



Infection Prevention and Control

COVID-19 Personal Protective Equipment (PPE) Decision Matrix

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Government
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SA Health

COVID-19 Personal Protective Equipment (PPE) Decision Matrix
 Infection Control Service
 SA Department for Health and Wellbeing
 Government of South Australia

www.sahealth.sa.gov.au/COVID-19

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Introduction

COVID-19 is a new disease caused by SARS-CoV-2 virus. Personal Protective Equipment (PPE) protects the wearer from infection. Proper use (when worn and selected appropriately) helps keep health workers safe and stops the spread of COVID-19. For information (including those products with [Australian Register of Therapeutic Goods](#) (ARTG) entries) regarding the selection and supply of PPE in Australian Healthcare settings, refer to the [Therapeutic Goods and Administration](#) website.

The PPE advice in this document applies to the management of any suspected, probable or confirmed case of COVID-19 that presents to a hospital. It is important to recognise the signs and symptoms of COVID-19 on presentation. These include: fever ($\geq 37.5^{\circ}\text{C}$) 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 taste for full information refer to the COVID-19 Series of National Guidelines [SoNG](#).

Additionally, it is noted that asymptomatic COVID-19 has been observed and can occur at any age. Its incidence and role in transmission is not yet known. High rates of asymptomatic infection have been reported during outbreaks in closed settings (e.g. cruise ships, aged care facilities), or in the context of high community prevalence.

Presymptomatic transmission is well documented. The duration of infectivity before the onset of symptoms is uncertain but limited evidence suggests it can be up to 48 hours.

Possible modes of transmission for SARS-CoV-2 can occur through direct, indirect, or close contact with droplets and aerosols. Currently, there is [strong clinical and epidemiological evidence](#) that the predominant mode of spread of COVID-19 is via respiratory droplets (produced during speaking, coughing, sneezing etc.):

- > Directly during close face-to-face contact (within ~1.5 m) by exposure of the face (and then mucosae of mouth, nose or eyes) OR
- > Indirectly by touching surfaces or fomites contaminated by respiratory droplets and then touching the face.

The infection control advice and associated personal protective equipment (PPE) recommendations in this SA Health guideline are based on current available guidelines, evidence and clinician advice. This document should also be read in conjunction with the SA Health [Workforce Health Guideline for Personal Protective Equipment \(PPE\) Selection](#).

Note: Recommendations and guidelines are subject to change and clinicians are advised to also refer to:

- > [Coronavirus Disease 2019 Communicable Diseases Network Australia \(CDNA\) National Guidelines for Public Health Units \(SoNG\)](#)
- > [Australian Government Department of Health information: Personal protective equipment \(PPE\) for the health workforce during COVID-19](#)
- > [Coronavirus disease 2019 \(COVID-19\) and SA Health Public Health Alerts](#)
- > Local Health Network (LHN) policies and procedures, including documented risk assessments and COVID-19 management plans

Scope

The guidance in this document provides PPE advice and applies to:

- > Hospitalised patients, including day procedure areas
- > All patients in the Emergency Department (ED), outpatient clinics and COVID-19 testing clinics.

Note: Other service providers including Residential Aged Care Facilities (RACF) and SA Ambulance Service (SAAS) should refer to the SA Health [Coronavirus disease 2019 \(COVID-19\) web page](#).

The document provides PPE advice and general infection control recommendations relating to COVID-19 including:

- > testing patients for COVID-19
- > personal protective equipment (PPE) for staff when providing care
- > room accommodation for the patient

Geographic areas with significant community transmission of COVID-19

The advice in this fact sheet is based on the understanding that currently, South Australia (SA) is not considered to have significant community transmission of coronavirus disease 2019 (COVID-19), and as the situation evolves this document will be updated as required.

In geographic areas with significant community transmission of COVID-19 (as defined by SA Health) and in specified clinical settings, health care workers may need to take extra precautions above those usually indicated for standard and transmission based precautions.

