

Infection Prevention and Control Manual Acute Respiratory Infections

For acute and non-acute healthcare settings

September 2026

Acknowledgement of Country

The Clinical Excellence Commission acknowledges the Traditional Custodians of the lands where we work and live. We celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

We pay our respects to Elders past, present and emerging and acknowledge the Aboriginal and Torres Strait Islander people that contributed to the development of this Manual.

We advise this resource may contain images, or names of deceased persons in photographs or historical content.

Infection Prevention and Control Manual Acute Respiratory Infections for acute and non-acute healthcare settings

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More information

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1

Essential principles of Acute Respiratory Infection (ARI) transmission and infectiousness

1 Essential principles of ARI transmission and infectiousness

1.1 Background

This document provides current recommendations for infection prevention and control (IPAC) measures for acute respiratory infection (ARI) across both acute and non-acute healthcare settings. The guidance is aligned with the [Infection Prevention and Control Policy Directive \(PD2023_025\)](#) and reflects the practices outlined in the [Infection Prevention and Control Practice Handbook](#).

It draws on best practice IPAC strategies informed by known transmission characteristics of respiratory pathogens and remains adaptable to changes in epidemiology and disease burden within the NSW health system.

A risk based approach underpins all recommendations. Precaution levels are determined through structured assessments, supported by the NSW IPAC Response and Escalation Framework. This framework provides a comprehensive matrix to guide the escalation or de-escalation of IPAC measures based on local transmission risk and any system wide alerts.

Health workers are encouraged to stay up to date by regularly consulting the following resources:

- [Coronavirus \(COVID-19\) - CDNA National Guidelines for Public Health Units](#)
- [National updates – Department of Health](#)
- [Triggers for Escalation Following Detection of Infection Outbreaks or Clusters \(GL2024_013\)](#)
- [NSW Health COVID-19 and ARI Clinical Guidance](#)
- [Cleaning of the Healthcare Environment \(PD2023_018\)](#)
- [CEC Infection Prevention and Control Program](#)
- [IPAC guidelines for management and assessment of ARI](#)

These resources offer current information on outbreak management, personal protective equipment (PPE), health worker exposure protocols and setting-specific guidance.

1.2 Scope and purpose

This manual gives evidence-based guidance on infection-prevention measures, PPE use, and precautions to limit the spread of ARI across NSW healthcare settings.

Applicability

The guidance applies to a wide range of healthcare and community care settings, from acute hospitals to aged care, oral health, disability services, community residential homes and mental health services. The intended audience includes NSW health workers and care staff such as:

- Clinicians
- Infection prevention and control professionals
- Managers and administrators
- Allied health and support staff.

Exclusions

This manual does not include detailed guidance on the Respiratory Protection Program. More information and detail about fit testing can be found here. [Clinical Excellence Commission, Respiratory Protection Program](#).

Disclaimer

NSW Health and the Clinical Excellence Commission do not endorse or promote any specific products or equipment mentioned in this document. Recommendations are based on current evidence and are intended to support safe and effective IPAC practices.

1.3 Definitions

The following terms are used frequently in this document in the context of ARI management and prevention.

Term	Definition
Acute respiratory infection (ARI) (Adults)	New onset of at least one of the following: • Cough • Sore throat or runny nose • Shortness of breath or difficulty breathing AND At least one of the following systemic features: • Fever or feverishness • Lethargy, malaise, confusion or decreased appetite • Headache • Myalgia.
Acute respiratory infection (ARI) (Paediatric and/or those who cannot mount an adequate immune response. For example, oncology, elderly, pregnant or immunosuppressed patients)	New onset of at least one of the following: • Cough • Sore throat or runny nose • Shortness of breath or difficulty breathing AND May or may not include any of the following systemic features: • Fever or feverishness • Lethargy, malaise, confusion or decreased appetite • Headache • Myalgia.
Asymptomatic	The absence of acute respiratory infection symptoms.
Health care associated with acute respiratory infection (HAI ARI)	Suggested definitions: • HAI Influenza: A positive influenza RT-PCR and symptom onset > 72 hours after admission

	HAI RSV: A positive RSV PCR and symptom onset > 96 hours after admission.
Healthcare associated infection (HAI) COVID-19	Definite HAI COVID-19 Symptom onset on day >14 after admission Probable HAI COVID-19 Symptom onset on day 8-14 after admission OR symptom onset on day 3-7 after admission, if epidemiologically linked to a hospital exposure Community-associated COVID-19 Symptoms present on admission or with onset on day 1 or 2 after admission (unless epidemiologically linked to a hospital exposure during the last 14 days) OR Symptom onset on days 3-7 and a strong suspicion of community transmission Note: If onset of clinical features cannot be defined, a case-by-case assessment is required taking account of the date of sampling relative to the date of admission and epidemiological evidence of a link to hospital exposure.
High risk exposure	For COVID-19 this includes household or household like contact.
High risk settings	All healthcare facilities including aged or disability care facilities.
Hospital onset	Symptoms develop and/or the condition is identified more than 48 hours after the patient has been admitted to hospital. This classification refers solely to the timing of symptom onset or diagnosis and should not be taken as evidence that the condition was acquired in the healthcare setting. Determination of the likely source of acquisition requires further epidemiological investigation.
Outbreak	An outbreak is a state characterised by an incidence of an infection greater than what is typically expected in a particular healthcare setting. Typically, in healthcare this has been defined as two or more cases, which should trigger an outbreak management process. For ARI, two or more cases should trigger a management plan and may be considered an outbreak depending on surrounding circumstances and transmission pathways. For more information on outbreak management refer to <u>CEC Infection Prevention and Control Practice Handbook</u> and for specific guidance on residential aged care and residential homes refer to <u>Managing infectious respiratory diseases in aged care</u>.
Resolution of symptoms	Resolution of fever and significant improvement of ARI symptoms for at least the preceding 24 hours. Symptoms such as headache, fatigue, anosmia, ageusia or a mild persistent cough may continue for some weeks and for health workers will not usually affect time to return to work.
Risk mitigation	In this context a combination of actions including source control (mask wearing, surgical or P2/N95), and in some cases testing

	even when there are very mild symptoms to reduce the risk of onward transmission of ARI pathogens.
Surveillance /screening test	Testing of asymptomatic staff in the context of widespread community transmission of a novel virus (for example, in the early part of the COVID-19 pandemic), where staff in some high-risk units may undergo regular surveillance testing. This is to be distinguished from symptomatic testing.
Zone	A zone is a clearly defined physical or functional area within a healthcare setting that is designated based on infection risk, patient status, or required IPC measures for ARIs. Zones are used to separate and manage risk of ARI transmission. They may be defined by: • Clinical function (for example, patient care vs non-clinical areas) • Infection risk level (for example, red, amber, green zones) • PPE requirements (areas requiring specific protective equipment)

1.4 How ARIs spread

Acute respiratory infections (ARIs) are transmitted when viruses are expelled from the respiratory tract of an infected individual and enter the environment, where they can infect the respiratory tract of a susceptible person. Transmission risk is influenced by viral characteristics, host factors and environmental conditions.

Updated terminology from leading health agencies

The World Health Organization (WHO), in collaboration with major public health agencies, introduced updated terminology to improve clarity and consistency in describing airborne transmission of respiratory pathogens.

The term ‘infectious respiratory particles (IRPs)’ is now recommended to describe particles expelled from the mouth or nose during breathing, talking, coughing, sneezing, singing or other expiratory activities ([WHO](#)).

Modes of transmission

Respiratory pathogens can spread through four primary modes:

1. Respiratory particles:
 - Large droplets – typically fall to the ground within 1–2 metres.
 - Fine aerosols – can remain suspended in the air and travel longer distances, especially in poorly ventilated spaces.
2. Direct contact – physical contact with an infected person.
3. Indirect contact (fomites) – touching contaminated surfaces or objects.
4. Airborne transmission – under specific conditions, smaller particles can remain airborne and lead to infection.

For more information refer to the *Infection prevention and control practice handbook, Chapter 2 - Figure 4 Features of infectious respiratory particles and descriptors for modes of transmission*.

SARS-CoV-2 (COVID-19)

SARS-CoV-2 exhibits specific transmission characteristics that influence spread in communities and healthcare settings:

- primary transmission route is via IRPs.
- the virus replicates in the respiratory tract, with peak viral load occurring just before symptom onset and during the first 5 days of illness.
- transmission can occur from asymptomatic or pre-symptomatic individuals, contributing to widespread community spread.

Influenza and Respiratory syncytial virus (RSV)

Influenza and RSV are common respiratory pathogens with distinct transmission characteristics that influence their spread in healthcare and community settings:

- they primarily spread via large respiratory droplets, especially during coughing or sneezing.
- both are more transmissible when symptoms are present
- fomite transmission is also possible, particularly in shared environments.

Key transmission factors

Most ARI transmission occurs through close contact, especially:

- among household members, who are at the highest risk due to prolonged exposure.
- during activities that generate respiratory particles, such as talking, coughing, sneezing, singing or shouting.

Respiratory particles cause infection when they are inhaled into the lungs and/or deposited on mucous membranes (for example, inside the nose, mouth or eyes).

Airborne transmission conditions

While close contact is the dominant mode of transmission, infectious respiratory particles exist across a spectrum of sizes, including larger droplets and smaller aerosols. Transmission commonly occurs at close range through exposure to larger respiratory droplets generated during breathing, talking, coughing, or sneezing. Airborne transmission via smaller particles may occur under specific circumstances, including:

- enclosed or poorly ventilated spaces, where particles accumulate.
- expiratory exertion (for example, singing, shouting, exercising)
- aerosol-generating procedures (AGPs) such as positive pressure mask ventilation, tracheal intubation and extubation which increase particle concentration.
- inadequate ventilation or air handling, allowing infectious particles to remain suspended in the air.

1.5 Incubation, infectious period and deisolation

The incubation period refers to the time between exposure to a virus and the onset of symptoms. The infectious period is the timeframe during which an infected individual can transmit the virus to others. For more information refer to *Table 1 ARI Incubation, infectious period and deisolation*.

Table 1 ARI - Incubation and infectious period

Pathogen	Incubation period	Infectious period
SARS-CoV-2	From 2-4 days Incubation period has changed with variant evolution and is currently shorter than the first variants.	From 1-3 days prior to symptoms and then for at least 5 days after symptoms start. The infectious period may be extended if there are ongoing symptoms.
Influenza	From 1-3 days	From the day before onset of symptoms for up to 7 days. The use of effective antivirals reduces the infectious period to about 3 days.
RSV	From 4-6 days Immunocompromised and neonates may shed RSV for 4 weeks or longer	From onset of symptoms for 5-8 days

Table 2 Deisolation guidance

Setting/decision point	COVID-19	Influenza	RSV	All ARIs (immunocompromised*)
Note: Deisolation requires a combination of the below. The resolution of acute respiratory symptoms for at least 24 hours from symptom onset and in some cases retesting for all ARI pathogens.				
Return to ward/out of isolation (incl. RACF)	Five days since symptom onset (or positive test if asymptomatic) AND COVID-19 RAT is negative OR Seven days since symptom onset with no testing. During isolation, case can cohort with COVID-19 cases.	If treated with antivirals: Three days after effective antiviral treatment OR If not treated with antivirals: Five days since symptom onset. No testing required. Can cohort with influenza cases.	Adults: May be released from isolation once asymptomatic for >24 hours. Children: Must be asymptomatic and reviewed by a medical team prior to de-isolation. No testing required. Can cohort with other RSV cases.	Immunocompromised patients may shed infectious virus for many weeks after initial infection and deisolation needs individual assessment. Even if asymptomatic, patients should remain in isolation for at least 7 days after the onset of symptoms.
Discharge to community	Isolate at home until day 5 AND resolution of acute symptoms for at least 24 hours. Avoid high risk settings until day 7.			Isolate at home until ≥day 7 AND ≥24 hours symptom resolution. Avoid high risk settings until ≥day 14.
Outpatient appointment after discharge	Notify clinic of recent diagnosis. Wear mask if symptomatic.			Notify clinic of recent diagnosis. Clinic may request testing and/or mask wearing.

*A number of conditions may cause or be associated with significant immunocompromise and this is associated with prolonged viral shedding in many patients after an ARI. Some of the more common conditions are (noting this list is not exhaustive):

- solid organ transplant on immune suppressive therapy
- haematopoietic stem cell transplant in the past 2 years

- immune suppressive therapy for graft versus host disease
- an active haematological malignancy
- human immunodeficiency virus infection with CD4 T-lymphocyte count below 200 cells/per mm³ (age adjusted for children)
- renal dialysis (but additional risk assessment recommended)
- other conditions specifically noted by the treating medical practitioner.

