discussed with Infection Prevention & Control (IP&C) prior to de-escalating precautions
 - De-escalation may be possible for immunocompetent patients provided there has been resolution of acute symptoms and they have a negative COVID-19 RAT
 - Immunocompromised patients may need to remain under precautions for a longer period given the risk for ongoing viral shedding
- Refer to the [PCH COVID-19 Infection Control, Patient Flow and Staff Health](#) guideline for further details

Aerosol generating procedures (AGPs)

- AGPs are those that stimulate coughing and thereby promote the generation of fine respiratory particles. They may increase the risk of infection transmission via the airborne route. AGPs include but are not limited to:
 - Tracheal intubation and extubation.
 - Intentional or inadvertent disconnection / reconnection of closed ventilator circuit.
 - Open oropharyngeal or nasopharyngeal suctioning.
 - Upper respiratory tract instrumentation and/or surgery (e.g. bronchoscopy, tracheotomy).
 - Manual or non-invasive ventilation (including BiPAP and CPAP).
 - Sputum induction & chest physiotherapy.
 - High flow nasal oxygen (HFNO).
 - Cardiopulmonary resuscitation.
 - Nebuliser use.
- The following are not considered AGPs: NGT insertion, nasopharyngeal swab collection, low flow oxygen therapy and Nitrous Oxide administration for procedural sedation.
- Senior medical input should determine if the AGP is warranted for a positive COVID-19 case based on clinical need. Decision making should be based on likely clinical benefit and whether an alternative exists.
 - Nebulisers should be avoided and replaced by single patient use spacers where clinically appropriate.
- If an AGP is deemed essential, the following precautions should be undertaken:

Positive COVID-19 Case or Close Contact	<u>No</u> Clinical Features or Epidemiological Risk for COVID-19 Infection
Prioritise for a negative pressure isolation room (NPIR)	Move to a single room with door closed
Limit HCWs in the room to those who are essential	Limit HCWs in the room to those who are essential
Attending staff must wear PPE as for contact + airborne precautions (fit-tested PFR, protective eyewear, gown and gloves)	Attending staff must wear PPE as for contact + airborne precautions (fit-tested PFR, protective eyewear, gown and gloves)

- For detailed Infection Control advice please refer to the following WA Health and CAHS documents:
 - WA Department of Health Policy: [Coronavirus Disease – 2019 \(COVID-19\): Infection Prevention and Control in Western Australian Healthcare Facilities.](#)
 - WA Department of Health Policy Framework MP 0172/22: [Identification and Use of Personal Protective Equipment in the Clinical Setting Policy](#)
 - CAHS COVID-19 [Infection Control, Patient Flow and Staff Health](#) guideline.