PPE recommendations in **geographic areas** with significant community transmission of COVID-19:

- > In all clinical settings, at a minimum use standard precautions, including eye protection and a surgical mask (level 2 or higher), refer local health facility advice.
- > For routine care of individual patients suspected, probable or confirmed COVID-19 including those who are in quarantine / isolation, at a minimum use contact and droplet precautions. Clinicians and LHNs should also undertake a local risk assessment to guide extra PPE requirements e.g. use of P2/95 respirators (or equivalent), refer to [Tables 1 & 2](#).
- > The Clinical Excellence Commission (CEC) recommends extended or sessional use of PPE is only recommended when caring for a patient with suspected, probable or confirmed COVID-19. Masks can be worn for a maximum of 4 hours, continuously or uninterrupted for multiple patients without removing the mask unless damaged, soiled or contaminated. The mask must be discarded if it becomes wet, contaminated, is hard to breathe through or is compromised in any way. HCWs must take care not to touch their facemask once in position, however if the mask is touched or adjusted hand hygiene must be performed. Refer to the [SA Health COVID-19 Strategies for optimising supply of personal protective equipment \(PPE\) Fact Sheet](#).

For further guidance on the use of PPE by healthcare workers in areas with significant community transmission refer to [Australian Government advice](#).

For further information regarding PPE during NO, LOW or SUSTAINED community transmission, refer to [Tables 1-4](#) in this document and also the SA Health Flow Chart: [ED flow for patients presenting with respiratory illness signs and symptoms during time of No, Low or Sustained community transmission of COVID-19](#)

Cardiopulmonary Resuscitation (CPR) of adults in healthcare settings

CPR should not be delayed. Cardiac compressions should commence immediately. Staff should ensure personal safety and wear appropriate PPE. Refer to [National Advice for CPR of adults with COVID-19 in Healthcare Settings and the Community](#)

Patients exhibiting challenging and aerosol generating behaviours (AGB)

There are currently minimum national recommendations for patients exhibiting challenging and or aerosol generating behaviours (AGB), (such as shouting), in specified clinical settings and situations based on risk assessment. The [national COVID-19 guidelines](#) recommend that P2/N95 respirators (or equivalent), should be used in areas with significant community transmission, where one or both of the following apply:

1. *For the clinical care of patients with suspected, probable or confirmed COVID-19, who have cognitive impairment, are unable to cooperate, or exhibit challenging behaviours. In this context, consider the use of contact, droplet and airborne precautions (including eye protection), including the use of a *PFR, instead of a surgical mask.*
2. *Where there are high numbers of suspected, probable or confirmed COVID-19 patients AND a risk of challenging behaviours and/or unplanned aerosol generating procedures (e.g. including intermittent use of high flow oxygen). In this setting, [consider extended use of PFRs](#), for up to 4 hours, if tolerated, to avoid the need for frequent changes of face covering.*

* **Note:** Particulate filter respirator (PFR) is as per national COVID-19 guidelines terminology, however for the purpose of this document this is interpreted as P2/N95 respirators (or equivalent).

In addition to the above minimum national guidance, SA Health recommends staff wear P2/N95 respirators (or equivalent) for care of suspected, probable or confirmed COVID-19 cases who are exhibiting AGB or who require aerosol generating procedures (AGP). Patients suspected of COVID-19 infection should have epidemiological risk AND clinical symptoms consistent with coronavirus infection. Refer to [Tables 1-4](#).

General messages regarding PPE

Staff are to use PPE if they:

- > care for someone with suspected, probable or confirmed COVID-19
- > assess or collect specimens from people who have suspected or probable COVID-19
- > have contact with people who have fever or respiratory symptoms suggestive of COVID-19.

Provide surgical masks (level 1 is sufficient) to patients or visitors to wear straight away if they:

- > are under quarantine, isolation or investigation for COVID-19
- > are suspected, probable or confirmed COVID-19
- > are from an area intrastate, interstate or overseas considered to have community transmission
- > have signs and symptoms suggestive of COVID-19.

Staff must assess patients at least daily for changes in clinical features during their episode of care, as this may influence clinical management and indications for testing, infection control precautions, isolation, room accommodation and PPE. A risk assessment for indications for PPE should also include consideration of areas with significant community transmission, refer to [Table 3](#).