For other viral causes of ARI (for example, rhino virus, human metapneumovirus, corona viruses) the same principles apply. Isolate patients when symptomatic and deisolate once acute symptoms have resolved for at least 24 hours.

2

Strategies to prevent or minimise transmission of ARIs

2 Strategies to prevent or minimise transmission of ARIs

2.1 Introduction

Effective infection prevention and control (IPAC) is essential to safeguarding patients, visitors and health workers from acute respiratory infections (ARIs). This chapter outlines the core principles, responsibilities and practical measures that underpin a coordinated and consistent IPAC approach across NSW Health.

It provides clear guidance on applying standard and transmission based precautions, managing exposure risks and supporting safe clinical environments to ensure healthcare services remain resilient and responsive as epidemiological conditions evolve.

2.2 Safe working principles

This section outlines the principles of safe work practices and the hierarchy of controls as applied to IPAC in acute and non-acute healthcare settings.

Legal and regulatory framework

Work-related risk, including exposure to communicable diseases, is managed under the Work Health and Safety Act 2011, its associated Regulations, and the Model Code of Practice: How to manage work health and safety risks. The Act requires all Australian workplaces to assess and manage risks 'so far as is reasonably practicable'.

This obligation includes the identification, assessment and control of risks related to infectious agents in healthcare environments.

Hierarchy of controls

Controlling exposure to occupational hazards is the primary strategy for protecting health workers, patients and visitors. The hierarchy of controls is a structured approach that ranks risk mitigation strategies from most to least effective:

1. Elimination: Remove the hazard entirely (for example, remote consultations to avoid exposure).
2. Substitution: Replace the hazard with a safer alternative (less applicable in infectious disease control).
3. Engineering controls: Isolate people from the hazard (for example, ventilation systems, physical barriers).
4. Administrative controls: Change the way people work (for example, infection prevention and control protocols, training, rostering).
5. Personal Protective Equipment (PPE): Use protective gear (for example, masks, gowns, gloves).

Multiple control strategies are often implemented simultaneously or sequentially to maximise protection.

Application in healthcare settings

Infection prevention and control programs must integrate the hierarchy of controls with standard and transmission-based precautions. This includes:

- Risk assessments tailored to specific clinical environments.

- Controls that reflect the nature of the pathogen, the vulnerability of the population, and the physical layout of the facility.
- Ongoing review and adaptation of control measures to ensure effectiveness.

2.3 Principles of risk assessment in the context of ARI

A risk-based approach is essential for guiding IPAC decisions in healthcare settings, particularly in the selection of personal protective equipment (PPE) and the implementation of transmission-based precautions.

This approach considers multiple factors, including:

- Time and duration of exposure
- Proximity to the patient
- Nature of the procedure or task
- Patient vulnerability (for example, immunocompromised, transplant recipients, or those under protective precautions).

Key risk assessment parameters

Risk assessment should evaluate the likelihood and impact of infection transmission, considering:

- Transmissibility of the pathogen
- Severity of illness and potential impact
- Patient-specific factors
- Health worker (HW) risk factors
- Procedure-related risks
- Environmental conditions.

Applying a risk-based approach

The following steps support a structured assessment:

1. Identify the risk. Recognise tasks or behaviours that increase transmission risk, such as:
 - Aerosol-generating procedures (AGPs)
 - Patient symptoms such as aerosol generating behaviours (coughing, laboured breathing, behavioural factors such as agitation or shouting).
2. Determine likely transmission routes. Assess type of exposure:
 - Non-parenteral: Contamination of mucous membranes (eyes, mouth) or non-intact skin.
 - Parenteral: Introduction of body substances via piercing or puncturing
3. Quantify the impact
 - Intensity of exposure: How close the health worker is to the patient
 - Duration of exposure: How long is the health worker in contact with patient.
4. Assess need for mitigation
 - Determine whether the risk requires mitigation or can be reduced/eliminated.
5. Implement mitigation strategies. Examples include:
 - Use of single rooms or negative pressure environments
 - Application of standard and transmission-based precautions

- Appropriate PPE selection based on risk level.

For detailed guidance on risk assessment, refer to the [CEC Infection prevention and control practice handbook](#).

2.4 Early recognition of patients with suspected ARI

Early recognition, identification, isolation, reporting of ARIs and application of source control (including respiratory hygiene) are central to effective containment and management of any communicable diseases and essential to maintaining the health and well-being of health workers, patients/clients and the community.

For more information refer to [NSW Health Influenza control guideline](#) and [NSW Health Respiratory syncytial virus \(RSV\) control guideline](#).

The national case definition for COVID-19 is provided by Communicable Diseases Network Australia (CDNA) [Coronavirus \(COVID-19\) – CDNA National Guidelines for Public Health Units](#). Case definitions may change over time based on a variety of factors, including current epidemiology and testing capacity. Check the [NSW Health website](#) for advice on latest case definitions and testing criteria.

Clinical testing of patients with compatible symptoms or epidemiological risk factors remain important for patient care.

Surveillance testing

Surveillance testing can be an important tool to support IPAC in healthcare settings but is usually only considered in an outbreak situation or when there is widespread community transmission.

ARI testing thresholds should reflect the level of community transmission. When transmission is elevated, clinicians should maintain a low threshold for testing patients presenting to the Emergency Department or admitted to hospital with compatible symptoms.

During periods of widespread community transmission or throughout the winter respiratory virus season, broader testing of hospital patients may be required. Additional guidance is available in Appendix 2A: Testing for Acute Respiratory Infection.

Individuals who meet the criteria for close contact with a confirmed case may still benefit from SARS CoV 2 testing, depending on the risk of severe illness from COVID-19. Refer to [NSW Health COVID-19 testing](#) for more information.

For guidance on IPAC considerations when collecting respiratory specimens, refer to the [Coronavirus \(COVID-19\) – CDNA National Guidelines for Public Health Units](#).

2.5 Application of infection prevention and control principles

When applying infection prevention and control principles, three main levels of control must be considered.

The **first level** consists of administrative controls, which are measures taken to ensure the entire system is working effectively. These controls include:

- Implementing procedures for triage of patients
- Detecting infections early
- Separating infectious patients from others
 - Consideration for the establishment of cohort areas/zones within the functional clinical areas to separate infectious patients from others

- Consideration for the concept of ‘ring fencing’ (for example, identifying a designated boundary or a zone for co-locating these patient groups) for potential high-risk patients such as high-risk surgery and immune suppressed patients
- Transporting patients safely
- Educating patients, carers and HWs
- Designating responsibilities clearly and correctly
- Communicating with all relevant partners.

The following zone classification system can be used during an ARI, including COVID-19, or any other communicable disease outbreak or pandemic, designated patient care areas may be established and divided into different zones.

This zone classification system supports patient placement and the management of patients and staff according to their diagnosis, exposure risk, or clearance status. Each zone reflects a different level of risk and informs the appropriate clinical management and transmission-based precautions.

Table 3 Example of patient zoning

Zone	Description
Red	For patients with a confirmed diagnosis
Amber	For patients with a suspected cases or high-risk contacts
Green	For patients who are cleared of relevant cases or are a contact
Blue	For staff only

Environmental and engineering controls

The **second level** is environmental and engineering controls, including cleaning of the environment and the ventilation of spaces.

Environmental and engineering controls are an integral part of IPAC that includes standards for adequate ventilation according to specific areas in healthcare facilities, adapted structural design, spatial separation, as well as adequate environmental cleaning.

Heating, ventilation and air-conditioning (HVAC) design in Australian healthcare facilities is regulated through the following guidelines:

- [Australasian Health Facility Guidelines \(AusHFG\)](#)
- [NSW Health Building guidelines](#)
- [AS 1668.2:2024 - The use of ventilation and air conditioning in buildings Mechanical ventilation in buildings](#)
- [HB 260-2003 Hospital acquired infections – Engineering down the risk](#)
- [Engineering Services \(GL2023_009\)](#).

There are three methods that may be used to ventilate spaces within healthcare facilities, natural (fresh air), mechanical, and hybrid, or mixed mode ventilation.

Each ventilation system has advantages and disadvantages and any modifications to healthcare ventilation need to be made carefully, taking into consideration the cost, design, maintenance and potential impact on airflow in other parts of the healthcare facility.

For more information refer to [Infection prevention and control practice handbook, Chapter 6, section 6.12 Recirculating air filtration device use](#).

Ventilation requirements for airborne precautions

Room placement of patients should ideally be in a negative pressure room with anteroom. Where not available, a standard isolation room or a single room where there is negative airflow with air conditioning or external exhaust air handling system (refer to facility engineering service) is an acceptable alternative.

Rooms with positive pressure airflow must be avoided. Other design types require additional risk assessment (Australasian Health Facility Guidelines, [Part D: Infection Prevention and Control](#)).

Where single rooms are not available, confirmed ARI patients may be cohorted based on additional risk assessment and management using local facility procedures as guidance.

Ensure ventilation systems operate properly and provide acceptable indoor air quality for the occupancy level for each space.

- A room with ≥ 12 air changes per hour (ACH) [equivalent to ≥ 80 L/s for a $4 \times 2 \times 3$ m³ room] and controlled direction of air flow is recommended for airborne precautions
- In addition to the requirement of ≥ 12 ACH, in a mechanically ventilated airborne precaution room, negative pressure (class N) is required to control the direction of air flow.

The **third level** of control to further decrease the risk of transmission is personal protection using appropriate personal protective equipment (PPE) such as masks, respirators and eye protection.

When implementing infection prevention and control principles in healthcare settings, all levels of controls (administrative controls, environmental and engineering controls and personal protection) must be given correct attention for the system to work effectively and for the different levels to support each other.

2.5.1 Advice for patients with an ARI

Patients with any ARI symptoms are encouraged and supported to wear surgical face mask (excluding paediatric patients <12yrs) providing it is tolerated and not detrimental to their medical or care needs. This is to minimise the dispersal of respiratory secretions and reduce both direct transmission risk and environmental contamination.

- A surgical mask should be worn by patients where clinically appropriate and where it does not interfere with their care or treatment.
- A surgical mask can be worn until it is damp, moist, damaged or uncomfortable for the wearer.
- Once the patient is isolated in a single room, they do not need to routinely wear a mask.
- Patients are to be encouraged to perform hand hygiene before leaving their room.

2.5.2 Respiratory hygiene and cough etiquette

The following measures to contain respiratory secretions are recommended for everyone. Health workers are to provide education to patients/clients on:

- Covering the mouth and nose with a tissue when coughing or sneezing.
- If a tissue is not available, cough or sneeze into the elbow.
- Use the nearest bin to dispose of the tissue after use.
- Perform hand hygiene. For example, hand washing with soap and water for 20 seconds or use alcohol-based hand rub (ABHR) after coughing or sneezing or if contaminated objects, materials or equipment are touched.

The following should be available in waiting areas for patients and visitors:

- Relevant signage and education resources/posters.
- Disposable surgical masks.
- Tissues and no-touch receptacles for used tissue disposal.
- Conveniently located dispensers of ABHR, where sinks are available, ensure that supplies for hand washing (such as soap, disposable towels) are always available.

Posters are available at [NSW Health COVID-19 poster and print resources](#).

2.5.3 Application of standard precautions

Standard precautions are the essential IPAC measures that apply to all patient or client care, regardless of whether an infection is known or suspected. They are required wherever healthcare is delivered or where exposure to blood or body substances may occur. This includes hospitals, subacute facilities, community care, home care and mortuaries.

Health workers must follow hand hygiene practices as outlined in the [National Hand Hygiene Initiative](#) and clinical procedures require a bare below the elbow approach to comply with asepsis and the [Infection prevention and control in Healthcare Settings \(PD 2023_025\)](#).

Before selecting IPAC strategies, health workers are to conduct a risk assessment. This includes evaluating:

- The nature of the patient interaction
- The likelihood of transmitting infectious agents
- The risk of exposure to blood, body substances, secretions or excretions
- The anticipated duration of PPE use
- Appropriate patient placement or cohorting.

Risk assessments should also consider patients who may require additional protective measures, such as those who are immunocompromised, have immunodeficiencies or have undergone transplantation.

These evidence-based practices aim to protect both patients and health workers while preventing the spread of infection across all care environments.

For more information refer to the [Infection prevention and control practice handbook](#).

2.5.4 Implementation of transmission-based precautions

Transmission-based precautions are required when standard precautions alone cannot prevent the spread of a microorganism, based on its known or suspected mode of transmission. Respiratory protection devices form an important part of IPAC; however, as PPE sits at the lowest level of the hierarchy of controls, these devices should be viewed as the last line of defence. For more information on standard and transmission based precautions refer to [Infection prevention and control practice handbook](#).

