Chapter 2: Infection prevention and control strategies for ARIs including COVID-19

This chapter is part of the Infection Prevention and Control Manual COVID-19 and other Acute Respiratory Infections for acute and non-acute healthcare settings, Clinical Excellence Commission, 2023.

The publication summarises ARI infection prevention and control strategies and their implementation in healthcare settings.

Contents

Key points

- ARIs are mainly spread by direct contact with respiratory particles of various sizes. Some physical and environmental conditions can increase the spread of particles
- Virus variants will continue to emerge and may alter the risk of transmission of viruses
- The application of a hierarchy of controls as a bundle will significantly reduce the risk of transmission
- Understanding and application of standard and transmission-based precautions is essential in the management of ARIs
- The use of non-pharmaceutical interventions is required along with personal protective equipment
- COVID-19 risk assessment should be aligned with the recommendations in *Chapter 3: NSW IPAC Response and escalation framework*

Acronyms and abbreviations

ABHR	Alcohol-based hand rub
ACH	Air changes per hour
AGB	Aerosol-generating behaviour
AGP	Aerosol-generating procedure
ARI	Acute respiratory infection
ARTG	Australian Register of Therapeutic Goods
CDNA	Communicable Diseases Network of Australia
CT	Computerised tomography scan
HVAC	Heating, ventilation and air conditioning
HW	Health worker
ID	Infectious diseases
IFU	Instructions for use
IPAC	Infection prevention and control
MPS	Multi-purpose service

MRI	Magnetic resonance imaging
NSW	New South Wales
PIC	Participants in care
PPE	Personal protective equipment
R_0	Basic reproductive number
RACF	Residential aged care facility
RAT	Rapid antigen test
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
TGA	Therapeutic Goods Administration
WHO	World Health Organization

2.1 Introduction

This chapter introduces best practice information for the prevention and management of COVID-19, influenza, and other respiratory pathogens. This manual was developed to create a single unified guidance to support a risk-based approach for the early identification and the ongoing management of acute respiratory infections (ARIs) and COVID-19. The principles of infection prevention and control (IPAC) are fundamental processes that keep health workers (HWs), patients and visitors safe.

2.2 How ARIs spread

Acute respiratory infections are transmitted between individuals when the virus is released from the respiratory tract of an infected person and is transferred through the environment, leading to infection of the respiratory tract of an exposed and susceptible person. There are several different routes (or modes) through which transmission could occur, the chance of which is modified by viral, host and environmental factors. ARIs differ in how readily they spread (transmissibility) and the mechanism (mode) of transmission.

Respiratory infections can be transmitted via four major modes of transmission: (large) droplets and (fine) aerosols, direct (physical) contact, indirect contact (fomite),

The primary mechanism of transmission of SARS-CoV-2 is via infected respiratory particles. SARS-CoV-2 replicates in the respiratory tract and the highest viral load is just prior to symptom onset or in the first 5 days of symptoms. Transmission also occurs with asymptomatic infection.

Influenza viruses and respiratory syncytial viruses (RSV) are thought to spread from person to person primarily through large-particle respiratory droplet transmission (e.g., when an infected person coughs or sneezes near a susceptible person). RSV may also spread via fomites.

Most ARI transmission occurs through direct **close contact**:

- People who are physically near (within 1.5 metres) a person with an ARI, or have direct contact with that person, are at greater risk of infection compared to individuals who remain >1.5 metres from cases. Transmission studies show household members are at the highest risk
- Infections occur mainly through exposure to respiratory particles when in close contact with someone who has an ARI. Respiratory particles of various sizes are produced by breathing, talking, coughing, sneezing and behaviours such as singing and shouting
- Respiratory particles cause infection when they are inhaled or deposited on mucous membranes, such as those that line the inside of the nose and mouth.

Pathogens mainly transmitted by close contact can sometimes also be spread via airborne transmission through smaller particles. Circumstances where airborne transmission of ARIs appears to have occurred include:

- **Enclosed spaces -** an infectious person exposes people at the same time or people were exposed shortly after the infectious person had left the space
- **Increased exposure to respiratory particles -** often generated with expiratory exertion (e.g., coughing, shouting, singing, exercising) that increase the concentration of suspended respiratory particles in the air space
- **Inadequate ventilation or air handling -** suspended small respiratory particles and particles from the air that were not adequately removed.

Incubation and infectious period

The incubation period is the duration between exposure to the virus and the onset of symptoms.

The WHO currently estimates that the incubation period for COVID-19 ranges from 1 to 14 days, with a median incubation period of 5 to 6 days and only 3 days for some of the most recent variants such as Omicron and its progeny. Around 1% of COVID-19 cases will develop symptoms more than 14 days after exposure.

Epidemiological data to date suggests that most of the transmission occurs from symptomatic cases. COVID-19 appears to be infectious from 1-3 days prior to symptom onset with most onward transmission occurring early after symptom onset.

Taking a precautionary approach, cases are currently considered infectious from 48 hours prior to the onset of symptoms until they meet criteria for release from isolation. More conservative periods (e.g., 72 hours prior to onset of symptoms) may be considered in high-risk settings at the discretion of the Public Health Unit.

Influenza incubation period is about 2 days, but ranges from one to four days (WHO) and for RSV is usually 3–6 days (ranging from 2 to 8 days).

2.3 Deisolation post ARI

Deisolation or release from isolation criteria in healthcare settings considers both patient factors (presence of immunocompromise) and setting (high risk settings such as healthcare).