General infection prevention and control principles

As per the current national advice, any person presenting with signs or symptoms of COVID-19, should initially be isolated, assessed and managed under a minimum of [standard and droplet precautions](#) (including placing a level 1 surgical mask on the patient for source control).

However, LHNs and / or clinicians should also undertake a clinical risk assessment and where deemed appropriate, institute additional measures including the wearing of a P2/N95 respirator (or equivalent) refer to [Tables 1-4](#).

When caring for COVID-19 patients who require AGPs, the addition of airborne precautions must be implemented. For further information regarding AGPs and for current advice for the use of PPE in specific hospital settings refer to [Tables 1-4](#).

The careful use of PPE regardless of the risk of COVID-19 should comply with current [Australian Infection Prevention and Control Guidelines](#) and the current Department of Health [COVID-19 advice](#). PPE requirements should also be in accordance with clinical circumstances and risk assessment. As per routine practices any person presenting for care should be assessed for risk of transmission of infectious agents spread by blood or body fluids by contact, droplet or airborne routes, and the appropriate level of infection control precautions and PPE implemented accordingly.

All staff, students, volunteers, contractors, and others in the healthcare environment must adhere to standard precautions (including the Five Moments for Hand Hygiene) at all times and transmission-based precautions as indicated. The patient [environment](#) must be cleaned and disinfected appropriately and any patient care equipment must be [reprocessed](#) according to recommended practices.

Refer to Local Health Network (LHN) policies and procedures relating to standard and transmission based precautions including PPE training and fit testing and fit checking requirements.

Room allocation

- > Suspected, probable or confirmed COVID-19 patients should be placed in a single hospital room with the door closed. If an ensuite is not available, a dedicated toilet/commode should be used.
- > If the patient has severe symptoms suggestive of pneumonia requiring more than routine care, or AGPs are required, or are exhibiting aerosol generating behaviours, they should be allocated a negative pressure room, if available.

Information regarding testing patients for COVID-19

COVID-19 testing criteria

For up to date information on who should be tested for COVID-19 refer to the latest version of the CDNA [SoNG](#), SA Health [Public Health Alerts](#) and SA Health Testing for COVID-19.

Note: In certain high-risk outbreak settings, asymptomatic people may be considered for testing. Refer to [SA Health latest advice](#).

Recommended PPE for COVID-19 testing clinics, inpatient settings and EDs

- > For the staff member taking the specimen, use gloves, gown, fit tested and fit checked P2/N95 respirator (or equivalent), eye protection (goggles or safety glasses or a face shield).
- > When extended use of PPE is being considered. Refer to the [Strategies for optimising supply of personal protective equipment \(PPE\) fact sheet](#) and local policies / procedures.

Note: Patients with severe respiratory symptoms should be referred to an ED for clinical assessment and testing.

PPE general recommendations

PPE can include the following items: gloves, gowns/aprons/coveralls, surgical masks, P2/N95 respirator (or equivalent), powered air-purifying respirators (PAPR), protective eye wear (safety glasses/goggles), full face shields, head covers and shoe covers.

Note: PAPR, head and shoe covers are not currently recommended for routine care of COVID-19 patients but can be considered as part of a local risk assessment.

Eye protection consisting of goggles / safety glasses AND a face shield is recommended when performing AGPs.

Nebulisers

Airborne precautions are required when performing a respiratory [aerosol generating procedure](#) (AGP) on a COVID-19 suspected, probable or confirmed patient. The use of nebulisers should be avoided and alternative means of delivering medication (such as pressurised metered-dose inhaler or a spacer) should be used. If the use of a nebuliser cannot be avoided in a patient with suspected, probable or confirmed acute respiratory viral illness (including COVID-19) then:

- > Isolate the patient.
- > Use a negative-pressure room, if available. If not available and there is no alternative, use a single room with the door closed.
- > HCWs administering nebulisers should wear airborne precaution PPE, including impervious gown and gloves, P2/N95 respirator or equivalent and protective eyewear.
- > Continue airborne precautions for at least 30 minutes after the nebuliser treatment.

Additional PPE such as head coverings can be considered where a high level of contamination is a major risk or when full barrier precautions are recommended e.g. aseptic technique or in operating theatres.

PAPR use is as per clinical risk assessment and LHN policy.