2.5.5 Extended or sessional use of PPE

Extended (or sessional) use of PPE refers to wearing the same above the neck PPE such as masks, respirators and eye protection for repeated close contact care with multiple patients without removing it between encounters, based on a risk assessment. Hand hygiene must still be performed between each patient interaction. Extended or sessional use is only recommended during a

pandemic when caring for patients with suspected or confirmed COVID-19 or cohorts of patients with influenza.

In the setting of a pandemic there may be supply challenges with demand and availability of consumables, temporary sessional PPE use may be considered. It is not appropriate for other infectious conditions.

Extended or sessional use is only recommended during a pandemic when caring for patients with suspected or confirmed COVID 19 or cohorts of patients with influenza. It is not appropriate for other infectious conditions (for example, multidrug resistant organisms) and evidence continues to show increased risk of healthcare associated infections when gowns and gloves are not changed between patients. Key considerations include:

- Extended use of masks/respirators and eye protection is suitable when caring for cohorted patients in dedicated clinical areas.
- Decisions must be guided by a risk assessment, clinical context, local facility needs and consultation with the IPAC team.
- A **session** refers to the period a health worker remains in a specific clinical area; it ends when leaving the area, when PPE becomes contaminated or when the worker needs food or drink.
- Surgical masks and P2/N95 respirators may be worn for extended periods (typically up to several hours) where clinically appropriate, subject to manufacturer IFU and earlier replacement if damaged, soiled, moist, contaminated or if fit or comfort is compromised.
- Gowns and gloves must be changed between patients and must be removed before exiting the room. Hand hygiene must be performed immediately after removing PPE. Limited exceptions apply only for minimal contact tasks (for example, meal tray collection). Gloves must always be changed between patients.

2.5.6 Brining your own PPE

Health workers must **not** bring personal PPE whether reusable or disposable into any health facility unless it has been formally approved by the local facility, LHD/SHN and/or NSW Health. Approval requires careful consideration of safety, standards and operational impacts.

Key requirements include:

- Verification of availability through HealthShare NSW.
- Ensuring the PPE meets AS/NZS standards and is ARTG listed, with documentation supplied by the manufacturer.
- Formal approval from the relevant clinical department, hospital leadership and LHD/SHN executive (PPE Strategic Committee), following HealthShare NSW procurement processes.
- A fully documented assessment covering:
 - Review and acceptance by IPAC, WHS, biomedical engineering, unit management and sterilising services, including compatibility and reprocessing risk assessments.
 - Manufacturer's instructions for reprocessing, filter management, maintenance and availability of replacement components (for example, straps, valves, filters, cartridges).
 - Insurance coverage for privately owned PPE requiring reprocessing.
 - Documented training and competency for safe use, including clarity on who provides and oversees training.
 - Review of donning and doffing procedures to ensure safety with non-standard equipment.
 - Assessment of financial, storage and resource implications, including capacity for reprocessing.

For more details on the management of reusable respiratory protection devices see [CEC Respiratory Protection Program Manual](#).

2.5.7 Skin sensitivity related to mask use

Prolonged use of masks, respirators and eye protection can lead to a variety of skin issues. The following guidance focuses on reducing skin irritation associated with disposable surgical masks and respirators. For advice on prophylactic dressings under tight fitting respirators, see CEC Respiratory Protection Program Manual.

Facial skin care to reduce irritation

The following strategies can help minimise skin irritation and pressure injuries associated with prolonged mask use:

- Cleanse and moisturise with mild, non-fragranced products.
- Avoid glycolic acids or retinoids which may compromise the skin's barrier.

Fitting and skin sensitivity

- Perform hand hygiene before putting on and after removing a mask.
- Choose the best-fitting mask or respirator (where fit-tested) and take time to apply it correctly to ensure comfort and seal without excessive pressure.

Wearing a mask when skin is sensitive

Use your usual morning and evening moisturising routine. Before putting on a mask, apply a silicone-based barrier product with clean hands and allow to dry. Regular skin breaks may help in reducing skin reactions.

During the shift minimise mask wearing time where safe and give the skin regular breaks and ensure good hydration.

If friction occurs:

- Apply moisturiser 30 minutes before mask use.
- Use silicone barrier films or light silicone based products.
- Avoid greasy barrier creams if acne prone.

Allergic reactions

True allergies to mask components are rare; irritation is more common. Monitor areas where reactions may occur:

- Glue strip along the nose
- Metal nose bridge
- Cheek contact points.

Managing skin irritation

For irritant contact dermatitis:

- Switch to a softer mask brand if available.
- Use a soft dressing or thin silicone pad under a surgical mask (not under tight fitting respirators).
- Increase moisturiser use, especially at night.
- Low strength over the counter topical steroids may help persistent dermatitis.
- Seek dermatology advice if symptoms worsen and report concerns to a supervisor.

Managing pressure injuries

- Apply cool compresses (gauze soaked in cold water/saline) for 20 minutes every 2–3 hours.
- Moisturise intact skin before and after mask use.
- Use silicone dressings under surgical masks or behind ears to reduce pressure and friction.
- Hydrocolloids may help but must not be used under tight fitting respirators.
- Avoid hot water, ethanol, or irritants on the skin.
- Switch to a visor if goggles cause pressure.
- If skin breaks down, use medical grade silicone based products and seek clinical review.
- Do not wear a mask over broken skin; redeployment may be required until healed.

Prophylactic dressings under tight fitting respirators

- May be used to prevent skin injury only if a fit test is passed with the dressing in place.
- A fit check must be performed every time the respirator is applied.

Refer to the [Respiratory Protection Program](#) and relevant evaluation studies for detailed guidance.

Reporting Incidents

All PPE related issues, defects, or adverse effects must be formally reported according to the [Incident Management \(PD2020_047\)](#) to ensure worker safety and compliance with incident management requirements:

- Report ‘No person incidents’ (for example, defective mask straps).
- Report ‘Worker incidents’ for skin reactions or other harm.
- Services not using ims+ should follow local reporting processes.

Mask and respirator wearing exemptions in healthcare facilities

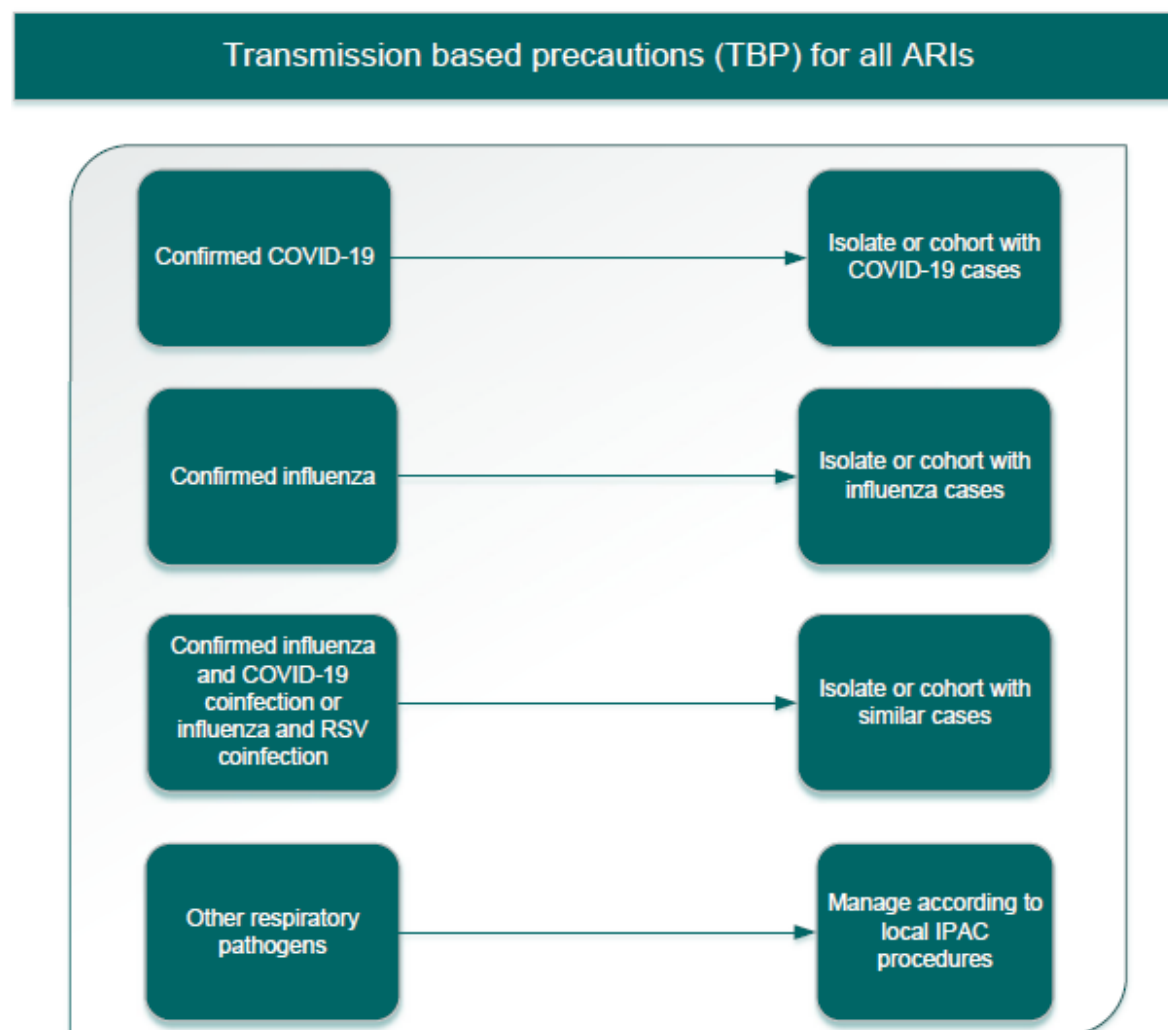
The following principles apply when considering mask wearing exemptions for health workers during periods of heightened transmission risk:

- During **red alert** risk levels, when mask use is mandatory, health workers who cannot wear any form of face covering at all must not attend work.
- Health workers who are unable to tolerate respirator use but can safely wear a surgical mask should undergo a documented risk assessment to determine whether modified duties, alternative work locations or other control measures are appropriate. Exemption from respirator use does not automatically constitute exemption from surgical mask use, unless the worker is unable to tolerate any face covering.
- Workers who can tolerate masks only for short periods should undergo a risk assessment to determine whether modified duties are appropriate.

2.6 Patient placement – risk assessment guide

To support the safe and timely placement of patients with known or suspected transmissible infections, decisions should align with guidance from the [CEC Infection Prevention and Control Practice Handbook \(Chapter 6, Section 6.5: Supporting bed allocation and patient flow\)](#). In some cases, a combined transmission-based approach may be required for specific communicable diseases. Figure 1 outlines the application of transmission-based precautions for patients with ARIs, providing a clear pathway for managing confirmed infections such as COVID-19, influenza, and coinfections, including when to isolate or cohort patients with similar cases. For other respiratory pathogens, follow local infection prevention and control procedures.

Figure 1 IPAC management of patients with ARIs



Note: consider immunocompromised status when isolating or cohorting* patients with ARI symptoms

* This refers to the grouping of patients with the same pathogen in the same area. The goal of cohorting patients (and the health worker that attends to them) is to minimise interaction between infectious patients and non-infected patients as much as possible.

* For paediatric patients, cohorting assessments must also consider the parent or carer, as sharing a room may expose them to infection risks from another patient or their parent/carer.

2.7 Visiting patients/clients in healthcare facilities

Maintaining access for visitors is essential even during a pandemic or outbreak. NSW healthcare facilities should continue to support patients to receive visits from partners, family, friends, participants in care (PIC), carers and/or volunteers. Refer to [Caring Together - Welcoming Visitors \(PD2026_025\)](#) and [Appendix 2B: Visitors and participants in care visiting guidance during ARI and COVID-19 season](#).

2.8 Environmental cleaning

Environmental cleaning and disinfection are crucial to preventing transmission of infection in the healthcare environment. Respiratory viruses can persist on surfaces but can be effectively inactivated by appropriate disinfectants. It is important to clean before disinfecting as dirt and grime can affect how well a disinfectant works.

Refer to the [Infection prevention and control practice handbook, Environmental cleaning and Cleaning of the Healthcare Environment \(PD2023_018\)](#) for more information.