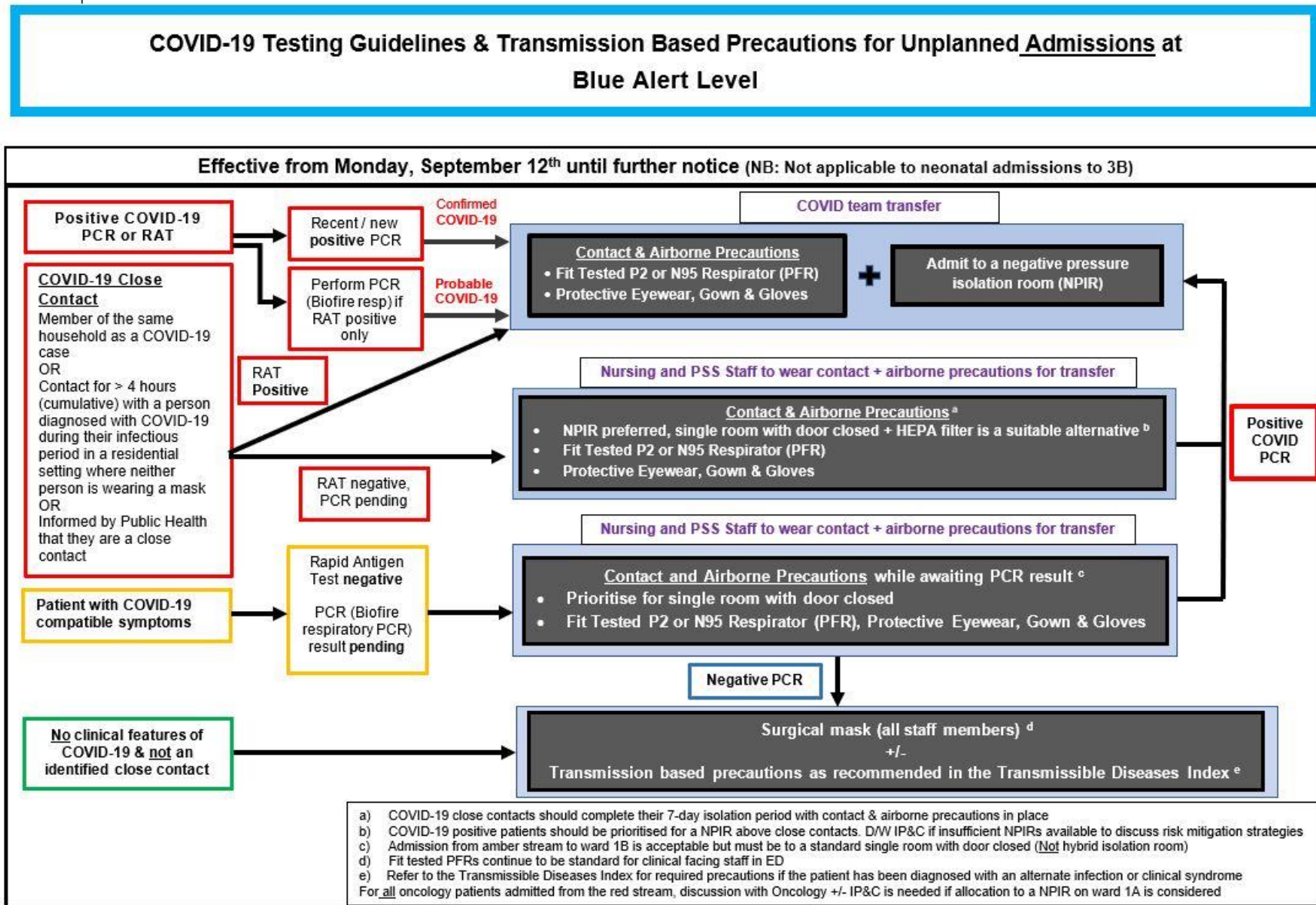


Figure 3: COVID-19 Testing & Transmission-based Precautions for PCH Admissions at SAR Blue Response Phase