COVID-19

The public health advice regarding isolation has changed to reflect overall pandemic management approach, and the most up to date advice can be found here. Advice for healthcare settings may include additional controls and differ from community advice. This has ongoing importance in protecting all patients, HWs and visitors in health facilities. There is also more information here Coronavirus (COVID-19) CDNA National Guidelines for Public Health Units.

HWs who have COVID-19 and are at home are required to comply with current NSW Health advice. Return to work advice for health workers is available here. In some circumstances, a decision about return to work may be complex and advice from their GP, infectious disease, clinical microbiology, or other specialist is recommended. For further information refer to *Appendix 2A: Deisolation criteria for COVID-19 within NSW healthcare facilities*. For community settings more information can be found here.

Influenza

Patients

Three days after commencement of effective anti-influenza medication AND resolution of ARI symptoms for >24 hours (afebrile without the use of antipyretics)

OR

Five days after commencement of respiratory symptoms if not treated with effective anti-influenza medication AND afebrile /asymptomatic for >24 hours.

Health workers

Stay home if unwell, even with mild symptoms (5 days from symptom onset for influenza without antiviral treatment and 3 days after commencement of effective anti-influenza medication) AND resolution of ARI symptoms for >24 hours (afebrile without the use of antipyretics).

Respiratory syncytial virus (RSV)

Adults – must be asymptomatic for > 24 hours

Children – must be asymptomatic AND reviewed by medical team.

Return to work: HW must be asymptomatic for 24 hours or have resolution of ARI symptoms for >24 hours.

2.4 Safe working principles

This section outlines the principles of the hierarchy of controls and safe working principles for acute and non-acute healthcare settings.

Work-related risk is managed under the Work Health and Safety Act (2011), Regulations, and the approved code of practice 'How to Manage Work Health and Safety Risks'. These require all Australian workplaces to assess and manage risk 'so far as is reasonably practicable' (Safe Work Australia, 2018). This also applies to the assessment and management of risk related to the transmission of communicable disease.

Controlling exposures to occupational hazards is the main way to protect personnel in a workplace. Usually, a hierarchy is used to achieve practical and effective controls of workplace hazards. The hierarchy lists different risk avoidance or mitigation strategies in decreasing order of effectiveness. Multiple control strategies can be implemented at the same time and/or following on from each other.

The code of practice requires workplaces to undertake a risk assessment and apply controls using the hierarchy of controls – see *Figure 2: An example of a hierarchy of control.*

Principles of risk assessment in the context of ARI

A risk-based approach to the selection of PPE considering the time of exposure, the proximity to the patient and the procedure/task. A risk-based approach to patient care should include risk factors such as patient vulnerability (examples include but not limited to immune compromised, immunodeficiency, transplant, or patients in protective precautions).

Risk assessment parameters should include risk of infection transmission inclusive of transmissibility of infection, impact of infection, patient factors, HW risk factors, practice/procedure factors and environmental factors, while taking into consideration of HW preference, desirable and undesirable anticipated effects and the balance between them, acceptability, and ease of implementation. The following points to be considered when applying a risk-based approach.

- Identify the risk:
    - Identifying tasks or activities that increase the risk of introducing or spreading infection such as aerosol generating procedure (AGPs), patient symptoms (cough or heavy breathing) behaviour (confused, agitated, shouting)
- Identifying likely transmission route(s)
    - Type of exposure e.g., parenteral (introduction of body substance into the body through piercing or puncturing), or non-parenteral (contamination of mucus membrane e.g., eyes mouth, non-intact skin) with body substance
- Quantify the impact
    - Intensity of exposure e.g., how close you are to the patient
    - Duration of exposure e.g., how long will you with the patient
- Does it need mitigation (yes/no) or can this be reduced or eliminated
- What the mitigation is e.g., single room, negative pressure or negative flow, standard precautions, transmission-based precautions, appropriate PPE.

For more information refer to Infection prevention and control practice handbook.

2.5 Occupational exposure to COVID-19

Protection of HWs includes having appropriate risk assessment and risk mitigation strategies in place. However, there may be occupational exposures which need to be reported and investigated as soon as possible. The risk varies based on the type of work being performed, the potential for interaction with infected people, the type of PPE worn, contamination of the work environment and precautions in place. Caring for a patient in the correct PPE is not considered occupational exposure in this context.

An occupational exposure is defined as an incident which occurs during a person's employment and involves contact with blood or other body substances. The greatest

occupational exposure risk for COVID-19 is splash to eyes, nose/nares or mouth with respiratory particles.

Where such an exposure occurs, the following principles apply:

- Carry out first aid immediately:
  - Skin - wash the exposed site with soap and water
  - Eyes - rinse thoroughly while eyes are open with water/normal saline
  - Mouth - spit out and rinse with water several times
  - Clothing - remove and shower if necessary
- Notification of the incident to immediate supervisor or manager and documentation in IMs+ or relevant local incident reporting system.

Management of HWs with occupational exposure to COVID-19

Any occupational exposure assessment and management should involve Staff Health, Infection Prevention and Control, Infectious Diseases (where available) and local Public Health as appropriate.

Based on the risk assessment (refer to *PPE breach risk assessment key principles* chart below), inform HWs of their level of exposure and likely actions required, while maintaining confidentiality.

- Provide information on the need to monitor for symptoms and importance of consistent adherence to all recommended mitigation strategies such as hand hygiene, mask wearing, cleaning and disinfection
- Support and encourage working from home or options to telework where possible
- Provide follow up and support as required and plan for return to work.