2.9 Outbreak management

An outbreak is defined as two or more confirmed cases of infection (patient, resident, health worker or visitor) occurring within a healthcare or residential care facility at levels higher than normally expected. When an outbreak is identified, the following actions must be taken:

- Risk assess patients using *Table 7 patient/visitor exposure to COVID -19 case risk matrix* and staff using *Table 5 occupational exposure to COVID -19 health worker risk matrix*.
- Work with local Public Health Unit (PHU) according to local processes
- In conjunction with local IPAC, collect data on cases and determine the index case, potentially exposed patients and health workers. Prepare an initial outbreak brief for relevant stakeholders.
- Limit non-essential patient visitors over the declared outbreak period (note: compassionate visitor exceptions require consideration). Closely risk-manage patient visitors (PPE and hand hygiene compliance required, screen for recent respiratory symptoms, provide information to visitors about potential risk acquisition).
- Notify other care facilities and hospitals where patients or residents have had a high-risk exposure and have subsequently been transferred or require immediate transfer for care.
- Outbreaks with significant ongoing transmission may require stricter limitation of visitors and/or ward closure to admissions if advised by the outbreak management team.
- Consider COVID-19 and/or influenza positive patient eligibility for antiviral treatment and document if they decline or are considered ineligible.
- Follow local documentation and reporting.
- A decision to declare the outbreak over should be made by internal processes, in consultation with the IPAC. This should be at least 7 days since the last date of identified transmission.

Each outbreak will differ according to the circumstances of the facility/department. The investigation and management will be applied based on identifying and understanding the features of the outbreak.

For more information on outbreak response procedures refer to [CEC Infection prevention and control practice handbook](#). For residential care homes refer to [Advice for aged care services on managing acute respiratory infections \(ARIs\)](#).

2.10 Occupational exposure to COVID-19

Health worker post exposure management

Assessment and management of occupational exposure to COVID-19 (Figure 2 PPE breach risk assessment key principles) should be multidisciplinary and involve Staff Health, Infection Prevention and Control (IPAC), Infectious Diseases (where available), and local Public Health as appropriate.

Following exposure, health workers should:

- Receive clear advice on monitoring for symptoms consistent with COVID-19.
- Maintain strict adherence to all recommended infection prevention measures, including hand hygiene, appropriate mask use, environmental cleaning, and respiratory etiquette.
- Be provided with appropriate follow-up, support, and a documented plan for safe return to work.

Management of health workers exposed to COVID-19 in either healthcare or community settings should be guided by:

- Table 4 Health worker – return to work after COVID-19
- Table 5 Occupational exposure to COVID-19 – Health worker risk matrix
- Table 6 exposure to COVID-19 – actions required for assigned risk level.

Contact tracing of exposed health workers remains an essential component of risk management within healthcare environments. This process may differ from broader community guidance, reflecting the higher-risk nature of healthcare settings and vulnerable patient populations.

If exposure involves patients, visitors, participants in care (PICs), or carers, refer to *Table 7 Patient/visitor exposure to COVID-19 case risk matrix*.

This supports risk assessment and identification of appropriate actions to minimise onward transmission within healthcare facilities. If patients are a contact from either a health worker or visitor and are immunocompromised, consider testing for respiratory viruses 5-7 days after exposure, even if asymptomatic.

Vaccination and risk reduction

Vaccination remains a key control measure, reducing both the risk of infection and the likelihood of severe disease and hospitalisation. All NSW health workers must comply with current NSW Health vaccination requirements and Australian Technical Advisory Group on Immunisation (ATAGI) recommendations.

Health workers who are non-compliant with influenza vaccination requirements (including those with approved exemptions) must:

- Wear, at a minimum, a surgical mask in all areas of the health facility (clinical and non-clinical).
- Take meal and beverage breaks separately from other staff where feasible (for example, outdoors), particularly during mask removal.

Additional risk mitigation strategies may include:

- Temporary reassignment to lower-risk duties, supported by a documented risk assessment.
- Implementation of enhanced infection prevention and control measures, particularly during periods of increased transmission or local outbreaks.

Table 4 Health worker - return to work after COVID-19

Note: if health worker is significantly immunocompromised, they need to seek advice from either their GP or relevant specialist regarding safe return to work.

Confirmed positive RAT or PCR test	
Day 0*	Do not attend work (stay home), notify manager and record results as per local process.
Day 1-3 (applies to asymptomatic HWs only)	Sites performing staff surveillance testing, if a HW tests positive to COVID-19 they should stay at home. If a PCR is performed and is negative, they may return to work. If the PCR is positive or is not done, stay at home for three days and return to work when: • If asymptomatic prior to positive test and continues to be asymptomatic • A repeat COVID-19 RAT is negative (not required where PCR is negative). If the HW develops symptoms, they should not attend work or be advised to leave work, refer to advice below.
Day 5 (symptomatic HW)	Conduct RAT, notify manager and record result as per local process.
	RAT negative: Can return to work the next day (day 6) if asymptomatic with risk mitigation in place until day 10.
	RAT not done: Can return to work on day 7 <u>only</u> if asymptomatic for at least the 24 hours prior with risk mitigation in place until day 10.
	RAT positive: Can return to work 5 days from symptom onset, or until acute symptoms have resolved, whichever is longer with risk mitigation in place until day 10. If the HW is working with significantly immunocompromised patients, a risk assessment must be performed after day 7 and before return to work.

*Day 0: is the date of onset of symptoms or the date of the COVID-19 positive test, whichever is earliest.

Table 5 Occupational exposure to COVID-19 - health worker risk matrix

PPE worn		Contact type		
		Low risk scenarios – transient contact	Moderate risk scenarios	High risk scenarios
Health worker	Case ⁺			
No effective PPE	No effective PPE	Low	Moderate [#]	High [#]
Surgical or P2/N95 mask and no eye protection	No mask	Low	Low to moderate [#]	Moderate to high [#]
	Surgical mask	Low	Low	Low to moderate [#]
Surgical or P2/N95 mask and eye protection (no breaches)	No mask	Low	Low	Low
	Surgical mask	Low	Low	Low

Key:

Low risk: Transient, not face-to-face, limited contact that does not meet the definition of face-to-face contact

Moderate risk: Any face-to-face contact within 1.5m up to 4 hours with a COVID-19 case

High risk: Prolonged face-to-face contact within 1.5m for more than 4 hours cumulative with a COVID-19 case OR aerosol generating behaviours

Case⁺: Any confirmed case of COVID-19 (co-worker, patient or other)

[#]Perform a risk assessment on the level of exposure, duration, frequency and level of PPE breach (see Figure 2 PPE Breach risk assessment key principles)

*Patients who are receiving close circuit ventilation can be considered to have equivalent protection to a surgical mask.

NB: Where a P2/N95 respirator is indicated, the user must comply with the Respiratory protection program.

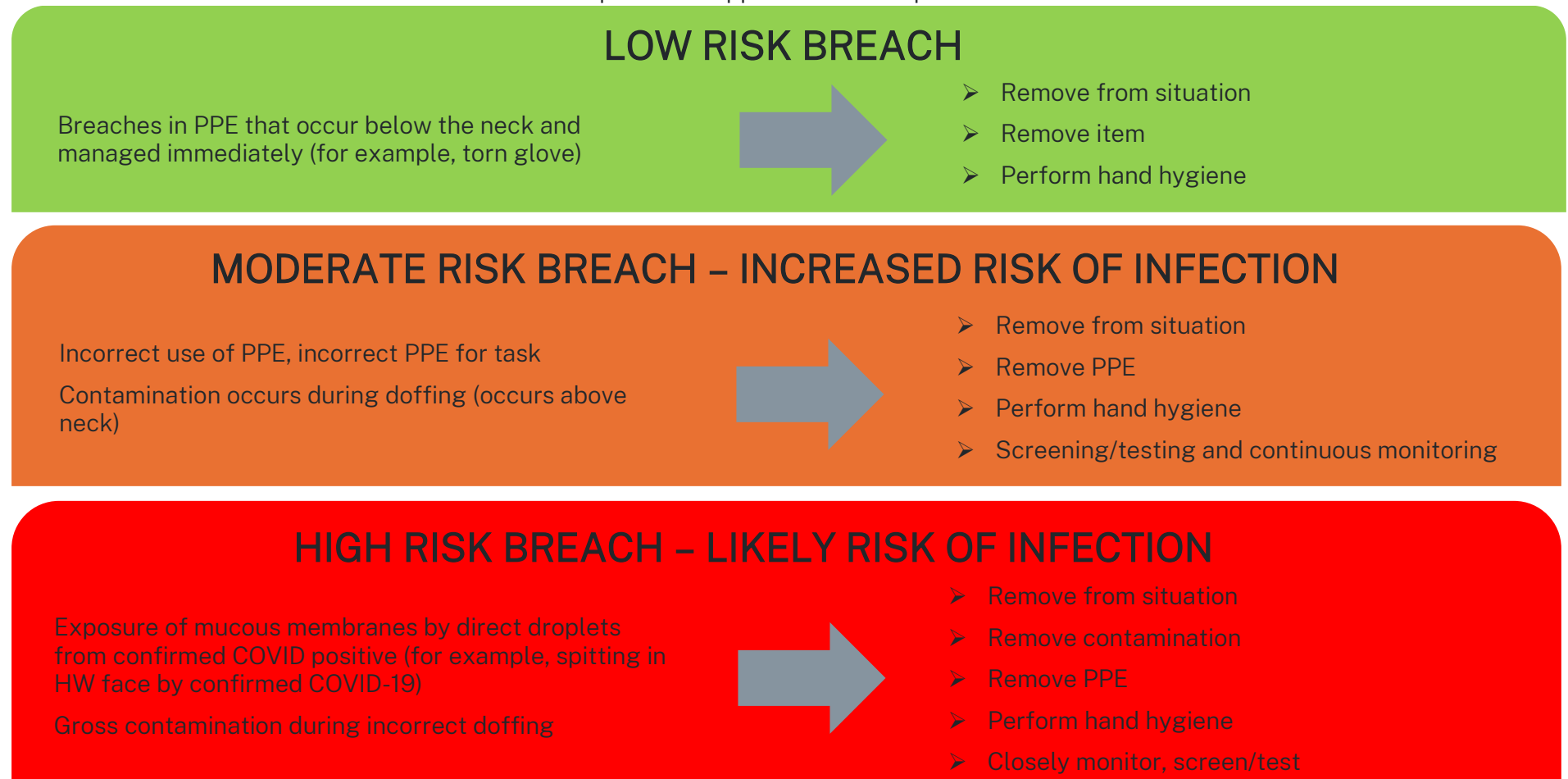
The use of eye protection for contact tracing is applied for droplet precautions when within 1.5m of a positive case (where a mask is not being worn by the case). The absence of eyewear outside of this setting will not increase risk.

Table 6 Exposure to ARI - Actions required for health workers

COVID-19	Influenza	RSV
Note: Perform a RAT or PCR if <i>symptomatic</i> , stay at home until <i>asymptomatic</i> and a negative result is received		
Exclusion is not needed if no symptoms Wear a surgical mask when at work for 7 days from last exposure Risk mitigation including risk assessment and management of shared spaces such as tearooms	Exclusion is not needed if there are no symptoms Wear a surgical mask when at work for 7 days from last exposure	Exclusion is not needed if no symptoms
No post-exposure prophylaxis	Consult infectious diseases regarding indications for post-exposure prophylaxis with anti-viral therapy	No post-exposure prophylaxis

Figure 2 PPE breach risk assessment key principles

Perform risk assessment to determine the level of exposure as applied to ARI suspected or confirmed



Adapted and modified from work developed by AUSMAT Quarantine management and operations compendium for the Howard Springs Quarantine Facility for the Repatriation of Australians at the Centre for National Critical Care and Trauma Response Centre, Darwin 2021.

Table 7 Patient/visitor exposure to COVID-19 case risk matrix

PPE worn		Contact type		
		Low risk scenarios – transient contact	Moderate risk scenarios	High risk scenarios
Case [#]	Contact			
No mask	No mask	Low	Moderate	High
Surgical mask	No mask	Low	Low	Moderate to high
No mask	Surgical mask*	Low	Low	Moderate
Surgical mask	Surgical mask*	Low	Low	Low
P2/N95 respirator (HW)	Mask or no mask	Low	Low	Low

Key:

Low risk: Transient, not face-to-face, limited contact that does not meet the definition of face-to-face contact

Moderate risk: Any face-to-face contact within 1.5m up to 4 hours with a COVID-19 case

High risk: Prolonged face-to-face contact within 1.5m for more than 4 hours cumulative with a COVID-19 case OR aerosol generating behaviours

Case[#]: Any confirmed case of COVID-19

*Patients in shared rooms/bays may require escalation of risks given high transmission rates in this environment

NB: P2/N95 respirators are not recommended for use by the patient of COVID-19.

This risk assessment includes parents or carers accompanying the child.

Table 8 Patient/visitor exposure to COVID-19 case (Neonatal units) risk matrix

PPE worn		Contact type		
		Low risk scenarios – transient contact	Moderate risk scenarios	High risk scenarios
Case [#]	Contact			
No PPE	Open cot	Low	Moderate	High
Surgical mask	Open cot	Low	Low	Moderate
No PPE	Closed crib	Low	Low	Low
Surgical mask	Closed crib	Low	Low	Low
P2/N95 respirator	Open cot/closed crib	Low	Low	Low

Key:

Low risk: Transient, not face-to-face, limited contact that does not meet the definition of face-to-face contact

Moderate risk: Any face-to-face contact within 1.5m up to 4 hours with a COVID-19 case

High risk: Prolonged face-to-face contact within 1.5m for more than 4 hours cumulative with a COVID-19 case OR aerosol generating behaviours

Case[#]: Any confirmed positive case of COVID-19

*Patients who are receiving close circuit ventilation can be considered to have equivalent protection to a surgical mask

NB: Absence or eye protection does not equate to onward transmission.