Donning and Doffing of PPE

[Donning and doffing](#) must be undertaken in a methodical manner as per the recommended sequence in the [National](#) and [SA Health](#) and local policies or instructions, including appropriate hand hygiene. There should be adequate space for donning and doffing as well as PPE waste disposal areas as per local procedures. Refer to the [SA Health Infection Control and personal protective equipment \(PPE\) advice](#) webpage.

Donning of PPE:

- > This must occur before a staff member enters the patient room or clinical space.

Doffing of PPE:

- > Should be in accordance with the Australian Guidelines for the Prevention and Control of Infection in Healthcare and DoH COVID-19 guidelines, including the removal of eye protection and mask outside the patient's room and then performing hand hygiene.

Information on items of PPE

Use of surgical masks:

Surgical masks are available in various levels ranging from 1-3. For further information regarding the different levels of surgical masks, see the [National Infection Prevention and Control Guidelines](#).

- > For staff providing routine care to non-ICU, non-critically ill patients and who are not performing AGPs – refer to [Tables 1-3](#).
- > Patients with suspected, probable or confirmed COVID-19 should wear a surgical mask (level 1) as long as this is not medically contraindicated (refer to medical advice).
- > Persons who have entered South Australia from areas high community transmission (including those who are required to quarantine or self-isolate) should wear a surgical mask for source control when entering or attending a healthcare facility.

Use of P2/N95 respirators (or equivalent)

P2/N95 respirators are also known as [particulate filter respirators \(PFR\)](#), however for the purpose of this document the terminology **P2/N95 respirator (or equivalent) will be used to ensure consistency with other [SA Health respiratory protection guidelines](#).**

Health care workers who use a P2/N95 respirator (or equivalent) should be [fit tested](#) and must be trained in the correct use, including how to perform fit-checking and safe removal.

Unless P2/N95 respirators (or equivalent) are used correctly, their effectiveness will be compromised and the risk of infection (to the wearer) increased. P2/N95 respirators (or equivalent) with valves should not be used, as there is a risk of exhaled air, from wearers who are infected, containing viral particles.

A respirator is a personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles (including dust particles and infectious agents), gases, or vapours. For further information about P2/N95 respirators (or equivalent), refer to [AS/NZS 1715-2009](#) Selection, use and maintenance of respiratory protective equipment.

Staff should wear a [fit tested and fit checked](#) P2/N95 respirator (or equivalent) when performing AGPs or when caring for ventilated or critically ill patients or the patient is exhibiting AGB – in addition to other recommended PPE. Refer to [Tables 1-4](#).

For full information regarding procedures classified as AGPs and AGB see the CDNA [SoNG](#).

The difference between a standard and surgical P2/N95 respirator (or equivalent) as per the 3M [technical advisory](#) is summarised as follows:

Standard P2/N95 respirator (or equivalent):

- > Function: Reduces inhalation of fine airborne droplets by wearer. (P2 = 94% filter efficiency, N95 = 95% filter efficiency, provided a good facial fit is obtained).
- > Application: Use for respiratory protection when wearer might be exposed to particulate hazards, including when performing AGPs.

Surgical P2/N95 respirator (or equivalent):

- > Function is as per standard P2/N95 respirator (or equivalent), plus provides higher level fluid resistance to prevent strike-through of high velocity fluid exposure.
- > Application: Use during surgery and other tasks during which both of these are true.
- > Healthcare facilities should prioritise use of surgical P2/N95 respirators (or equivalent) for those healthcare workers requiring respiratory protection while performing surgery or other tasks that may expose them to high velocity streams of bodily fluid or conducting work in a sterile field.

The [CDC provides](#) the following advice in relation to surgical respirators:

Where a surgical respirator is required but not available, HCWs can use a non-valved standard respirator with a full face shield to help block high velocity streams of blood and body fluids.

A face shield is recommended where there is a risk of high velocity fluid strike irrespective of the type of P2/N95 respirator (or equivalent) (Standard or Surgical) being used.

Note: P2/N95 respirators (or equivalent) are not currently recommended for use by patients.