Recording and reporting of a positive rapid antigen test (RAT)

NSW Health entities may choose to report RAT results through the StaffTrakr application, developed by eHealth NSW as a web-based, mobile-friendly application that allows HWs to record and share their test results with the appropriate managers within their entity and be advised on the next steps to take. For more information refer to StaffTrakr – app for recording rapid antigen test results.

Management of COVID-19 exposures

For HWs exposed to COVID-19 in the community or in the workplace, refer to COVID-19 and other ARI: Managing Health Worker Exposures and Return to Work in a Healthcare Setting for specific advice. Contact tracing of HWs exposed to COVID-19 remains important for the ongoing management of risks within healthcare settings and this may differ from the advice provided for the community. Refer to Management of patient or visitor COVID-19 and other Acute respiratory infection exposures in healthcare facilities for more information on the assessment of risk level posed to patients including children and their parents or carers, participants in care (PIC) and/or visitors if there has been contact with a COVID-19 case. Appropriate actions to be taken to minimise the risk of further spread of COVID-19 within the health facility.

PPE breach risk assessment key principles

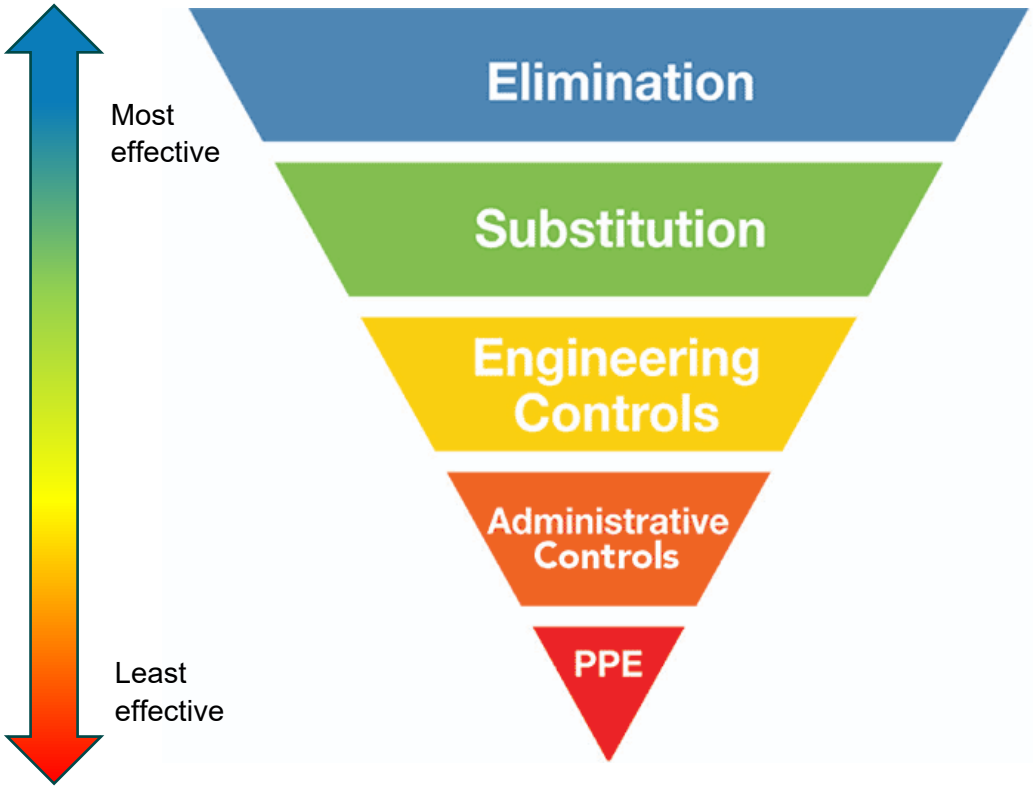
Perform a risk assessment to determine the level of exposure to a person with suspected/confirmed ARI. Where injury has occurred, perform immediate first aid. For more information refer to NSW Health Information for people exposed to COVID-19.

Low risk breach	Breaches in PPE that occur below the neck and managed immediately (e.g., torn glove)	Remove from situation Remove item Perform hand hygiene
Moderate risk breach **Increased risk of infection**	Incorrect use of PPE, incorrect PPE for task Contamination occurs during doffing (occurs above neck)	Remove from situation Remove PPE Perform hand hygiene Screening/testing and continuous monitoring
High risk breach **Likely risk of infection**	Exposure of mucous membranes by direct particles from a confirmed ARI positive (e.g. spitting in HW face by confirmed COVID-19 or influenza patient) Gross contamination during incorrect doffing Contamination occurs during doffing	Remove from situation Remove contamination and PPE Perform hand hygiene Closely monitor, screen/test Risk assess and monitor for symptoms

* Refer COVID-19 and other ARI: Managing Health Worker Exposures and Return to Work in a Healthcare Setting for more information. Removal from clinical duties may be required based on risk assessment

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 Resilience. National Critical Care and Trauma Response Centre. Darwin 2021.