This risk assessment includes parents or carers accompanying the child.

Table 9 Action based on risk classification

Actions based on risk classification (from table 7)			
	COVID-19	Influenza	RSV
Contact testing	All patients in the affected zone	Symptomatic patients in the same zone	Symptomatic patients in the same zone
Contact isolation	Patients who are in the same zone(s) should avoid moving between different zones	Patients who are in the same zone(s) should avoid moving between different zones	Nil
Post-exposure prophylaxis	Nil	Influenza antivirals to be considered in outbreak (via treating clinician). See 'Antiviral prophylaxis considerations during an influenza outbreak' for more information.	Nil
Visitors	Can visit if there are no symptoms A mask should be worn for 7 days from last exposure if visiting	Can visit if there are no symptoms A mask should be worn for 7 days from last exposure if visiting	Can visit if there are no symptoms A mask should be worn for 7 days from last exposure if visiting

*If transferred to another unit/facility, the receiving unit/facility need to be notified as part of the transfer handover.

2.11 References

Australian Commission on Safety and Quality. Break the Chain Poster (A3). 2021. Australian Commission on Safety and Quality in Healthcare. Accessed on Aug 18, 2026

Australian Centre for Disease Control Coronavirus (COVID-19) – CDNA National guidelines for public health units. Accessed on Aug 18, 2026.

Barakat-Johnson M, Stephenson J, Dempsey K, Innes L, Jain S, Leong T, Schouten T, Coyer F, Hallahan A. Fit testing and comfort evaluation of prophylactic dressing use for healthcare workers under N95/P2 respirators in one health service district in Australia. *J Hosp Infect*, 2022; 123, 100-107 [https://www.journalofhospitalinfection.com/article/S0195-6701\(22\)00067-6/abstract](https://www.journalofhospitalinfection.com/article/S0195-6701(22)00067-6/abstract)

Centres for Disease Control and Prevention – Respiratory Illness - Masks and Respiratory Viruses Prevention. Accessed on Aug 18, 2026.

Greenhalgh T, MacIntyre CR, Baker MG, Bhattacharjee S, Chughtai AA, Fisman D, Kunasekaran M, Kvalsvig A, Lupton D, Oliver M, Tawfiq E, Ungrin M, Vipond J. 2024. Masks and respirators for prevention of respiratory infections: a state of the science review. *Clin Microbiol Rev* 37:e00124-23. <https://journals.asm.org/doi/10.1128/cmr.00124-23>. Accessed on May 14, 2026.

Safe Work Australia. Model Code of Practice: How to manage work health and safety risks. Accessed on Aug 18, 2026.

Moore N, Dempsey K, Hockey P, Jain S, Poronnik P, Shaban RZ, Ahmadpour N. Innovation During a Pandemic: Developing a Guideline for Infection Prevention and Control to Support Education Through Virtual Reality. *Front. Digit. Health*, 09 July 2021. <https://www.frontiersin.org/journals/digital-health/articles/10.3389/fdgth.2021.628452/full>

Plachouras D, Kacelnik O, Rodríguez-Baño J, Birgand G, Borg MA, Kristensen B, et al. Revisiting the personal protective equipment components of transmission-based precautions for the prevention of COVID-19 and other respiratory virus infections in healthcare. *Eurosurveillance*. 2023;28(32):2200718.

Satta, G., & Simniceanu, A. (2025). Infection prevention and control of epidemic-prone acute respiratory infections in healthcare setting. *Current Opinion in Pulmonary Medicine*, 31(3), 230–236. <https://www.ovid.com/jnls/co-pulmonarymedicine/fulltext/10.1097/mcp.0000000000001158~infection-prevention-and-control-of-epidemic-prone-acute>

Tran K, Cimon K, Severn M, Pessoa-Silva CL, Conly J. Aerosol generating procedures and risk of transmission of acute respiratory infections to healthcare workers: a systematic review. *PloS One*. 2012; 7: e35797. Doi:10.1371/journal.pone.0035797

Appendix 2A: Testing for Acute Respiratory Infection (ARI)

Diagnostic testing for acute respiratory infections should be guided by clinical assessment, with the most likely pathogens being tested first. These are usually influenza, respiratory syncytial virus (RSV) or COVID-19.

NSW Health Pathology offers a variety of respiratory Polymerase Chain Reaction (PCR) assays:

- respiratory 'triplex' testing (Influenza A/B, RSV and COVID-19)
- **viral** multiplex PCR tests (may include pathogens such as influenza, rhinovirus, adenovirus, enterovirus, RSV, parainfluenza and metapneumovirus)
- various **viral and bacterial** multiplex respiratory PCR tests (may include pertussis, **atypical** bacterial pathogens such as Chlamydia, Mycoplasma, Legionella and other less common pathogens).

Availability of these tests varies, and some have on-site respiratory triplex PCR testing only. If additional respiratory multiplex PCR testing is requested by the clinician, specimens may be sent to a second laboratory. If additional tests are requested, two swabs may need to be taken; one for local respiratory PCR testing and the second swab for additional PCR testing. Check with your pathology provider.

Respiratory virus testing FAQs

1. Who should be tested?

Patients who meet criteria for ARI, whether on presentation/admission or if already an inpatient, may require respiratory PCR testing for the following reasons:

- patients who may benefit antimicrobial therapy including antivirals whether admitted or discharged
- patients who require close clinical follow-up and management
- testing may be required for residential care facility residents or as guided by public health.

Note: On admission if patient has a positive RAT, a confirmatory PCR is not always required.

2. How is the test done?

Testing for respiratory pathogens requires the collection of a throat/nose swab. Ensure the correct swabs and collection technique are used; inadequate specimens can reduce the effectiveness of testing and incorrect specimen collection can place the health worker collecting the respiratory samples at unnecessary risk. If you are uncertain, please contact your local laboratory.

3. Do I need to wait for the collection and/or report of pathology samples to manage and move a patient?

No. Patients with ARIs should be managed with transmission-based precautions (either airborne or droplet) and standard precautions as soon as practicable. Do not wait for the collection or results of pathology samples to apply infection prevention and control practices. Appropriate IPAC strategies can be implemented in any healthcare setting, including the emergency department. Patients should be managed based on their symptoms (for example, ARI symptoms require droplet or airborne precautions) while awaiting test results.

4. What respiratory testing is available?

Two types of tests are available. PCR and rapid antigen tests (RAT).

Respiratory PCR tests are available through NSW Health Pathology and other private pathology providers. There are different respiratory PCR panels provided by different pathology providers. The choice regarding the types of respiratory PCR panels depends on the clinical presentation, history, epidemiological information, location of the patient and workflows of the different pathology providers.

RAT for the 4 notifiable respiratory viruses (influenza A/B, RSV and COVID-19) are commercially available. The use of RATs is a locally determined process and not performed by pathology providers. Check with your local healthcare facility for details.

Rapid antigen tests (RAT)

The use of RATs for the diagnosis of a variety of respiratory viral infections is continuing to evolve.

RATs are intended for use at the point-of-care or for self-testing and, like nucleic acid testing, require samples from the upper respiratory tract (a throat/nose swab). It is important to note that there is considerable variability in the performance between different RATs. RATs are less sensitive and less specific than nucleic acid testing for respiratory pathogens.

Most manufacturers of current RATs claim that maximal sensitivity is achieved when testing symptomatic individuals within the first 1-3 days of the onset of symptoms. Please refer to the [TGA website](#) and search by the name, ID or sponsor of the RAT kit you are reviewing.

The RAT result should be documented in the patient's electronic health record.

Using RATs

These should be used in accordance with the following:

1. RATs selected for use must be included in the Australian Register of Therapeutic Goods (ARTG) and be supplied in accordance with conditions prescribed by the [Therapeutic Goods Administration \(TGA\)](#).
2. RATs used at the point-of-care must be used in accordance with the National Pathology Accreditation Advisory Council Guidelines for Point of Care Testing. See [National Pathology Point of Care Testing \(Second Edition 2021\)](#).
3. Rapid antigen testing should be undertaken in accordance with any public health orders and/or regulations of the jurisdiction where they are used.
4. RATs must be used in accordance with the manufacturer's instructions for use (IFU). Use outside these instructions breach TGA regulations in relation to the supply and use of these tests and performance of the test result.
5. A positive RAT together with ARI symptoms can be used to manage patient placement and flow. A negative RAT in this context is an indication for PCR testing. Confirmatory PCR testing of a positive RAT is recommended if specific antiviral treatment is considered but should not delay patient placement or the application of infection prevention and control practices.

Selection of RATs (procurement)

When considering procurement of RATs, it is important to review the relevant product information for individual tests considering the following performance characteristics to guide purchasing.

1. Sensitivity and specificity. Recommend choosing RATs where there is evidence of independent reviews of sensitivity and specificity detailed in the 'Instructions for Use' (IFUs) and sensitivity and specificity is high (for example, $\geq 80\%$). If no independent reviews are available, choose tests where information is available about the performance of the kit; and the number of participants tested or dilutions of pathogens by a recognised laboratory provider or organisation and choose tests with acceptable sensitivity and specificity as above.
2. Review which viral strains are detected by the individual RAT. These should ideally align with current circulating strains noting that H1N1 and H3N2 strains of influenza A are always important.
3. When reviewing product information, it is important to note the difference between analytical sensitivity and clinical sensitivity when assessing and comparing the performance characteristics of a RAT. Analytical sensitivity is predominantly measured by in vitro laboratory studies designed to assess the test's limits of detecting the virus. In contrast, clinical sensitivity (the 'real-world' performance of the test) depends on several factors, including sampling, days post-symptom onset, adequacy of test procedure and viral shedding kinetics.

What about surveillance testing?

Surveillance testing currently has a very limited role and is not routinely recommended. This may be considered in an outbreak situation where testing may detect infected individuals before they are symptomatic and inform local IPAC strategies. Any plans considering respiratory surveillance testing must include NSW Ministry of Health and the Public Health Unit, NSW Health Pathology, Public Health Pathology, the local microbiologist and infectious diseases specialists and IPAC. For more information refer to [Coronavirus \(COVID-19\) – CDNA National Guidelines for Public Health Units](#).

Post-infection testing

People who have confirmed COVID-19, influenza or RSV do not usually need repeat testing once symptoms have resolved. However, for deisolation of patients with COVID-19, retesting may be required (see Table 2, page 16). People, including children who are significantly immunocompromised may continue to shed virus for several weeks. If new respiratory symptoms develop, the patient requires reassessment including the need for retesting. required.

Table 10 COVID-19 surveillance testing - for use when significant community transmission

	Alert level		
	Yellow Low transmission	Amber Moderate to high transmission	Red High transmission, outbreaks
High risk • ED presentations • Emergency surgery • Antenatal inpatient care • Admissions	No routine testing	Test all symptomatic and targeted testing based on risk assessment	Recommend testing all patients: Consider retesting admissions 3-5 days after admission
Moderate risk • Elective admissions • Adult parents/carers staying with hospitalised children • Participants in care including support person • Elective surgery	No routine testing	Test symptomatic patients and participants in care or parents staying with children	Test all effective admissions, if using PCR* 24-48 hours prior to admission RAT testing of participants in care, parents staying with children
Low risk • Outpatient appointments – including home visits (community care) • Drop-in clinics	No routine testing	Test all symptomatic and targeted testing based on risk assessment	Telehealth where possible Recommend RAT prior if face-to-face for appointments longer than 15 mins and/or if mask needs to be removed for consultation**
Other • Dialysis • Chemotherapy and/or radiotherapy appointments	No routine testing	Test 2-3 x week at site depending on visit schedule and local transmission	All: RAT on presentation
Transfer back to RACF or group home	Testing as per above for admissions. See here for more information. Absence of a test should not delay transfer of this patient group		

*PCR testing the day prior to admission is preferential if results are reliably available within 48 hours and providing local facilities can provide the testing

**Targeted testing: identification of most vulnerable at highest risk acquisition or transmission that warrants admissions additional control strategies

NB: Where a positive test result is received, proceeding with the patient's treatment should be accommodated using risk mitigation controls and ensuring delivery of safe, quality care maintaining health worker safety.