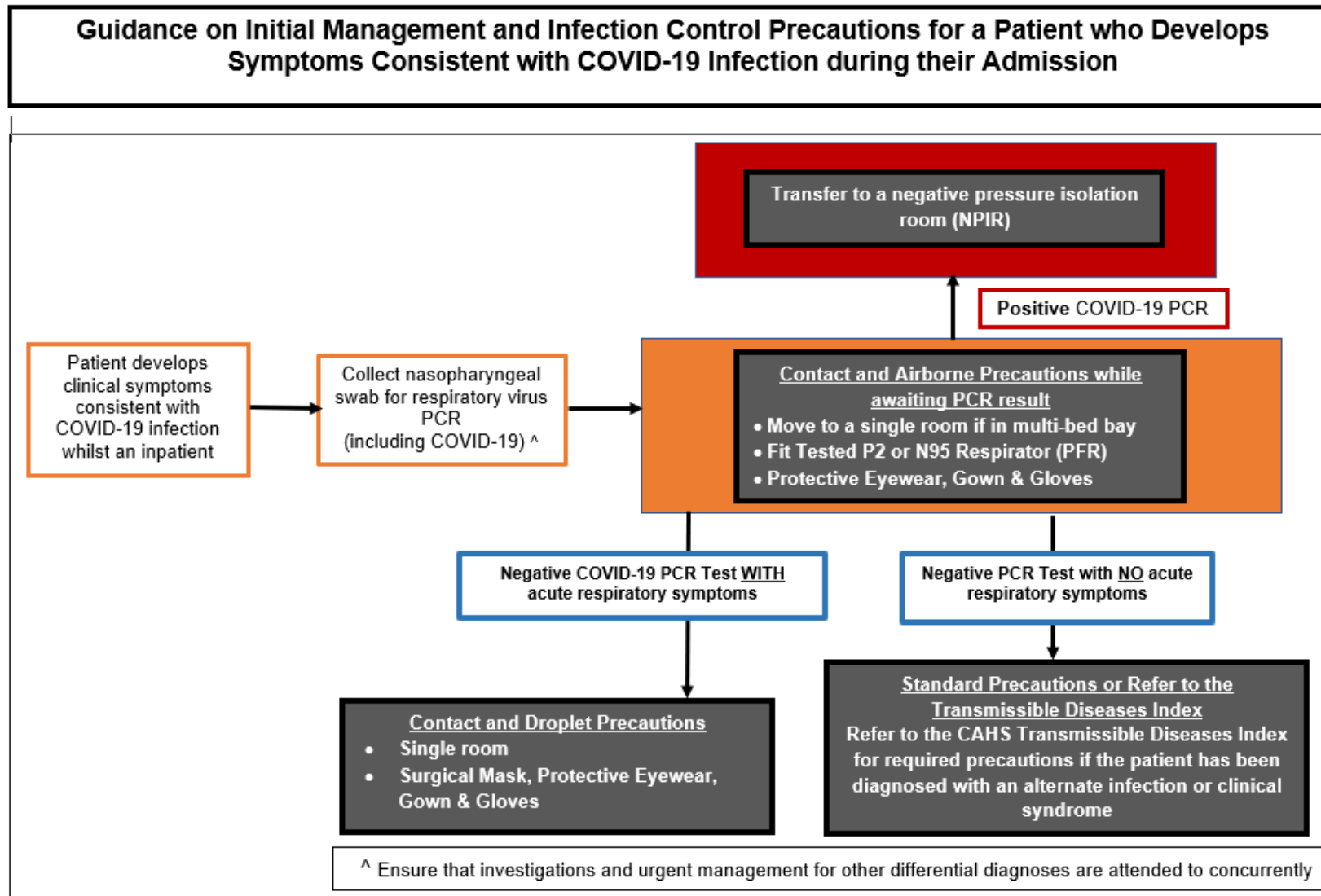


Figure 4: Initial Management & Infection Control Precautions for Inpatients who Develop COVID-19 Compatible Symptoms during their Admission

Admission procedures

For all positive COVID-19 patients and asymptomatic close contacts, ensure the following (refer to Figure 3):

- Prioritise the patient for admission to a NPIR.
- Preference should be given to the following patient groups if NPIR capacity is limited:
 - Positive COVID-19 cases
 - Asymptomatic close contacts that require aerosol generating procedures.
- A single room with door closed & portable HEPA filter is otherwise sufficient provided staff members use contact and airborne transmission-based precautions on entry to the room.
- Arrange a COVID team lift transfer to the admitting ward via Vocera for all positive COVID-19 cases.
- Place signage demonstrating the appropriate transmission-based precautions outside the patient room.

Staff Allocation

- Individual staff members and managers should refer to the [Staff Allocation for Probable or Confirmed COVID-19 Patients and Clients](#) policy for guidance on appropriate allocation.
 - All allocated staff members must be up to date with mandatory PPE training.
 - All allocated staff must have undergone fit-testing for a PFR and have access to their appropriate mask.
 - All allocated staff must be fully vaccinated and have complied with their booster vaccination requirement (from January 31, 2022 a booster vaccine is required 3 months following completion of the primary vaccination course).
 - All eligible staff members should be encouraged to remain up to date with their COVID-19 vaccine booster doses.
 - Staff members with a medical exemption from COVID-19 vaccination and/or from wearing PPE must not care for positive COVID-19 patients.
 - Staff members with underlying medical conditions that may place them at higher risk for severe illness from COVID-19 should undergo a COVID-19 fitness for work risk assessment.

Management of positive COVID-19 cases

Management based on clinical manifestation

- Thresholds for admission/transfer of patients with acute respiratory illness currently should not change. These decisions should be based on the clinical severity of disease, not the presumed underlying viral aetiology.
- The management of suspected COVID-19 cases should follow existing PCH management guidelines including:
 - [Intravenous fluid therapy](#)
 - [Croup](#)
 - [Pneumonia](#)
 - [Asthma](#)
 - [Bronchiolitis](#)
 - [Sepsis recognition and management](#)
 - [Children's Antimicrobial Management Program](#).