FIGURE 2: AN EXAMPLE OF A HIERARCHY OF CONTROL



Hierarchy of Control Ranking	Examples of control measures to prevent transmission
Elimination Reduce the opportunities for the virus to be introduced	• Vaccination • Routine and targeted surveillance • Symptomatic HW and agency group to stay home and do not come to work • Remote working
Substitution Find alternative ways of providing care that reduce the potential for transmission	• Administer aerosolised medicine with spacers instead of nebulisers • Substitute in-person appointments with telehealth services, when appropriate
Engineering Controls Use physical barriers and other forms of hazard reduction for example: ventilation controls, patient separation	• Ventilation and improved air changes • Negative pressure rooms • Single room with ensuite • Isolation of patients
Administrative controls Effective and consistent implementation of policies & protocols	• Audit and feedback • Hand hygiene • Cleaning and disinfection • Signs, posters, information sheets • IPAC guidance documents • Training and education of HW
PPE	• Symptomatic patients wear surgical mask • Correct transmission-based precautions, PPE worn when in contact with infectious patients

For more information refer to the Australian Government Department of Health the hierarchy of controls for minimising the risk of COVID-19 transmission.

The adherence to hierarchy of controls including use of PPE is key in the prevention and control of any exposure to communicable diseases and pathogenic organisms. PPE requirements should be based on clinical circumstances and risk assessment.

Vaccination reduces the risk of both infection and the risk of disease requiring hospitalisation. NSW HWs are required to comply with the vaccination requirements of the NSW Health and ATAGI advice

HWs noncompliant (including exemptions) with influenza or COVID-19 vaccination, are required to wear a surgical mask as a minimum while in the health facility (clinical and non-clinical area). Where possible, meal and beverage breaks should be taken separate from other HWs (e.g., outdoors) during times when masks are removed. HWs may be reassigned to an area of lower risk under a risk management plan. Additional controls may also be implemented during local outbreak events. P2/N95 respirator is applied based on the risk assessment when a P2/N95 is indicated (suspected or confirmed COVID-19, ARI until diagnosis).

2.6 Strategies to prevent or minimise transmission of ARIs

The following strategies are to be applied to ensure HWs, patients and visitor safety, along with sustainable and continuous quality care provision within healthcare settings.

2.6.1 Early recognition of patients with suspected or confirmed ARI

Early recognition, identification, isolation, and reporting of ARIs and application of source control, including respiratory hygiene are central to effective containment and management of any communicable diseases.

As per Communicable Diseases Network Australia (CDNA) ARI includes recent onset of new or worsening acute respiratory symptoms: cough, breathing difficulty, sore throat, or runny nose/nasal congestion with or without other symptoms (see below).

Other symptoms may include:

- headache, muscle aches (myalgia), fatigue, nausea or vomiting and diarrhoea. Loss of smell and taste and loss of appetite can also occur with COVID-19, but is variable and its absence doesn't preclude COVID-19
- fever (≥37.5°C) can occur, however is less common in elderly individuals
- in the elderly, other symptoms to consider are new onset or increase in confusion, change in baseline behaviours, falling, or exacerbation of underlying chronic illness (e.g., increasing shortness of breath in someone with congestive heart failure).

Early recognition of patients who have suspected or confirmed ARI is essential to maintaining the health and well-being of HWs, 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 CDNA. Case definitions may change over time based on variety of factors, including current epidemiology and testing

capacity. Check the NSW Health website for advice on latest case definitions and testing criteria.

Surveillance testing

Testing for surveillance has continued to undergo transition as the COVID-19 pandemic has progressed and is a key strategy and tool for preventing and controlling infection in healthcare. Testing for surveillance and IPAC requires careful consideration and planning. Persons meeting the close contact definition may benefit from being tested for SARS-CoV-2. Information about COVID-19 testing is available here.

Visit Coronavirus (COVID-19) - CDNA National Guidelines for Public Health Units for more information regarding IPAC recommendations when collecting specimens. Depending on the community transmission rates there should be a low threshold for COVID-19 testing for patients presenting to the Emergency Department or inpatients. In a setting of widespread community transmission and in the influenza season, more extensive testing of hospital patients is expected. Refer to CEC Winter strategy: Testing and IPAC for acute respiratory infection for more information.

2.6.2 Respiratory hygiene and cough etiquette

The following measures to contain respiratory secretions are recommended for everyone. HWs 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 e.g., 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 (i.e., soap, disposable towels) are always available.

A poster on Respiratory Hygiene for waiting areas is available on the CEC website.

2.6.3 Advice for patients with an ARI

Patients with any ARI symptom must be encouraged and supported to wear a surgical face mask 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 (educated on the correct wearing) where their clinical care is not compromised for example, when receiving oxygen therapy via an oxygen mask

- 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.

2.6.4 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
    - Also consider the concept of 'ring fencing' (e.g., 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 second level is environmental and engineering controls, including cleaning of the environment, spatial separation of patients with ARIs and the ventilation of spaces.

The third level of control to further decrease the risk of transmission is personal protection, which is the provision of appropriate PPE (e.g., masks, eye protection and respirators).

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.

Environmental and engineering controls

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:

- Australian Health Facility Guidelines
- State design guidelines
- AS1668.2-2012 – Section 5 – use of ventilation and air conditioning in buildings
- HB260 – 2003 Hospital acquired infections, Engineering down the risk
- GL2023_009 Engineering Services

There are three methods that may be used to ventilate spaces within healthcare facilities: natural, mechanical and hybrid (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 the airflow in other parts of the healthcare facility. For more information refer to Recirculating air filtration device use in NSW hospitals – Safety Information.

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 4×2×3 m^3 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.

2.6.5 Application of standard precautions for all patients at all times

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 is delivered.

Standard precautions apply to all settings where care is provided or where there is a risk of blood or body fluid exposure including acute and subacute care facilities, home care settings, community settings and other settings such as mortuaries. HWs must perform hand hygiene in accordance with the National Hand Hygiene Initiative. All HWs having direct contact with patients or a patient's environment should ensure they are bare below the elbow.