Appendix 2B: Visitors and participants in care visiting guidance during ARI

NSW healthcare facilities should support safe visitation during periods of higher transmission of ARIs by balancing infection prevention with patients' social and care needs. Rather than restricting access, visitation should be guided by infection prevention and control (IPAC) principles, including clear communication, visitor education, appropriate PPE use, hand hygiene and physical distancing. Additional measures such as screening or testing may be used in higher-risk settings, alongside encouragement of vaccination.

Access to visitors (family, carers, PIC, volunteers) should be maintained wherever possible, with policies centred on compassionate care and patient wellbeing. For visitors or patients with ARI or other communicable diseases, case-by-case risk–benefit assessments should be undertaken in consultation with IPAC or infectious diseases teams. Patients should wear masks during visits where appropriate.

Visitation decision-making

Discussions with patients and families should support informed decisions, considering:

Risks: potential transmission of infection, mitigated through PPE, hygiene, distancing and reduced visit duration.

Benefits: improved patient safety, emotional wellbeing, advocacy, communication, reduced distress (especially for vulnerable or cognitively impaired patients) and support during end-of-life care.

Alternatives: use of virtual communication, additional staffing support where appropriate and alternative ways to provide care and connection (for example, letters or personal items).

Special consideration should be given to vulnerable patients (clinical, social or end-of-life needs), with decisions aligned to local health district processes.

Refer to *Table 11 Supporting visitation*.

For the latest advice refer to [NSW Health guide to healthcare visitation](#) and [Caring Together – Welcoming Visitors \(PD2026_025\)](#).

Table 11 Supporting visitation

Type of patient	Special considerations
Patient immunocompromised	A clinical assessment should be completed to determine the suitability of visitation. If patient is deemed particularly vulnerable and therefore unsuitable, alternative methods, such as virtual visitation, should be explored.
Visitation on compassionate ground For example: • Patient seriously ill or dying • Patient in palliative care who are critically ill	Visitation should not be restricted, regardless of communicable disease status of both patient and visitors. Written exemption not required.
Patients in care of maternity services	Participants in care who are positive or a close contact for a communicable disease should be supported to attend in appropriate circumstances.
Patients in care of neonatal and paediatric services	Participants in care who are a close contact and are asymptomatic should have visitation supported in appropriate circumstances
Patients in care of mental health services	Visitation should not be restricted. Sensible approach, compassion, risk assessment and escalated decision making required.
Patients with cognitive impairment, delirium or dementia	Visitation should not be restricted. Visits can assist in assessment and management of the patient in their day-to-day comfort and safety, as well as being a significant help/support for health workers

Appendix 2C: Aerosol-generating procedures

Aerosol-generating procedures (AGPs) produce smaller respiratory particles due to air or gas flowing rapidly over moist or wet surfaces. There are many procedures that may be 'aerosol-generating', and these are considered to increase the risk of transmission of respiratory viruses.

Other procedures that may cause aerosolisation of fluid or tissues that are not from the respiratory tract or lungs are not considered high risk AGPs for transmission of respiratory pathogens.

Some considerations include:

- AGPs on suspected or confirmed ARIs should be performed with a minimum number of HWs present and where possible, the most qualified person should carry out the procedure
- Nebulisers are not recommended 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, then:
 - Isolate the patient
 - Use a negative-pressure room if available, otherwise use a single room with the door closed
 - Health workers administering nebulisers should wear airborne precaution PPE, including P2/N95 respirator and eye protection
 - If staying in the room, depending on the air changes per hour, continue these precautions for at least 30 minutes after the nebuliser treatment. See link: [CDC Air Changes](#).

Cardiopulmonary resuscitation

While providing CPR for patients suspected or confirmed to have COVID-19 or ARI wear a P2/N95 respirator and eye protection. For more information refer to [CPR during the pandemic - National Clinical Taskforce](#).

3

NSW IPAC response and escalation framework

3 NSW IPAC response and escalation framework

3.1 Introduction

The NSW Infection Prevention and Control (IPAC) Response and Escalation Framework provides a structured, evidence-informed approach to managing transmission risks associated with acute respiratory infections (ARIs) and other communicable diseases of state or national significance across the NSW health system.

Originally developed to support health services in responding to varying levels of COVID-19 transmission risk, the framework has evolved to encompass a broader range of respiratory and emerging infectious diseases. It is underpinned by NSW, national and international evidence, together with lessons learned from operational experience.

The framework is embedded within routine infection prevention and control programs and establishes a foundational level of preparedness that applies across all NSW Health facilities. This baseline approach ensures the consistent application of robust IPAC practices, with additional escalation measures implemented according to local risk assessments, disease prevalence, and healthcare system impact.

Statewide alert levels are informed by health system surveillance and risk monitoring, with the minimum state alert level determined by the NSW Health Secretary. Local Health Districts (LHDs) and Specialty Health Networks (SHNs) are responsible for undertaking local risk assessments and implement additional IPAC measures where required to address local epidemiology, transmission risk, or operational pressures.

The framework supports a coordinated and scalable response by enabling health services to:

- Maintain a consistent baseline of infection prevention and control practices.
- Implement proportionate escalation measures based on local transmission risks and healthcare system impact.
- Adapt responses in consultation with Infection Prevention and Control and Infectious Diseases teams.
- Apply outbreak management principles in accordance with relevant NSW Health policy and guidance.
- Respond effectively to future pandemics, emerging communicable diseases, and high-consequence infectious diseases (HCIDs).

While the NSW health system operates at the foundational level, health services may introduce enhanced control measures in line with the framework, the [Infection Prevention and Control in Healthcare Settings \(PD2023_025\)](#) policy directive and the [Triggers for Escalation Following Detection of Infection Outbreaks or Clusters \(GL2024_013\)](#) guideline.

3.2 Emergency response governance

The NSW Health State preparedness and response unit is responsible for 'whole of health' state-level preparedness and response to critical incidents and public health emergencies including those involving infectious diseases.

During an emergency response, NSW Health works closely with partner agencies to ensure timely communication and coordinated decision-making. This collaboration enables the development and implementation of the most effective and appropriate strategies to manage emerging threats.

In the event of a communicable disease of state or national significance particularly high consequence infectious diseases (HCIDs), NSW Health leads a centralised and specialised response. This approach is designed to mitigate the risk of a public health emergency and minimise impacts on the healthcare system.

For detailed guidance refer to the NSW Health policy directive on [Early Response to High Consequence Infectious Diseases \(PD2024_005\)](#) and [CEC High Consequence Infectious Diseases](#).

3.3 Escalation principles

During situations of increased risk, it is important to be able to escalate and provide a proportionate response with specific IPAC precautions to align with the level of community transmission or level of healthcare transmission and impact. These escalation principles can be applied locally using local parameters. The statewide level of risk including escalation or de-escalation is assessed and guided by the MoH. In the absence of a statewide alert level, foundational level forms the entry level of operation.

Transition between risk levels

During a statewide pandemic or outbreak response, NSW Health follows a coordinated, statewide decision making process. Transitions between risk levels are based on a combination of community transmission, the public health response and the impact of infection on the health system. If an LHD/SHN identifies local community risk that requires further assessment, the Chief Executive should escalate this to the Chief Health Officer (CHO), who may convene an extraordinary meeting to determine the appropriate NSW Health response. Additional precautions may also be mandated through Public Health Orders when required by community transmission or epidemiological risk.

Escalation to higher transmission risk levels requires LHDs/SHNs to rapidly implement the controls associated with that level. De-escalation may require additional communication and may take longer to operationalise.

LHDs/SHNs are expected to apply the framework consistently, incorporating local learnings and ensuring appropriate reporting and escalation. Private and independent healthcare providers may refer to CEC guidance to support their own local risk assessments.

System impact

A system impact alert reflects additional pressures on the health system, including rising case numbers and significant staff or service impacts. This alert level may be applied alongside the locally assigned risk level or the level determined through the risk escalation framework and may relate to impacts beyond IPAC. Local implementation of system impact strategies should follow established escalation processes. This additional alert level is informed by NSW, national and international experience and evidence. System impact alerts are most likely to be triggered by large scale local outbreaks or the need for a statewide intervention.

System-impact considerations are applied in conjunction with the current risk alert level to provide comprehensive guidance for healthcare services. Examples of potential triggers for system impact are outlined in the table below.

Table 12 System impact alert level

System impact alert level	
Workforce	Significant impact due to critical staff shortages; large furlough numbers, contact numbers and positive HW case numbers.
ICU capacity	<20-25% ICU bed capacity including surge beds (either bed availability and/or staff to manage beds), unable to deliver usual services.
Hospital capacity	Hospital at capacity and/or unable to be staffed due to sick leave. Substantial delay in admissions, unable to admit elective patients.
ED capacity	Either significant number of ED presentations (inadequate beds and/or inadequate staff numbers); serious delays in patient assessment times; inability to admit or delays in admission.
Transport capacity	NSW Ambulance & HealthShare NSW: • Either significant or marked increase in demand and/or serious delays in transport timeliness and response times. • A high proportion of ARI transports.
PPE availability	Significant or marked increase in demand, major strategies to manage and ensure supply, with or without impact on stock supply.
Surgery	Emergency surgery only. • Risk assessment for day procedures to continue • Emergency day procedures where capacity and pressure on system continues to rise

Alert level plus

An alert level PLUS may be applied when additional measures are required within an existing risk level but a full escalation to the next level is not warranted. Local services may implement this level as needed. Where a statewide alert level PLUS is required, the CHO will provide advice.

3.4 General principles for all settings and all scenarios

The following principles provide a robust framework for LHD/SHNs and other healthcare organisations to manage risk and apply to all settings and all scenarios. A key focus during escalation is to ensure that the hierarchy of controls combined with IPAC are in place and to look at the use of PPE in response to the level of community transmission.

The foundational principles of IPAC must always be applied across all settings. These principles apply across all scenarios and are listed below:

1. Administrative and engineering controls
2. Standard precautions for all healthcare interactions
3. Enhanced cleaning of high touch surfaces
4. Transmission based precautions
5. Test if symptomatic (for example, COVID-19)
6. Health workers stay at home if they are unwell

7. NSW Health guide to healthcare visitation.

NSW IPAC Response and escalation framework - Principles for IPAC monitoring and management for local implementation

The NSW IPAC Framework for Respiratory and COVID-Safe Healthcare, provides a structured and scalable approach to IPAC for ARI across healthcare settings. Based on current evidence and local, national and international experience, it outlines core and escalated measures for managing low, moderate and high transmission risk scenarios, including clinical care, workforce protection, ventilation, PPE and outbreak management.

Aligned with NSW Health policy and the IPAC Response and Escalation Framework, it supports Local Health Districts and Specialty Health Networks to implement proportionate responses to changing epidemiological conditions. A summary of the [framework's risk matrix](#) and recommended control measures is available on the CEC website.

The following should be read in conjunction with the below additional policies and guidelines:

- Infection Prevention and Control in Healthcare Settings (PD2023_025)
- Infection Prevention and Control Practice Handbook
- Triggers for Escalation Following Detection of Infection Outbreaks or Clusters (GL2024_013)

Monitoring measures for local IPAC programs supported by local systems:

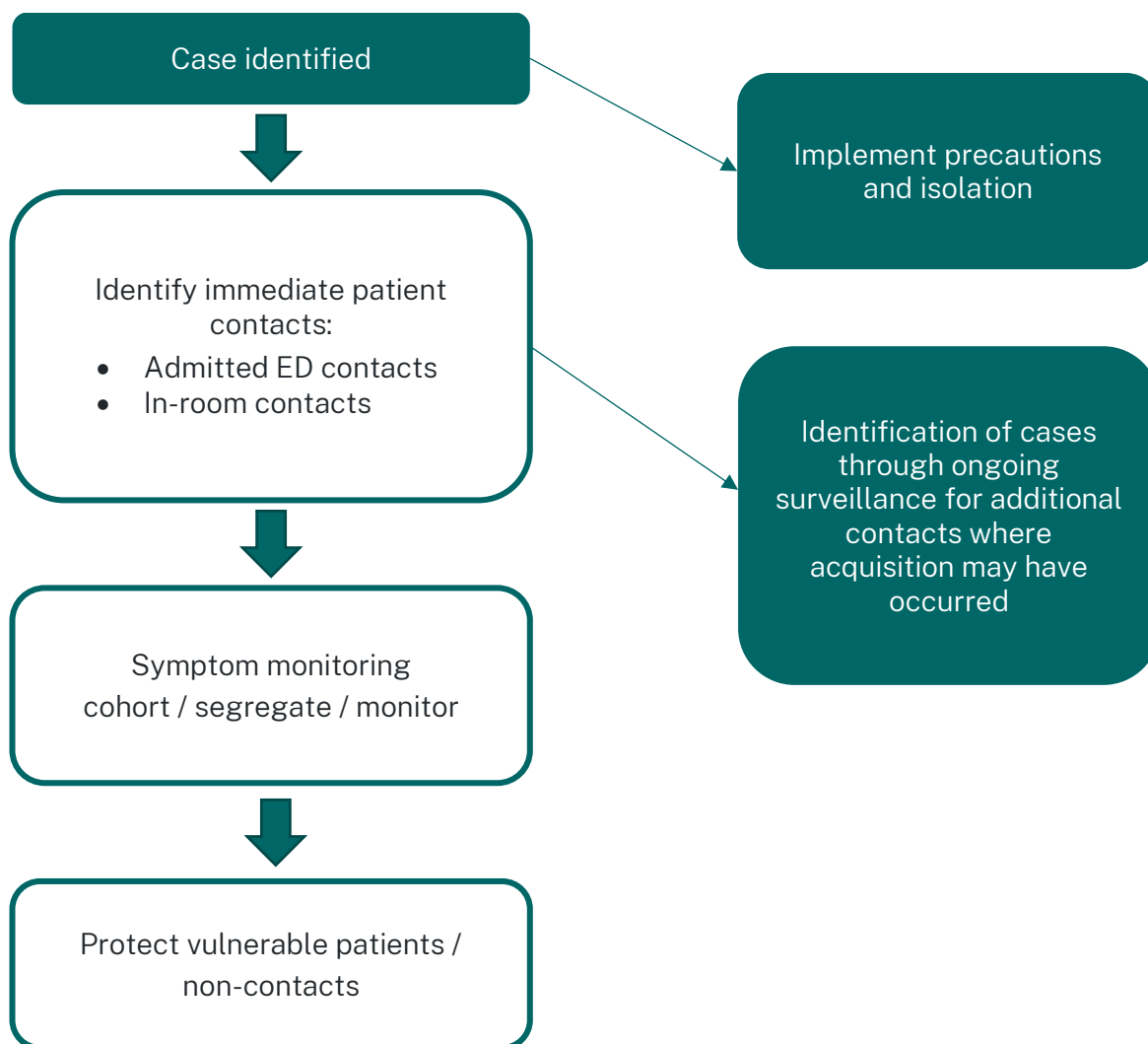
- Monitor case numbers of Influenza, RSV, COVID-19 and other communicable infections
- Targeted contact tracing as part of foundational level IPAC (Figure 3 below)
- Identification and reporting through ongoing surveillance – prevalence/incidence
- Monitor staff furloughing numbers
- Screening and cohorting of patients
- Patient flow to incorporate IPAC status supporting bed allocation for IPAC and minimising patient movements.

Escalation reasons for consideration (monitored and directed by IPAC/ID):

- Increased case numbers
- Increased clusters/outbreaks causing an impact on usual care
- Significant staff furlough
- Consideration of statewide parameters/MOH directive.

For more information refer to 3.5 NSW Risk matrix table.

Figure 3 In-hospital (targeted) contact tracing principles



Note: The above provides a high level principles approach to contact tracing. Disease specific information with additional definition of each of the above would need to be applied locally.

3.5 NSW Risk matrix table

This table is designed to provide an escalation response when there is a significant outbreak of a respiratory pathogen that is causing an impact on the community and health services. It was designed for COVID-19, however, the principles apply to other ARI outbreaks.

Health worker mask use

The risk of undetected introduction of viral respiratory infections into healthcare settings varies with community transmission levels and the characteristics of circulating pathogens. During periods of widespread transmission and/or significant system impact, additional protective measures may be required. This includes the routine use of masks and physical distancing for health workers, particularly during amber and red alert levels. These measures help reduce the likelihood of inadvertent transmission and support the continued safe delivery of healthcare services.

Recommended precautions:

- Airborne precautions: Respirator and eye protection when providing care to patients with suspected or confirmed COVID-19, undiagnosed ARI or other infections spread via airborne route.
- Droplet precautions: Surgical mask and eye protection when providing care to patients with ARI.
- Standard precautions: Includes hand hygiene, environmental cleaning, cough etiquette, respiratory hygiene, apron/gown and gloves when direct and close contact with patients based on risk assessment – standard precautions apply to all settings where care is provided.

Risk matrix		Foundational system prepared	Yellow alert Low to moderate transmission	Amber alert Moderate transmission	Red alert High transmission
Patients	Patients with an ARI to wear a surgical mask on presentation and transit if able				
	All patients in hospital	Respiratory virus testing of symptomatic patients. Isolate ARI in single room/cohort Paediatrics: isolate in bedspace following risk assessment	Respiratory virus testing of symptomatic patients. Isolate ARI in single room/cohort. Cohort confirmed ARIs with same virus.	Respiratory virus testing of symptomatic patients. Targeted screening. Manage suspected or confirmed ARI patients in a single room where possible	Surveillance screening of patients. Manage suspected or confirmed ARI patients in a single room where possible. Prioritise single rooms according to risk. Cohort if no single rooms available. Minimise patient movement where safe to do

Risk matrix		Foundational system prepared	Yellow alert Low to moderate transmission	Amber alert Moderate transmission	Red alert High transmission
Patients (cont.)	Presenting directly to ED, birth suite, medical imaging, rehabilitation, outpatient and community services.	All patients with ARI to wear a surgical mask on presentation and during transit if able	All patients to wear a surgical mask on presentation and during transit if able.		Patients to wear a surgical mask when receiving care if able
	Maternity (including presenting directly to birthing suite) and paediatric patients	Mothers, parents and participants in care with ARI to wear a surgical mask if able. Mother and baby to remain together. Children 12 years and under are not required to wear a mask	Mothers, parents and participants in care to wear a surgical mask if able Mother and baby to remain together Children 12 years and under are not required to wear a mask		
	Home based care (patients seen in their own home)	All patients with ARI to wear a surgical mask if able, when HW(s) visiting	Patients with ARI to wear a surgical mask when receiving care if able, others depending on risk assessment		All patients to wear a surgical mask when receiving care if able
	Vulnerable patients	All patients to wear a surgical mask when receiving care if able, protective isolation may apply			
	Dialysis	All patients with suspected or confirmed ARI to wear a surgical mask if able	All patients to wear a surgical mask where able	All patients to wear a surgical mask where able	
				Consider enhanced patient surveillance, dedicating HWs and limiting movement.	Consideration of hospital-based dialysis for most patients Surveillance screening of patients

Risk matrix		Foundational system prepared	Yellow alert Low to moderate transmission	Amber alert Moderate transmission	Red alert High transmission
Health workers (Acute facilities, non-acute facilities, MH, MPSs, health services and RCF)	HWs managing suspected or confirmed COVID-19 patients to wear P2/N95 respirator and eye protection				
	Healthcare facility (non-ED HW)	HW to wear a surgical mask and eye protection when providing care for patients suspected or confirmed with an ARI	HWs to wear surgical mask in clinical and patient facing areas. Eye protection when within 1.5m of a patient with ARI. P2/N95 for confirmed /suspected COVID-19	HWs to wear surgical mask when in healthcare facilities, this includes clinical and non-clinical areas (for example, on entry, corridors, office spaces) Eye protection when within 1.5m of a patient	
	HWs working in ED	HWs to wear surgical mask and eye protection as per local risk assessment	As above	As above	As above PLUS All ED HWs to wear P2/N95 respirators and eye protection in clinical areas when providing direct care
	Home based care (patients seen in their own home)	Standard precautions	Surgical mask when providing direct patient care Eye protection when within 1.5m of a patient		Symptom screening prior to visit Surgical masks (universal mask use) Eye protection when within 1.5m of a patient
	Residential aged care facility (RACF)	HWs to wear surgical mask and eye protection for suspected / confirmed ARI residents	Surgical mask when providing direct patient care Eye protection when within 1.5m of a patient		Surgical masks (universal mask use) Eye protection when within 1.5m of a patient
	Shared space for example, team rooms	Standard precautions	Standard precautions. Cough etiquette and respiratory hygiene Consider masking if crowded	Manage the number of HWs using shared spaces HWs who are high risk contacts not to use shared spaces Mask wearing at all times. Limit numbers in tea rooms	

Risk matrix		Foundational system prepared	Yellow alert Low to moderate transmission	Amber alert Moderate transmission	Red alert High transmission
Health workers (cont.)	Basic Life Support (BLS)	Standard and droplet precautions for BLS Add airborne precautions (P2/N95 Respirator) if ARI		Airborne precautions (P2/N95 respirator) for all BLS	
	Facility/Unit outbreak/community transmission increase	Mask wearing in clinical areas Surgical mask and eye protection when providing care for patients suspected or confirmed with an ARI P2/N95 respirator and eye protection when providing care to patients suspected or confirmed COVID-19			
	Vulnerable patients	Vulnerable patients are to be identified and managed as per the risk assessment			
Visitors (Including participants in care)	All visitors Children 12 years and under are not required to wear a mask ¹	Visitors to adhere to standard and transmission-based precautions. Surgical mask as per risk assessment.	Standard precautions Surgical mask for visitors in clinical areas. Support visitors as per local policy	Visitors to wear a mask before entering the facility and meet entry criteria. Exceptions managed by LHDs Local policy to determine number of visitors in 4 bed bays and on wards	Any restrictions to be based on the NSW Health PHO. Visitors to wear a mask before entering the facility and meet entry criteria. Exceptions managed by LHDs Visitors based on risk assessment and individual patient needs and circumstances
	A participant in care can be described as someone actively providing care, physical and/ or emotional support	Standard precautions Surgical mask as per risk assessment	Participant(s) in care must wear a surgical mask in clinical areas (wards/clinics)	Participant(s) in care must wear a mask before entering the facility Participants in care to be risk assessed to be able to continue providing care and support	Universal mask use applies. Participants in care to be risk assessed to be able to continue providing care and support.
	Visitors to RACF	Based on local facility advice	Visitation to be based on the latest advice from Public Health Response Branch see NSW Health advice for RACFs		Visitors, including any children will require an exemption to visit NSW Health advice for RACFs

Note: Although these principles apply across healthcare environments, when caring for vulnerable patients/residents, individual circumstances should be considered.

3.6 Risk matrix testing strategy table

This table summarises surveillance testing recommendations for patients, carers and participants in care across a range of healthcare settings, aligned with varying levels of community transmission. The guidance uses a risk escalation framework: yellow (low transmission), amber (moderate to high transmission) and red (high transmission or outbreaks) to support a scalable, risk-based approach. As transmission risk increases, strategies progress from minimal and targeted testing to broader, routine, and repeat testing, alongside increased use of rapid diagnostics and telehealth to reduce exposure risk.

Low risk Yellow – low to moderate transmission	Medium risk Amber – moderate transmission	High risk Red – high transmission or outbreaks
Symptomatic testing and no routine surveillance testing. Targeted testing may be indicated based on clinical judgement or specific risk groups (for example, selected admissions, some high-risk cohorts like dialysis or antenatal wards). Minimal disruption to usual care, with in-person services continuing as standard.	Symptomatic testing is standard, with targeted testing based on risk assessment expanded across settings. Increased use of RAT or PCR on admission or presentation and repeat testing (for example, days 3-5) in higher-risk environments. Regular screening begins for frequent attendees (for example, dialysis, oncology). Care delivery continues with some precautions.	Widespread surveillance including all ED presentations, admissions, elective procedures and high-risk outpatient encounters. Use of RAT or PCR on arrival is standard, with repeat testing and frequent screening (2-3 times, weekly) in some high-risk settings. Strong shift toward telehealth where possible and enhanced precautions to minimise exposure and transmission.

Table 13 Summary table: ARI risk assessment guide for PPE selection for direct care of patients

Patient Characteristics			Precautions Required					
								
			Frequent hand hygiene	Surgical mask ¹	P2/N95 respirator ^{1,2}	Eye protection ¹	Fluid resistant gown/apron	Gloves
No acute respiratory infection (ARI) symptoms	STANDARD PRECAUTIONS FOR ALL ¹	Subject to current NSW risk level		Risk assessment		Risk assessment	Risk assessment	Risk assessment
With ARI symptoms (important to test for other respiratory viruses)		STANDARD + DROPLET					Risk assessment	Risk assessment
Patients with suspected or confirmed COVID-19 OR as identified as a close contact		STANDARD + AIRBORNE					Risk assessment	Risk assessment

1. For extended use, masks or respirators can be worn for up to 4-8 hours respectively. Eye protection can also remain on between patients. Masks/respirators and eye protection should be discarded (or reprocessed in the case of reusable eye protection) if they are moist or contaminated with blood or bodily fluids and after removal
2. Health workers required to wear P2/N95 respirators should be trained in the correct use including donning, fitting, fit checking, and doffing and be fit tested as per Respiratory Protection Program. This also applies to the use of reusable respirators.

4

Specific healthcare settings

4 Specific healthcare settings

4.1 Introduction

This chapter provides advice on acute respiratory infection (ARI) management in specific healthcare settings during high level of community transmission (amber or red alert). Content will evolve over time and be updated as needed.