Management based on severity of illness

Refer to Appendix 1 for disease severity classification in children and adolescents.

Mild Illness

- Children with mild disease may not require admission to hospital if respiratory and hydration status are stable and social circumstances permit ongoing care and isolation at home.
- Symptomatic management is recommended.
- Families of COVID-19 positive children who are discharged from hospital should be advised that they need to complete the required isolation period at home following the diagnosis of COVID-19.
 - Refer Department of Health advice on [COVID-19 isolation](#) for up to date information on isolation duration and requirements for positive COVID-19 cases and their close contacts.

Moderate Illness

- Children with moderate disease require admission to hospital for oxygen therapy and hydration.
- Refer to the [Oxygen Administration](#) Guideline within the CAHS Clinical Practice Manual for details.

Severe Illness

- Children with severe illness should be admitted to hospital and discussed with both the admitting consultant and the Paediatric Critical Care Unit.

Respiratory Support

- Conventional oxygen therapy [nasal prong, mask or high-flow nasal oxygen (HFNO)] progressing to or non-invasive ventilation (NIV) should be used for neonates, children and adolescents where oxygen saturations cannot be maintained within the target range.

- As HFNO and NIV are AGPs, positive COVID-19 cases requiring this support should be discussed with a senior clinician prior to commencement and should be prioritised for admission to a NPIR under contact & airborne transmission-based precautions.