Gowns

Isolation gowns currently available offer varying resistance to penetration by blood and body fluids depending on the type of material and level of fluid resistance. Currently gowns in Australia are classed as levels 1-4 with level 4 representing the highest level of fluid penetration protection.

For general care of patients with suspected, probable or confirmed COVID-19, the recommended minimum level of protection in the hospital setting is a level 3 gown.

For further information regarding surgical masks and gowns and their application refer to TGA Advice <https://www.tga.gov.au/advice-surgical-masks-and-gowns-during-covid-19>.

For information about other items of PPE see [National Infection Prevention and Control Guidelines](#).

Tables 1-4 provide summarised PPE recommendations for COVID-19:

- > [Table 1: Patients **WITH** suspected, probable or confirmed COVID-19](#)
- > [Table 2: Patients **WITH** epidemiological or clinical risk factors for COVID-19](#)
- > [Table 3: Patients **WITHOUT** epidemiological risk factors for COVID-19](#)
- > [Table 4: PPE recommended for aerosol generating procedures \(AGPs\)](#)

TABLE 1: Patients WITH suspected, probable or confirmed COVID-19

Actions		COVID-19 Routine clinical care	COVID-19 ICU or Critically unwell
Patient PPE (if able to tolerate)		Surgical face mask (level1), when patient moving out of the room or staff moving into the room, hand hygiene, cough etiquette	Surgical face mask (Level 1), when patient moving out of the room or staff move into the room, hand hygiene, cough etiquette (N/A if intubated)
Aerosol generating procedure is NOT required	Health care worker PPE	Minimum as recommended in the SoNG Surgical mask (level 2 or 3), long sleeved gown, gloves, face shield or goggles OR Based on clinician and LHN risk assessment a P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
	Room accommodation for patient	Single room – door closed	Negative pressure room if available, otherwise single room – door closed
	Restriction on entry to patient's room after the patient leaves	No Allocate time for environmental cleaning	No Allocate time for environmental cleaning
Aerosol generating procedure IS Required or the patient is exhibiting aerosol generating behaviours or there is a risk of a high velocity fluid strike to the P2/N95 respirator (or equivalent)	Health care worker PPE	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
	Room accommodation for patient	Negative pressure room if available, otherwise single room	Negative pressure room if available, otherwise single room
	Restriction on entry to patient's room after the patient leaves	Following an AGP, the room should remain vacant for at least 30 minutes, followed by appropriate environmental cleaning. Entry within 30 minutes only by persons wearing a P2/N95 respirator (or equivalent), long sleeved gown, gloves, face shield or goggles	Following an AGP, the room should remain vacant for at least 30 minutes, followed by appropriate environmental cleaning. Entry within 30 minutes only by persons wearing a P2/N95 respirator (or equivalent), long sleeved gown, gloves, face shield or goggles

NOTE: Also refer to LHN policy and procedures.

TABLE 2: Patients WITH epidemiological or clinical risk factors for COVID-19

Risk factors for epidemiological exposure currently include:

- > Close contact (see CDNA [SoNG](#)) in the 14 days prior to illness onset with a probable or confirmed case
- > People from areas in South Australia or overseas or interstate with increased risk of community spread transmission (e.g. [Community spread](#) means people have been infected with the virus in an area, including some who are not sure how or where they became infected) See SA Health [latest updates on COVID-19](#) and SA Health [Self-isolation and self-quarantine advice for COVID-19](#) (coronavirus)
- > Healthcare workers, aged or residential care workers with COVID-19 exposure risk e.g. staff working at sites caring for COVID-19 patients and there has been a suspected, probable or known risk of unprotected exposure Refer to [Working arrangements for the health and aged care workforce during COVID-19](#).