4.2 Access to surgery during amber and red alert

Impact to surgery may vary depending on the level of community transmission of COVID-19 (amber or red alert or in the context of a pandemic). For updated information on specific advice refer to [NSW Health COVID-19 and elective surgery](#).

Surgery/procedure

If the patient is suspected or confirmed to have COVID-19 and the decision is to proceed with surgery, then follow transmission-based precautions for droplet and airborne including standard precautions.

The decision to operate on a patient confirmed to have COVID-19 will be influenced by the level of transmission risk at a state level and the surgical need for each patient. The pathway for a patient from the emergency department (ED) or a ward bed to the operating theatre and return to the ward involves several interactions between HWs and the patient. Standard precautions always apply.

Further information is available at:

- [ACI Surgical care network resources: Emergency Surgery Guidelines \(GL2021_007\)](#)
- [NSW Health Planned Surgery Access \(PD2025_036\)](#)

4.3 ARI/COVID-19 PPE in Allied Health procedures

This guidance supports Allied Health clinicians in making risk-based decisions regarding the use of personal protective equipment (PPE) across hospitals, community health centres and other clinical settings. It was developed in consultation with experts from the field.

The prevalence and risk of transmission of acute respiratory infections (ARIs) vary by location and over time. Accordingly, this guidance must be applied in conjunction with local advice from LHDs/, SHNs and individual services, as outlined in NSW IPAC Response and Escalation Framework and the [Infection Prevention and Control Practice handbook](#).

Where additional or unique risks are identified for a specific service or clinical context, advice should be sought from local infection prevention and control teams and specialist infectious diseases experts before deviating from the PPE recommendations outlined in Figure 4.

All Allied Health professionals must apply a systematic, risk-based approach prior to undertaking clinical assessments, procedures or treatments. This includes consideration of patient factors such as suspected or confirmed COVID-19 or other ARIs, environmental factors and the nature of the activity being performed, including whether aerosol-generating procedures (AGPs) are involved. Appropriate PPE must always be used to minimise the risk of transmission to patients, staff and others.

Factors to be considered during risk assessment

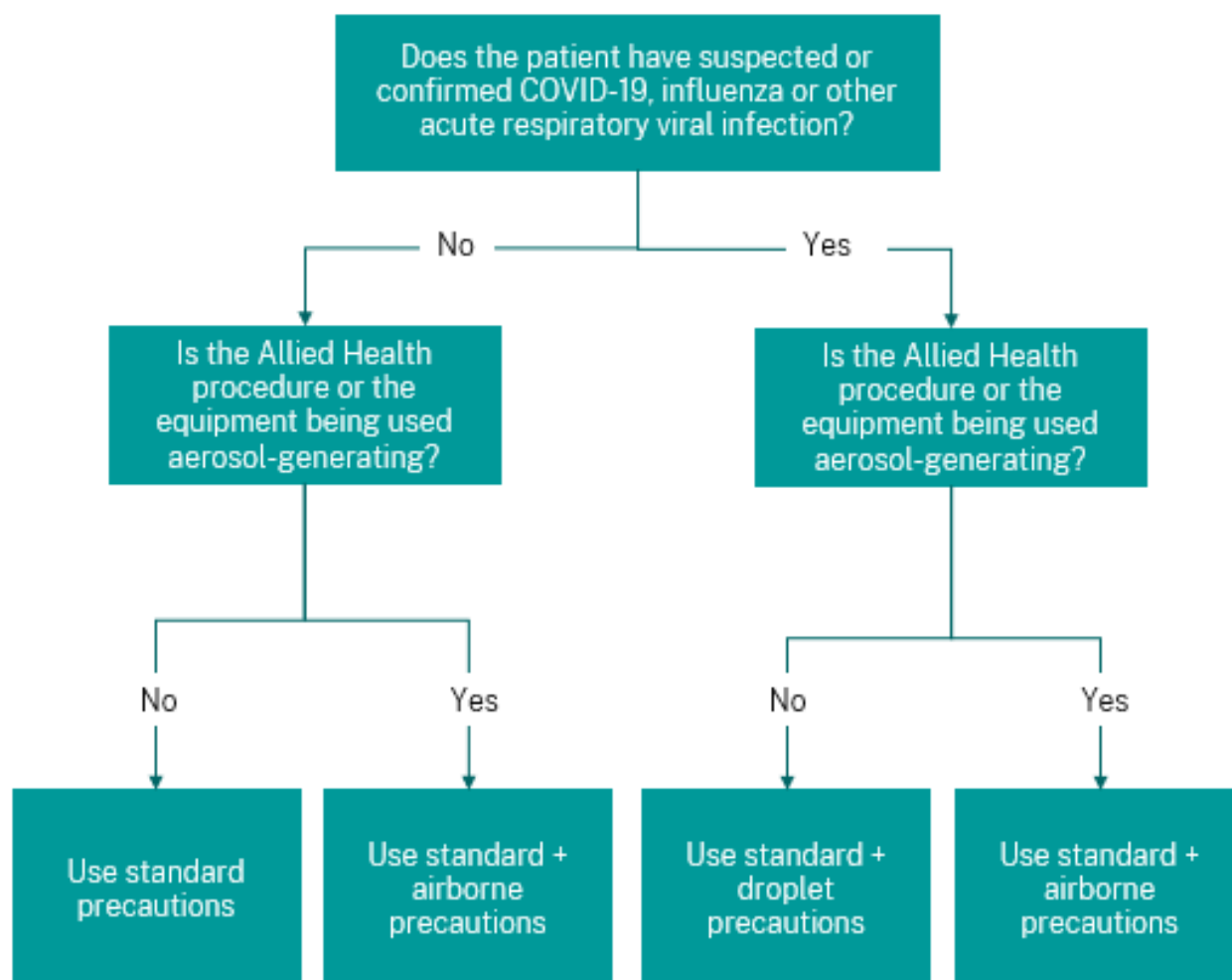
Risk factors to be considered:

- Cognition and cooperation of patient
- Secretion control/volume
- Cough etiquette and respiratory hygiene.
- The position of the clinician during the procedure (for example, behind or beside patient) where possible and practical
- The cumulative length of time spent with an individual patient (2 hours >1.5 metres over a 48-hour period is considered low risk). If this is longer or distance can't be maintained, additional PPE may be required.

If these circumstances put the clinician at risk of infection, droplet precautions should be considered.

If a patient suspected or confirmed to have an ARI, the following decision tree should be used when determining decisions regarding appropriate PPE (figure 4).

Figure 4 Decision algorithm for recommended PPE in Allied Health procedures



1. Allied Health procedures with no risk of droplet exposure

Standard precautions should always be adhered to, ensuring ongoing risk assessment approach during patient contact.

Examples of procedures (not exclusive):

- General mobilisation of patients

- Outpatient orthopaedics, hydrotherapy, musculoskeletal, lymphoedema, women's health, cardiac and pulmonary rehabilitation
- Videofluoroscopic swallow assessment, modified barium swallow
- Clinical dysphagia assessment
- The presence of dysphonia, dysphasia, or dyspraxia.

Transmission-based precautions are applied where patients are suspected or confirmed of an infectious disease according to mode of transmission.

2. Allied Health procedures with risk of exposure to particles or body fluids

Standard precautions, plus droplet precautions

Examples of procedures (not exclusive):

- All airway clearance techniques, cough and breathing devices, respiratory muscle strength training devices, spirometry, and peak flow
- Non-AGP assessment and treatment of tracheostomy and laryngectomy patients
- Assessment of a patient where 1.5m distance cannot be maintained.

Standard precautions, plus airborne precautions

Examples of procedures (not exclusive):

- Open suctioning of nasopharynx, oropharynx, tracheostomy, endotracheal tube or laryngectomy stoma
- Manual hyperinflation and inspiratory muscle training device on ventilated patient
- Procedures that have risk of ventilator disconnection, for example, manual assisted cough, manual techniques, mobilising
- Fibreoptic endoscopic evaluation of swallowing assessment.

4.4 Specialist areas

The provision of health services for patients with suspected or confirmed ARI must not be delayed and the care provision should be based on a risk assessment and clinical need.

The following principles apply for the management of ARIs for specialist areas such as medical imaging, non-acute healthcare settings, home visits, community meetings/sessions, radiology, breast screen and so forth.

Early recognition of patients/clients who have suspected or confirmed ARI is essential to maintaining the health and wellbeing of providers, carers, HWs and the community. The following key elements are important factors:

1. ***Triage*** and risk assessment through a screening process prior to arrival at the home or premises should be conducted. ARI risk assessment of patients/clients should be undertaken by providers of care in the home prior to each visit.
2. ***Respiratory hygiene and cough etiquette*** to contain respiratory secretions are recommended for everyone and should be communicated to patients/clients.
3. ***Standard precautions*** represent the minimum infection prevention measures that apply to all patient/client care, regardless of suspected or confirmed infection status of the patient/client, in any setting where healthcare and home care is delivered. These evidence-based practices are designed to both protect and prevent spread of infection among patients/clients, care providers and HWs.

4. **Transmission-based precautions** should be used when standard precautions alone are insufficient to interrupt the transmission of a microorganism (transmissible infection or communicable disease). Precautions are applied and based on the mode(s) of transmission.
5. **Assess and monitor risk** through routine risk screening and monitoring for patients/clients and the HW or care provider at each point in the episode of care. The risk screening and risk management required for the patient/client is inclusive and required for others who will be present at the appointment and/or living in the home.
6. **HW or care providers** must follow all requirements for assessing, monitoring and reporting their own health and risk factors associated with ARIs to ensure their own safety and the safety of those they provide care for.
7. **Vulnerable patients/clients** should be identified and risks associated with specific ARI vulnerability should be considered in the provision of home care.
8. **Vulnerable HWs and care providers** should be individually risk assessed to determine their suitability for care of patients/clients with suspected or confirmed ARIs.

4.5 Oral Health Services

Aerosol generating procedures (AGPs) in dentistry are defined as any clinical interventions that utilise equipment capable of producing airborne particles, including high-speed and surgical handpieces, ultrasonic and sonic devices, air polishing systems, lasers and the triplex syringe when air and water are combined. These procedures present an increased risk of airborne transmission of infectious agents, particularly in the context of an ARI.

Deferring dental treatment

In most cases non-urgent dental treatment for a person with ARI should be deferred until the person is deemed non-infectious.

Managing shared open clinics

The following measures should be considered when managing and risk assessing the use of shared open clinics:

1. Two (2) metres is the minimum distance between the headrests of the patient chairs. Three (3) metres or more may be appropriate depending on the procedure and physical space available.
2. The use of physical barriers such as screens or partitions between chairs may assist in separating spaces.
3. Risk assess the air quality, existing ventilation and air exchange of the shared space. Consider adjusting or enhancing existing ventilation before using other air improving devices.
4. Consider the use of clinical zones based on procedural risk (for example, AGP) or vulnerable patient cohorts (unvaccinated or immune suppressed). Adjustment to patient flow, patient timing and grouping of procedure types may assist risk management of shared spaces.
5. Minimise aerosols by practicing four handed dentistry, use of highspeed suction and rubber dam.

Table 14 Dental services - ARI quick reference guide

	 Hand hygiene	 Disposable gloves	 Fluid resistant gown or apron*	 Surgical mask	 P2/N95 mask	 Eye protection – safety glasses	 Face shield or mask with visor	Treatment room requirements
Foundational – system prepared	✓	✓	*Risk assessment	✓	*Risk assessment	✓	*Risk assessment	Standard precautions apply at all times
Yellow or amber alert level	✓	✓	*Risk assessment	✓	*Risk assessment	✓	*Risk assessment	A single room or risk assessed shared space
Red alert level	✓	✓	✓	✗	✓	✓	✓	A single room or risk assessed shared open space
Confirmed or suspect patient	✓	✓	✓	✗	✓	✓	✓	Use a single room with the door closed. Where available use negative air flow and good ventilation. High risk AGPs should be performed in a negative pressure room or equivalent. Allow necessary air changes before next patient.

*Risk assessment for AGPs should consider the length of procedure and anticipated exposure to large volumes of blood/body fluids and respiratory droplets AND prevalence of community transmission.

4.6 Disability information

There are numerous resources available for people with disability and their carers or supporters. For more information, please refer to [Advice for disability services on managing acute respiratory infections](#).

4.7 Information relevant to aged and residential care

- [Infection prevention and control in aged care](#)
- [For national updates – Department of Health and Aged Care](#)
- [Coronavirus \(COVID-19\) - CDNA National Guidelines for Public Health Units](#)
- [Respiratory infection advice to residential disability care facilities \(RDCF\)](#)
- [People at higher risk of severe COVID-19](#)
- [Advice for aged care services on managing acute respiratory infections \(ARIs\)](#)