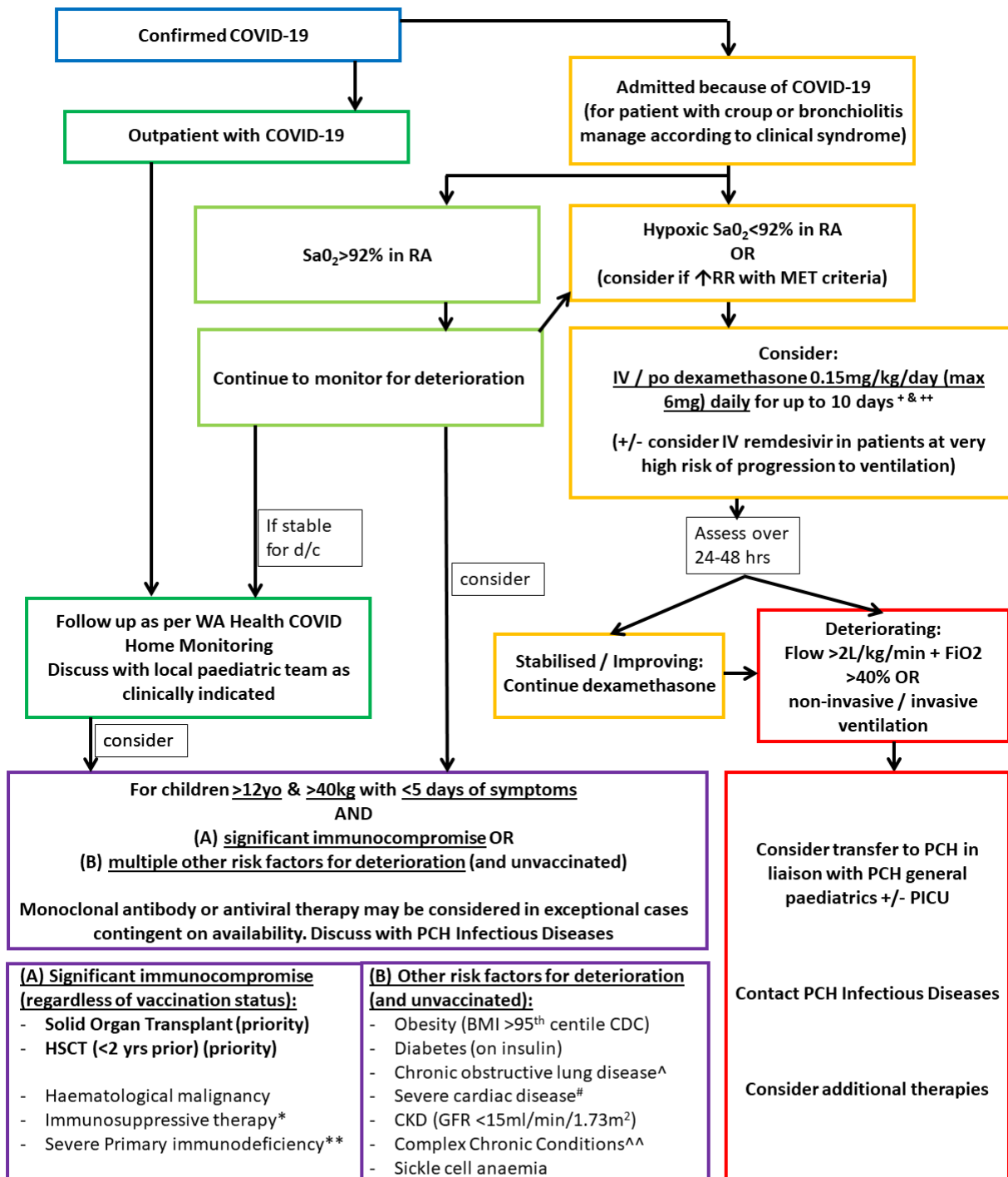
Critical Illness

- Increase inspired oxygen concentration as required.
- Consider endotracheal intubation and mechanical ventilation in neonates, children and adolescents with COVID-19 who continue to deteriorate despite optimised non-invasive respiratory support*. This should be discussed with a PCH PCC consultant.
 - Early intubation should be considered to prevent the additional risk posed to staff by emergency intubation
 - Refer to [Consensus statement: Safe Airway Society – Principles of airway management and tracheal intubation](#) and the [APLS guideline for Paediatric Advanced Life Support \(with COVID-19 considerations\)](#) for further guidance on airway management and cardiopulmonary resuscitation for patients with COVID-19.
 - Intubation should be undertaken by the most experienced team member available
- ETT suction should be minimised but may be essential. It should be performed with in-line suction apparatus incorporated into the airway circuit at the time of intubation.

Disease modifying treatments

- Additional therapies may be considered for children at high risk for severe disease (e.g. Haemopoietic stem cell transplant recipient, solid organ transplant recipient, severe primary immunodeficiency) &/or those requiring hospital admission for respiratory support.
- The use of disease-modifying therapies for acute COVID-19 infection should be discussed with a Paediatric Infectious Diseases consultant. Treatments that may be considered due to ongoing demonstrated activity against more recent SARS-CoV-2 variants include:
 - Dexamethasone (where supplemental oxygen is required)
 - Remdesivir: Individual Patient Approval (IPA) & National Medicine Stockpile approval required
 - Paxlovid® (Nirmatrelvir/Ritonavir): IPA required
 - Evusheld® (Tixagevimab and Cilgavimab):
 - TGA approved for pre-exposure prophylaxis
 - IPA & National Medicine Stockpile approval required

Figure 5: COVID-19 Patient Treatment Pathway



+ for infants with bronchiolitis, supportive management likely sufficient ++consider strongyloides serology +/- empiric tx if resident in tropical regions of WA
[^] severe asthma (>1 admission in last 12 months req ICU or IV tx), CF / bronchiectasis with FEV <60%, congenital tracheal stenosis, CLD with pulmonary HTN on oxygen, neuromuscular disease (requiring daytime resp support), tracheostomy req ventilation
^{^^}neurodisability / cerebral palsy (GMFCS 4-5 or equivalent), congenital and genetic (incl trisomy 21), metabolic,
[#] cardiomyopathy (on diuretics), Shunt dependent pulmonary blood flow, pulmonary HTN (on tx), single ventricle
 *Immunosuppressive therapy includes: (1) Chemotherapy (2) High dose corticosteroid treatment (>20mg/day >14 days) (3) selected DMARDs (MMF, leflunomide, azathioprine, 6-MP, cyclophosphamide, calcineurin inhibitors (cyclosporin, tacrolimus) (4) Selected biologics / targeted therapies: Anti-CD20 antibodies (e.g. rituximab); BTK inhibitors (e.g. ibrutinib); JAK inhibitors (e.g. tofacitinib, ruxolitinib); Sphingosine 1-phosphate receptor modulators (e.g. fingolimod); Anti-CD52 antibodies (e.g. alemtuzumab); Anti-complement antibodies (e.g. eculizumab); Anti-thymocyte globulin (5) Multiple immunosuppressants where the cumulative effect is considered to be severely immunosuppressive
 **PID including combined immunodeficiency syndromes, major antibody deficiency (e.g., CVID / XLA), defects of innate immunity (including phagocytic cells), defects of immune regulation, complement deficiencies