Before deciding on the IPAC strategies for individual patient care HWs must perform a risk assessment on the type of patient interaction, the risk of transmission of the infectious agent, and the risk of contamination of mucous membranes by patients' blood, body substances, secretions, or excretions and how long the PPE is likely to be required to be worn, along with patient placement or cohorting.

Principles of risk assessment for individual patients should consider risk of acquisition and development of serious disease and requirement for additional strategies for example includes but not limited to immunocompromised patients, immunodeficiency, transplant, may require protective precautions.

These evidence-based practices are designed to both protect individuals and prevent the spread of infection among patients and HWs. Standard precautions comprise of the following measures:

- Hand hygiene
- Respiratory hygiene (cough etiquette)
- PPE (if contact with blood or body fluids is anticipated)
- Aseptic technique for clinical procedures
- Occupational exposure prevention: management of needlestick/sharps injuries or blood and body fluid splashes
- Cleaning and disinfection of the healthcare environment and shared patient care equipment
- Safe handling of used linen and waste disposal.

2.6.6 Implement transmission-based precautions

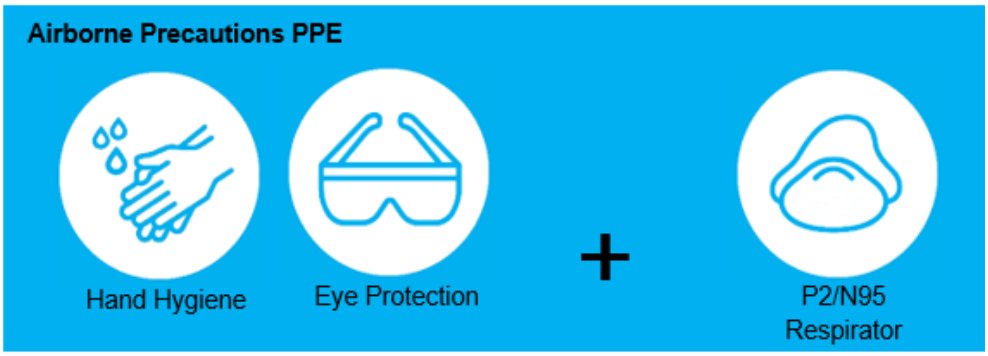
Transmission-based precautions should be used when standard precautions alone are insufficient to interrupt the transmission of a microorganism based on its mode(s) of transmission. Respiratory protection devices are an important aspect of IPAC, and aligning within the hierarchy of control as PPE, they should be considered as the last line of defence.

Droplet precautions (surgical mask and eye protection)

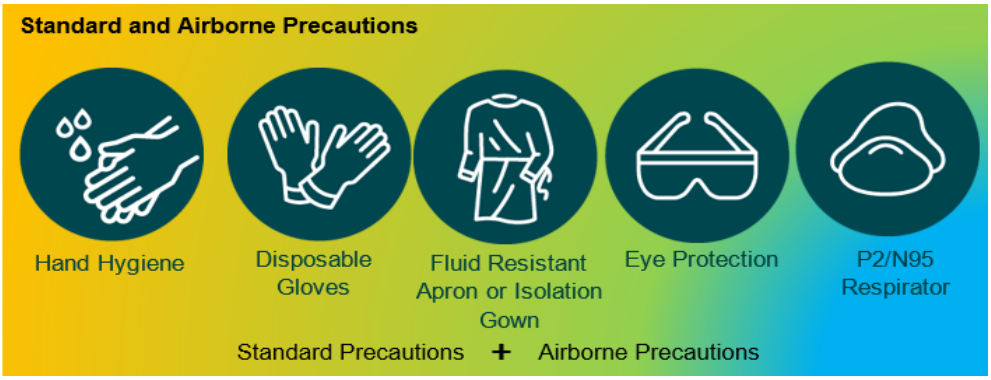
- Patients negative for COVID-19 without epidemiological link but present with an ARI or recent onset of fever without an alternative clinical focus. (Screening and testing for other respiratory viruses are recommended). Refer to Winter strategy: testing and IPAC for ARIs for more information.

Airborne precautions (P2/N95 respirator and eye protection)

- Confirmed COVID-19 cases AND
- Suspected cases (a person who meets clinical **AND** epidemiological criteria or a person identified as a high-risk contact, regardless of symptoms)



Use of gown/apron and gloves based on risk assessment, proximity, duration and intensity of exposure during care provision.



Note:

- Before entering room or patient zone – perform hand hygiene and a risk assessment on the need for apron/gown i.e., duration and type of patient contact or contact with blood or body substance (as per standard precautions)
- After entering room or patient zone – perform hand hygiene and risk assessment on the need for gloves i.e., contact with blood or body substance. Change or remove gloves (if worn) and perform hand hygiene in between dirty and clean tasks
- The use of gloves is recommended as part of standard precautions to reduce the risk of contamination of HWs hands when exposure to blood and body substance is expected. COVID-19 is not transmitted via intact skin and therefore, gloves do not add a layer of protection against COVID-19
- The choice of wearing a fluid resistant apron or gown is based on a risk assessment around the level of contact to blood and body substance exposure
- Whether an apron or a gown is worn, it should be changed between contact with patients or their environment. For more information refer to Gown or Apron: Principles for Risk Assessing.