Actions		Patients WITH risk factors (includes geographical areas with significant community transmission) AND <u>WITH</u> COVID-19 signs and symptoms	Patients WITH risk factors (includes geographical areas with significant community transmission) AND <u>WITHOUT</u> COVID-19 signs and symptoms
Patient PPE (if able to tolerate)		Surgical mask (level 1), hand hygiene, cough etiquette	Surgical mask (level 1), hand hygiene, cough etiquette
Aerosol generating procedure is NOT required	Health care worker PPE	Minimum as per the SoNG surgical mask (level 2 or 3), long sleeved gown, gloves, face shield or goggles OR Based on clinician and LHN risk assessment, P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves Refer to table 1.	Surgical mask (level 2 or 3), long sleeved gown, gloves, face shield or goggles OR Based on clinician and LHN risk assessment, P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
	Room accommodation for patient	Single room	Single room
	Restriction on entry to patient's room after patient leaves	No Allocate time for environmental cleaning	No Allocate time for environmental cleaning
Aerosol generating procedure IS required and/or the patient is exhibiting aerosol generating behaviours and/or there is a risk of a high velocity fluid strike to the P2/N95 respirator (or equivalent)	Health care worker PPE	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
	Room accommodation for patient	Negative pressure room if available, otherwise single room with the door closed	Negative pressure room if available otherwise single room
	Restriction on entry to patient's room after the patient leaves	Following an AGP, the room should remain vacant for at least 30 minutes, followed by appropriate environmental cleaning Entry within 30 minutes only by persons wearing a P2/N95 respirator (or equivalent), long sleeved gown, gloves, face shield or goggles	Following an AGP, the room should remain vacant for at least 30 minutes, followed by appropriate environmental cleaning Entry within 30 minutes only by persons wearing a P2/N95 respirator (or equivalent), long sleeved gown, gloves, face shield or goggles

NOTE: Also refer to LHN policy and procedures.

TABLE 3: Patients **WITHOUT epidemiological risk factors for COVID-19**

Note: Risk assess for areas with significant community transmission and if identified, refer to [Table 2](#).

If sustained community transmission is occurring, all patients should be considered as possibly infected or COVID-19 risk.

Actions		Patient <u>without</u> epidemiological risk factors WITH respiratory signs and symptoms	Patient <u>without</u> epidemiological risk factors WITHOUT respiratory signs and symptoms
Patient PPE (if able to tolerate)		Surgical mask (level 1), hand hygiene, cough etiquette	Not required unless patient is required to self-isolate or self-quarantine and/or is in an area with significant community transmission
Aerosol generating procedure is NOT required	Health care worker PPE	Surgical mask (level 2 or 3) long sleeved gown, gloves, face shield or goggles	Minimum standard precautions and transmission based precautions as indicated as per usual clinical risk assessment.
	Room accommodation for patient	Single room	Minimum standard precautions. Transmission based precautions as per usual clinical risk assessment
	Restriction on entry to patient's room after the patient leaves	No Allocate time for environmental cleaning	No Allocate time for environmental cleaning
Aerosol generating Procedure IS required and/or there is a risk of a high velocity fluid strike to the P2/N95 respirator (or equivalent)	Health care worker PPE	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	Minimum standard precautions and as applicable transmission based precautions apply. Also refer to Table 4 for specific procedures that routinely require airborne precautions.
	Room accommodation for patient	Single room with door closed.	As clinically indicated.
	Restriction on entry to patient's room after the patient leaves	Following an AGP, the room should remain vacant for at least 30 minutes, followed by appropriate environmental cleaning. Entry within 30 minutes only by persons wearing a P2/N95 respirator (or equivalent), long sleeved gown, gloves, face shield or goggles	A minimum of standard and transmission based precautions apply as applicable.

NOTE: Also refer to LHN policy and procedures.

TABLE 4: PPE recommended for aerosol generating procedures (AGPs)

NOTE: The following are examples of AGPs, this list is not exhaustive. Refer to LHN policy and procedures.