Paediatric Inflammatory Multisystem Syndrome Temporally associated with SARS-CoV-2 (PIMS-TS)

- PIMS-TS is a rare but severe complication that occurred in around 1 in 3000 children 2-6 weeks following infection with the SARS-CoV-2 ancestral strains. The observed incidence is lower following Omicron infection compared with earlier waves.
- Some features overlap with Kawasaki disease, toxic shock syndrome and sepsis.
- Refer to the CAHS [Paediatric Inflammatory Multisystem Syndrome \(PIMS-TS\) following SARS-CoV-2 Infection: Diagnosis and Management](#) guideline for further information on investigation and treatment.

Long COVID

- Most children and adolescents with COVID will recover uneventfully and be back to their usual health within 1-2 weeks. A smaller number will have some persistent symptoms for a few weeks until they feel back to normal. A much smaller number may have symptoms for up to 3 months but can also be expected to make a full recovery back to normal health.
- Studies to date have found that children and adolescents are much less likely to have long COVID than adults and also recover faster than adults. Long COVID is very rare in younger children and mainly affects children over 10 years.

Definition: Long COVID is a term used to describe individuals with physical symptoms that continue for more than 12 weeks after testing positive for SARS-CoV-2, that cannot be explained by an alternative diagnosis and which are having an impact on that persons day-to-day functioning.

Symptoms: The most common symptoms include fatigue, headaches, difficulty concentrating (“brain fog”), changes to sense of taste and smell, muscle aches and joint pains, cough, breathlessness, chest pain, palpitations, dizzy spells and low mood. Symptoms are very similar to those experienced by children and young people recovering from other viral infections, such as glandular fever.

Assessment: If a child or adolescent has symptoms persisting beyond 4 weeks after testing positive for SARS-CoV-2, they should be encouraged to see their GP for a detailed assessment, to exclude other causes of their symptoms.

The GP may consider further investigations depending on the symptoms and clinical signs. As per [RACGP Caring for Patients with post-COVID-19 Conditions](#) Guideline:

- History should include symptoms enquiry and the severity of their acute COVID infection, as well as vaccination status and dates. All adolescents should have a psychosocial screen (HEADSS) as part of their assessment

- Clinical assessment should include observations (heart rate, respiratory rate), pulse oximetry for oxygen saturation, blood pressure, weight, examination of the cardiovascular, respiratory and abdominal systems.

Investigations: Depending on the differential diagnosis, those to consider include:

1/ Bloods: FBC, iron studies, U&Es, LFTs, TFTs, CRP, glucose, coeliac serology, CK, B12/folate, vitamin D, troponin and D-dimers

2/ Diagnostic imaging: CXR, ultrasound scan

3/ Other: ECG, Holter monitor, ECHO, pulmonary function tests

Management:

- There is no specific treatment for Long COVID.
- Refer to the [RACGP Caring for Patients with post-COVID-19 Conditions](#) Guideline for advice on management of common symptoms.
- Children/adolescents and their families should ensure that:
 - Routines are in place & the child/adolescent is getting out of bed during the day;
 - The child/adolescent is eating and drinking well;
 - The child/adolescent is doing gentle graded exercises;
 - The child/adolescent is keeping in touch with family and friends.
- Parents/carers should make contact with their child's school if poor school attendance is occurring or anticipated. Support for school re-integration is an essential component of clinical management.
- Allied Health services (psychology, physiotherapy, occupational therapy) may be useful to support the child/adolescent through recovery.
- For children/adolescents who have had the preliminary work up with their GP and have symptoms persisting for more than 12 weeks and not improving, consider an outpatient referral to the local general paediatric service, or a PCH paediatric subspecialist depending on the symptoms and signs.
 - The focus of the paediatric assessment will be to:
 - 1/ exclude an alternative diagnosis that would explain the child's symptoms
 - 2/ support a graduated rehabilitation program.