Organisation of patient zones or cohorting

Zoning (cohorting) refers to the grouping of patients with the same pathogen in the same area. Ring fencing is cohorting of susceptible patients. The goal of zoning or cohorting patients (and the HW that attend to them) is to minimise interaction between infectious and non-infectious patients as much as possible. For COVID-19 this would require keeping patients who are confirmed COVID-19 together in the same zone that is separate from those who are not infected. Alternatively, separating into an area of COVID-19 recovered or non-COVID patients together. If layout and staffing allow (may vary between facilities), consider the following factors before establishing zones.

The organisation of zones depends on factors such as:

- physical building space
- availability of single or shared rooms in a specific area to enable zoning
- ability of patients to be relocated
- staffing capacity
- number of suspected or confirmed COVID-19 cases

- acuity of COVID-19 positive patients
- number of contacts
- access to bathrooms.

The following are examples of how zoning could be applied for COVID-19:

1. **Red zone** – COVID-19 positive patients
2. **Amber zone** – COVID-19 high risk contacts or suspected cases
3. **Green zone** – patients that have been cleared of being COVID-19 cases or contacts
4. **Blue zone** – areas only accessed by staff.

Patient placement – infection prevention and control risk assessment guide

To ensure the safe and timely placement of a patient with a known or suspected transmissible infection, patient placement decisions should be made based on the guidance provided within the CEC Infection Prevention and Control Practice Handbook and a combined transmission based approach may require for specific communicable diseases. Please refer to the patient placement risk assessment guide below.

Risk factors to consider	Identify risks	Evaluate risks	Treat risks
Establish the context	**Source and mode of disease transmission**	**Clinical impact of transmission**	**Need for isolation, standard and transmission-based precautions**
• Acute Respiratory Infection/symptoms (ARI) • MRO colonised or infection • Transmissible infection (e.g., chicken pox) • Recently returned traveller from overseas • Presence/symptoms of diarrhoea, vomiting or incontinence • Patient/client risk factors e.g., falls risk • Cognitive ability e.g., dementia • Is the patient immunocompromised, immune deficient (e.g., chemotherapy) • Palliative/end of life care • Room air changes/ ventilation if sustained requirement for procedures such as BiPAP, NIV, nebuliser	How is the disease spread? Is the transmission route known? Spread from a single or multiple source? Spread from person to person?	• Risk to other patients in shared space • Possible mode of disease transmission • Bathroom/toilet availability/configuration • Presence of wounds or indwelling devices/drains • Post-operative • On immunosuppressive therapy	☐ Single room ☐ Negative pressure room ☐ Positive pressure room Precautions required: ☐ Contact ☐ Droplet ☐ Airborne ☐ Combined (contact, droplet and airborne)

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 *Appendix 2C: Visitors and participants in care visiting guidance during COVID-19 and ARI 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.

Routine cleaning and disinfection

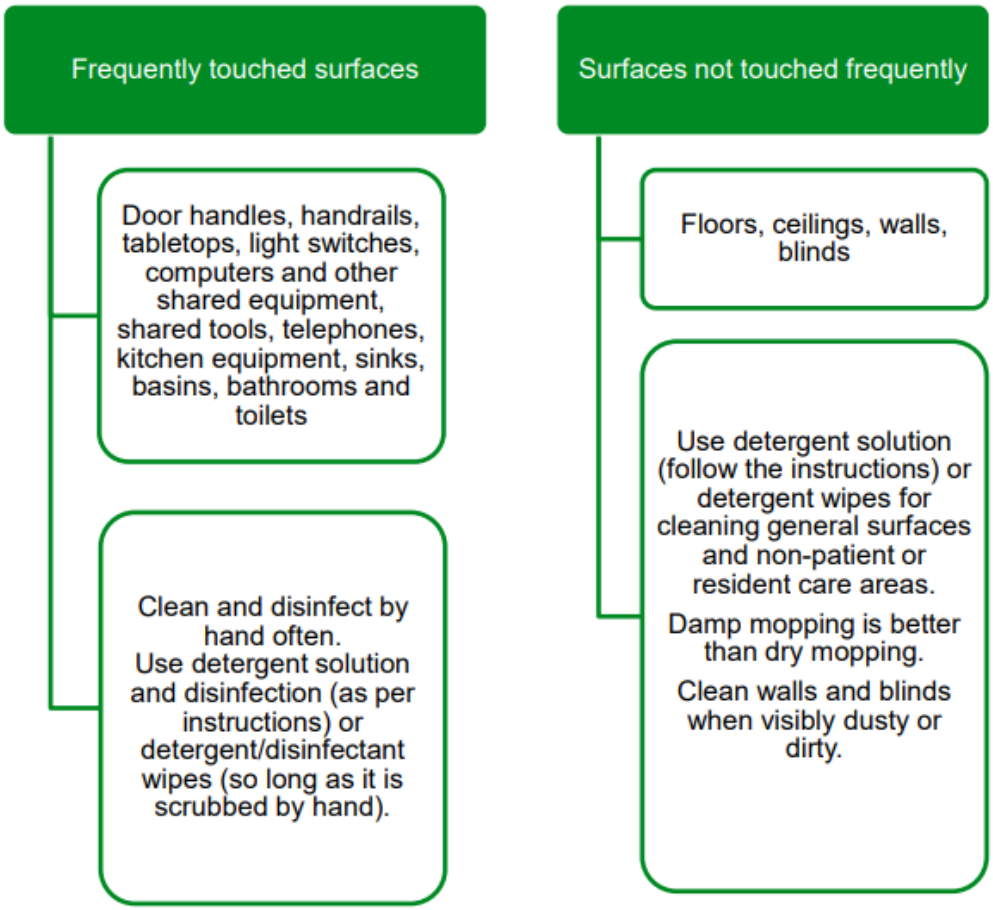
Routine cleaning should be undertaken using an appropriate detergent and disinfectant. High touch point cleaning is used to describe frequently touched surfaces by patients, HWs, volunteers and visitors within the healthcare environment. High touch points (such as doorknobs, bedrails, tabletops, light switches, patient handsets) in the patient's room should be cleaned at least daily or more frequently in high intensity or high traffic areas. High touch point cleaning must be supported by good hand hygiene practices, correct use of both PPE and cleaning and disinfection chemicals.