Procedure	Risk mitigation strategies	Asymptomatic AND <u>NO</u> epidemiological risk factors for COVID-19	Asymptomatic AND risk factors for COVID-19 OR sustained community COVID transmission	Suspected, probable, confirmed COVID-19
<ul style="list-style-type: none"> > Tracheostomy / laryngectomy > Tracheostomy procedures (insertion/open suctioning/ removal) 		Surgical mask (level 3), long sleeve gown, gloves, face shield or goggles	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Intubation, extubation and related procedures (e.g. manual ventilation/ open suctioning of respiratory tract. > Non-invasive ventilation (NIV) (eg. Bi-level positive pressure ventilation and continuous positive airway pressure) > High frequency oscillatory ventilation > High flow nasal oxygen 	<p>Appropriate use of (NIV) should be directed by a senior clinician.</p> <p>If CPAP or NIV are instituted in patients with suspected or confirmed COVID a non-vented mask with close fitting seal should be applied and a viral filter applied to the expiratory limb of circuit.</p>	Surgical mask (level 3), long sleeve gown, gloves, face shield or goggles	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Cardiopulmonary resuscitation 		Standard precautions with risk-based assessment.	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Surgical and complex dental procedures that involve the mouth, front of the neck, sinuses, oropharynx or lung 	Minimise high speed drilling where possible	Surgical mask (level 3), long sleeve gown, gloves, face shield or goggles	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Bronchoscopy > Bronchoalveolar lavage (BAL) - also known as bronchoalveolar washing 	Note: Safe Work SA requirements for any Bronchoscopy require surgical P2/N95 respirator (or equivalent) to be worn	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Upper gastrointestinal endoscopy where there is suctioning of the upper respiratory tract > Nasoendoscopy 	Endoscopic procedures that require additional insufflation of CO ₂ or room air by additional sources should be avoided where possible. This includes many endoscopic mucosal resection and endoluminal procedures	Surgical mask (level 3), long sleeve gown, gloves, face shield or goggles	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Induction of sputum for <i>Pneumocystis jirovecii</i> pneumonia (PJP), Tuberculosis (TB) and other pathogens as per clinician decision. 	Do not undertake induced sputum on confirmed COVID-19 positive cases. Discuss need for induced sputum with ID/ Respiratory MO prior to ordering test.	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves
<ul style="list-style-type: none"> > Administration of medication via nebulisation 	Avoid, unless no alternative (for example nebulised adrenaline for croup)"	Minimum surgical mask (level 3), long sleeve gown, gloves, face shield or goggles Refer to LHN policy.	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves	P2/N95 respirator (or equivalent) with goggles/safety glasses and a face shield, long sleeved gown, gloves

Related resources

- > Australian Government Department of Health, Coronavirus (COVID-19) Web page: resources for health professionals, including aged care providers, pathology providers and health care managers <https://www.health.gov.au/resources/collections/coronavirus-covid-19-resources-for-health-professionals-including-aged-care-providers-pathology-providers-and-health-care-managers>
- > SA Health Coronavirus disease 2019 (COVID-19): Information for health professionals web page: <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+programs+and+practice+guidelines/infectious+disease+control/coronavirus+disease+2019+information+for+health+professionals/novel+coronavirus+%282019-ncov%29+infection+information+for+health+professionals>
- > SA Health Coronavirus disease 2019 (COVID-19): Infection control and personal protective equipment (PPE) advice web page: <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+programs+and+practice+guidelines/infectious+disease+control/coronavirus+disease+2019+information+for+health+professionals/infection+control+and+personal+protective+equipment+%28ppe%29+advice>
- > Government of South Australia Emergency Declaration and Directions web page: <https://www.covid-19.sa.gov.au/emergency-declarations>
- > NSW Government Clinical Excellence Commission (CEC), Infection Prevention and Control Application of PPE during COVID-19, Version 2.3, August 2020 https://www.cec.health.nsw.gov.au/_data/assets/pdf_file/0006/590307/Application-of-PPE-in-COVID-19.pdf
- > National COVID-19 Clinical Evidence Taskforce, Basic Life Support for Adults in the Community during the COVID-19 Pandemic, Version 1.1, December 2020 <https://covid19evidence.net.au/wp-content/uploads/FLOWCHART-10-CPR-IN-THE-COMMUNITY.pdf?e=201021-151716>
- > National COVID-19 Clinical Evidence Taskforce, Cardiopulmonary resuscitation of Adults with COVID-19 in Healthcare Settings, Version 1.0, December 2020 <https://covid19evidence.net.au/wp-content/uploads/FLOWCHART-6-CPR-IN-HOSPITAL.pdf?e=201021-151723>

For more information

Infection Control Service
Communicable Disease Control Branch
Telephone: 1300 232 272
www.sahealth.sa.gov.au/COVID-19

Official
Version 2.3



www.ausgoal.gov.au/creative-commons