Discharge of positive COVID-19 patients from PCH

- Refer to the Department of Health [COVID-19 Guidelines for hospital discharge and interhospital transfer](#) for comprehensive advice on this subject.
- Discharge planning should focus on ensuring that isolation and transport requirements for a patient who is COVID-19 positive or a close contact are considered. Patients must be discharged to an appropriate setting with the necessary information and follow-up plans in place.
- The treating team must assess the patient's need for post-hospital services and the availability of such services prior to discharge.
- If a patient is unable to be discharged back to their place of residence or to private accommodation, alternate accommodation may be arranged with the assistance of the State Welfare Incident Control Centre at:
 - COVIDSupport@communities.wa.gov.au or
 - By calling the 13 COVID Hotline (13 26483).
- Positive COVID-19 children and adolescents who require ongoing monitoring of their symptoms following discharge from hospital should be referred directly to the SPARC COVID program via eReferral or following discussion with the SPARC consultant on-call.
- The following principles apply for transport of patients following discharge:
 - A private vehicle should be the first choice of transport for discharging a patient to their home or accommodation (family's car or a lift from a family member).
 - The patient should wear a clean surgical mask provided by the hospital, where possible, unless the patient has already been cleared by time of discharge.
 - All other occupants of the vehicle should also wear surgical masks if able.
 - If a private vehicle is not available, a taxi or rideshare may be used. The driver and patient/family should be aware of the Department of Health guidelines and precautions for transport that include hand hygiene, mask use, opening windows, sitting away from the driver and contactless payment.
 - Taxi & rideshare *passengers* should refer to the [Passengers – stay safe from COVID-19 on you ride](#) factsheet
 - Taxi & rideshare *drivers* should refer to the [Taxi and rideshare drivers – stay safe from COVID-19](#) factsheet
 - Standard hospital processes apply where patient transport services (PTS) are used to transfer a patient to their accommodation following discharge. The service provider must be informed in advance that the patient is either COVID-19 positive or a close contact so that they can prepare accordingly.
 - Public transport must **not** be used by positive COVID-19 cases and close contacts for discharge transport.


References
Hoang A, Chorath K, Moreira A, et al. COVID-19 in 7780 pediatric patients: a systematic review. <i>EClinical Medicine</i> 2020 (July); 24:100433.
Munro APS, Faust SN. COVID-19 in children: current evidence and key questions. <i>Curr Opin Infect Dis</i> 2020; 33(3): 540-547.
Brewster DJ, Chrimes N, Do TBT, Fraser K, Groombridge CJ, Higgs A, et al. Consensus statement: safe airway society principles of airway management and tracheal intubation specific to the COVID-19 adult patient group. <i>Med J Aust</i> 2020; 212(10): 472-481.

Related CAHS internal policies, procedures and guidelines
CAHS COVID-19 Infection Control, Patient Flow and Staff Health guideline
CAHS Staff Allocation for Positive COVID-19 Patients and Clients policy
CAHS Paediatric Inflammatory Multisystem Syndrome (PIMS-TS) following SARS-CoV-2 Infection: Diagnosis and Management guideline
Croup (PCH Emergency Department Guideline)
Asthma (PCH Emergency Department Guideline)
Sepsis recognition and management (PCH Emergency Department Guideline)
Remdesivir Monograph – Paediatric (ChAMP monograph)
Nirmatrelvir with ritonavir (Paxlovid®) Monograph – Paediatric (ChAMP monograph)

Useful resources
National COVID-19 Clinical Evidence Taskforce – Caring for people with COVID-19
WA Department of Health. Coronavirus Disease -19 (COVID-19) Infection Prevention and Control in the Western Australian Healthcare Facilities (V15, 19 August 2022)
WA Department of Health. TTIQ (Test, Trace, Isolate and Quarantine) Plan (V3.0, 3 May 2022)
WA Department of Health. COVID-19 Framework for System Alert & Response (SAR) (V9.0, 15 August 2022)
Australian Department of Health: Communicable Diseases Network of Australia. COVID-19 National Guidelines for Public Health Units (SoNG)
Royal College of Paediatrics and Child Health. Guidance: Paediatric multisystem inflammatory syndrome temporally associated with COVID-19
Royal Australian College of General Practitioners. Caring for Patients with Post-COVID Conditions

CAHS COVID-19 Resources: Guideline

This document can be made available in alternative formats on request for a person with a disability.