Consideration should be given to increased frequency of routine cleaning and disinfection of environmental surfaces and frequently touched surfaces in clinical areas.

- Clean using an S-shaped motion from clean to dirty (see Figure 3)
- Clean general surfaces and fittings straight away when visibly dirty and after spills
- Clean often touched surfaces with detergent solution or detergent/disinfectant wipes (see Figure 4).

FIGURE 3: S-SHAPED METHOD FOR CLEANING (IMAGE FROM GAMA HEALTHCARE)

FIGURE 4: ROUTINE ENVIRONMENTAL CLEANING (FROM AUSTRALIAN GOVERNMENT, 2021B)



The preferred routine cleaning process should involve either:

- **2-step clean:**

  Physical cleaning with detergent followed by disinfection with a Therapeutic Goods Administration (TGA) listed hospital-grade disinfectant with activity against viruses (according to label/product information) or a chlorine-based product such as sodium hypochlorite.

- **2-in-1 clean:**

  A physical clean using a combined detergent and TGA listed hospital-grade disinfectant with activity against viruses (according to label/product information) or a chlorine-based product such as sodium hypochlorite, where indicated for use, i.e., a combined detergent/disinfectant wipe or solution.

Disinfectant solutions should be made fresh daily and gloves should be worn when handling and preparing solutions. Cleaning equipment, including mop heads and cloths, should be laundered in hot water, and completely dried before reuse. Cleaning equipment, such as buckets, should be emptied and cleaned with a new batch of cleaning and/or disinfectant solution and allowed to dry completely before reuse.

Terminal clean

Terminal cleaning of rooms requires both thorough cleaning and disinfection.

- Terminally clean room/zone on discharge or transfer from inpatient units
- Always check with the nurse-in-charge before entering the room
- Following an aerosol generating procedure (AGP, cleaners should only enter the room after 35-45 minutes depending on the air changes per hour within the room)
- The room and all patient care equipment remaining in the room should be physically cleaned
- Follow or combine cleaning with a disinfectant process (see 2-step clean and 2-in-1 step clean)
- All furniture, patient equipment items, horizontal surfaces, frequently touched surfaces, e.g., light switches and call buttons, bathroom, toilet and shower area should be thoroughly cleaned and disinfected
- For procedural rooms with short patient stays (e.g., CT scan, MRI, fever clinics) clean and disinfect frequently touched surfaces between cases. Clean and disinfect the area as per local policies e.g., at the end of the session/day.

Patient care equipment

Patient care and patient assessment devices (e.g., thermometers, sphygmomanometers, glucometers, hoists, pat slides) may transmit microorganisms including COVID-19, influenza, RSV and multidrug resistant organisms if devices are shared between patients without cleaning and disinfection.

Any shared non-critical patient equipment should be cleaned and disinfected after use according to the manufacturer instructions for use (IFU). Standard precautions should be applied while cleaning these items. If cleaning occurs within the patient room apply precautions based on risk assessment.

HWs involved with the cleaning and storage of shared patient care equipment should be trained in cleaning techniques and choice of chemical.

Ensure cleaning audits within functional risk area are maintained. Refer to the CEC Environmental Cleaning Standard Operating Procedure for further information and NSW Health Cleaning of the Healthcare Environment Policy Directive.

Information for HWs that perform cleaning tasks in healthcare facilities

When cleaning rooms cleaners should:

- Avoid touching face, mouth, nose, and eyes when cleaning
- Be trained in the use and choice of correct PPE (including doffing)
- Wear a disposable apron or gown, impermeable disposable gloves, surgical mask or P2/N95 respirator and eye protection or a face shield while cleaning (prescription glasses are not protective eyewear)
- Perform hand hygiene, either ABHR or using soap and water (when hands visibly soiled) before putting on and after taking off any item of PPE

- Always check with the nurse-in-charge before entering the room
- Use a TGA registered hospital-grade disinfectant
- Ensure adherence to the cleaning/disinfection product manufacturer's recommended contact time.

NB: Use a chlorine-based product such as sodium hypochlorite if unsure of the properties of the disinfectant provided by the facility.

Reprocessing reusable medical devices (RMDs)

Routine procedures for cleaning and disinfection for reprocessing RMDs such as surgical instruments, flexible endoscopes, ultrasound probes should be followed. No additional processing or procedures are required for RMDs used on ARI suspected or confirmed cases. Used RMDs should not be labelled as 'COVID-19 CASE'.