File Path:			
Document Owner:	Executive Director Nursing Services		
Reviewer / Team:	Clinical Microbiology, Department of General Paediatrics, Infectious Diseases, Paediatric Critical Care, Respiratory Medicine.		
Endorsed by	CAHS COVID Executive Oversight Committee (CCEOC)	Initial Date of Effect	March 2020
Aboriginal Impact Statement and Declaration (ISD)		Date ISD Approved	12 January 2022
Standards Applicable	NSQHS Standards:  Child Safe Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10		
Type of Amendment	CCEOC Endorsed date	Description of Amendment	
V1	27 March 2020	First publication	
V2	31 March 2020	Amendments and updates	
V3	03 April 2020	Minor amendments	
V4	29 April 2020	Major revision and expansion of document into a comprehensive clinical care guideline	
V5	22 May 2020	Minor amendments	
V6	29 May 2020	Minor amendments to case definitions and investigation sections	
V7	21 July 2020	Minor amendments to testing information & PPE flowchart	
V8	03 August 2020	Amendments to suspect case definition & additional section on patient discharge planning	
V9	02 September 2020	Addition to guidance on who to test & alignment of Infection Control Principles with current DoH PPE recommendations	
V10	23 September 2020	Minor amendment to clinical case definition to align with updated DoH test criteria	
V11	02 December 2020	Amendments to case definitions, infection control principles, addition of illness severity definitions, addition of advice on disease modifying treatments and PIMS-TS diagnosis and management	
V12	06 January 2021	Addition to negative COVID-19 PCR results. Reformatted to align with the CAHS COVID-19 Policy set. Hyperlinks checked and broken links amended.	
V13	19 August 2021	Updated case definitions, instructions for nasopharyngeal swab collection and admission procedures. Updated treatment advice to align with current guidance from the National COVID-19 Clinical Evidence Taskforce.	
V14	7 February 2022	Updated case definitions, testing recommendations and expansion of patient management in regard to disease modifying agents and PIMS-TS	
V15	10 March 2022	Inserted - COVID-19 Testing Guidelines & Transmission Based Precautions for Unplanned Admissions at Red Alert Level	
V16	29 August 2022	Updated definitions, management and discharge requirements to align with current DoH policy. IP&C advice updated to align with current SAR response phase. Disease severity definitions amended to align with current NCCCE Taskforce recommendations. New section on long COVID added.	

Printed or personally saved electronic copies of this document are considered uncontrolled



Healthy kids, healthy communities

Compassion

Excellence

Collaboration

Accountability

Equity

Respect

Neonatology | Community Health | Mental Health | Perth Children's Hospital

Appendix 1: Definition of Illness Severity for Children and Adolescents

	Feeding / Hydration	Respiratory / Vital signs	Oxygen requirement
Mild Illness	Normal or mildly reduced feeding	No or mild upper respiratory tract symptoms OR No or mild work of breathing	No supplemental oxygen required
Moderate Illness	Unable to maintain hydration without NG or IV fluids AND Normal conscious state	Moderate work of breathing OR Abnormal vital signs for age but does <u>not</u> persistently breach early warning criteria OR Brief, self-resolving apnoea (infants)	Requires low-flow oxygen AND/OR Chest x-ray changes due to COVID-19 without other severe features
Severe Illness	Unable to maintain hydration without NG or IV fluids OR Drowsy/tired but easily rousable	Moderate-severe work of breathing OR Abnormal vital signs for age with breaches of early warning criteria OR Apnoea needing support / stimulation (infants)	Requires high-flow oxygen or non-invasive ventilation
Critical Illness	Unable to maintain hydration without NG or IV fluids OR Altered conscious state / unconscious	Unable to maintain breathing or prevent apnoea without advanced modes of support OR Abnormal vital signs for age with persistent breaches of early warning criteria OR Haemodynamically unstable without inotropic or vasopressor support OR Other organ failure	Requires advanced modes of support to maintain oxygenation: Intubation and mechanical ventilation OR Extracorporeal membrane oxygenation (ECMO)

Based on the Australian Guidelines for the Clinical Care of People with COVID-19: [Definition of disease severity for children and adolescents](#). National COVID-19 Clinical Evidence Taskforce (Updated August 18, 2022).