Reprocessing personal protective equipment

The CEC does not recommend or endorse any strategies for the reuse of single use PPE that differ from standard infection prevention and control practices. In times of a pandemic and global supply shortages, temporary emergency strategies can be considered. When a single use item is reprocessed for reuse, the healthcare facility responsible for carrying out reprocessing activities meets the legislative definition of a manufacturer as per the Australian Register of Therapeutic Goods ARTG Therapeutic Goods Act 1989. For more information refer to TGA - Guidance on Personal Protective Equipment for Health Professionals.

2.9 Handling of linen

Management of linen should be in accordance with standard precautions and routine procedure. Handle all used linen as per section 4.7.1 in the Infection Prevention and Control Practice Handbook.

2.10 Waste management

Waste storage and handling

- Waste storage, handling, labelling, containment, transport and disposal should be undertaken in accordance with routine procedures for relevant waste management.

Waste minimisation

- The implementation of appropriate waste minimisation strategies, that do not compromise work standards, environmental outcomes, patient or HW safety should be considered.

Non-clinical waste disposal

General waste and should be segregated and managed according to existing waste stream definitions.

Manage waste in accordance with routine procedures:

- All non-clinical waste should be segregated where possible and disposed of with the appropriate general waste stream

- Waste (used PPE) is considered general waste unless contaminated with large amounts of blood and/or body substances.

Clinical waste disposal

- Clinical waste should be disposed of with the appropriate clinical waste stream
- Sharps should be discarded into a sharps bin.

2.11 Curtains and bed screens

- Change bed screens and curtains (including disposable curtains/screens) that are soiled or contaminated
- Reusable curtains should be changed/replaced after confirmed ARI patient discharge/transfer
- Disposable curtain use should be checked with the manufacturers for the efficacy against specific microorganism; if unsure, dispose after transfer/discharge of ARI cases.

2.12 Food service utensils (COVID-19)

- Disposable crockery and cutlery are not required for suspected or confirmed COVID-19 patients/clients
- Kitchen utensils should be cleaned using routine cleaning cycles
- Food trolleys that have been used in any COVID-19 clinical areas should be cleaned and disinfected before reuse
- The meal ordering, delivery and collection of meal trays within a COVID-19 patient zone/ward should be led and managed by the ward/clinical area and local facility management
- Food delivery HW to wear PPE as per transmission-based precautions if taking trays into a patient room or area e.g., respirator and eye protection. Gown and gloves are not required if placing a food tray on the table or talking to the patient.

2.13 Handling of consumer paper health records

The risk of paper health record contamination and subsequent exposure to ARI or COVID-19 in the absence of a spill (or similar) is thought to be unlikely and considered extremely low risk.

Minimise handling of paper records/forms by patients where able, risk of handling can be mitigated by asking patients to perform hand hygiene before touching records/forms.

2.14 Handling of deceased bodies (COVID-19)

Routine processes apply to the management of deceased bodies, with the same precautions in place after death as were in place prior to death.

HWs are unlikely to contract COVID-19 when transmission-based (standard and droplet)

precautions are used when handling the body of a deceased person. However, the following precautionary strategies should be used to minimise risks and to prevent the spread of COVID-19 when handling or transferring deceased suspected or confirmed cases:

- HWs handling deceased bodies are to wear apron/gown, gloves, masks and face shield/goggles
- Wear appropriate PPE without contaminating environmental surfaces
- Avoid unnecessary manipulation of the body that may expel air or fluid from the lungs
- Inform family members they should not kiss or touch the deceased to minimise the risk of transmission
- If a family member does touch the body, they should wash their hands with soap and water immediately afterwards or use ABHR
- When transporting the deceased, the body must be placed and secured in a body bag or wrapping in a manner that prevents the leakage of body fluid or other substance; double bagging may be required to achieve this
- Label the outer bag 'COVID-19: Handle with care'.

More information is available on NSW Health COVID-19 – Handling of bodies by funeral directors and cemetery staff.

2.15 Transport

Inter-facility patient transport

All agencies involved in the transport of ARI suspected or confirmed patients are to implement their agency specific standard and droplet or airborne precautions including eye protection (based on risk assessment).

If tolerated, a surgical mask should be worn by ARI suspected or confirmed patients during the transfer.

The transferring health facility is to notify NSW Ambulance or other transport agency on the patient's condition to ensure all HWs involved in the patient transfer are aware of the PPE requirement prior to arrival. The transporting agency is to notify the area receiving the patient where possible.

The transport vehicle is to be cleaned and disinfected after the patient is transported. Follow local cleaning and disinfection procedures.

2.16 Outbreak management

An outbreak is a state characterised by an incidence of an infection greater than what is typically expected in a particular healthcare setting.

An outbreak is two or more confirmed cases in a patient/resident, HW or visitor of a health facility or residential care facility. If an outbreak is identified in the facility the following steps are to be undertaken:

- Risk assess patients using the Management of patient or visitor COVID-19 and other acute respiratory infection exposures in healthcare facilities risk matrix and staff using the COVID-19 and other ARI: Managing health worker exposures and return to work in a healthcare setting risk matrix
- Notify the local Public Health Unit (PHU) of an outbreak when 2 or more patients/HW from the same ward/unit test positive to COVID-19, influenza, or RSV, within a 72-hour period and there have been transmission links identified
- In conjunction with local IPAC, collect data on cases and determine the index case, potentially exposed patients and HWs. Prepare an initial outbreak brief for relevant stakeholders
- Restrict 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 visitor about potential risk acquisition)
- Notify other care facilities and hospitals where 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 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 the internal OMT, in consultation with the IPAC and PHU. 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; therefore, 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, and for residential care homes refer to Protocol to support joint management of a COVID-19 outbreak in a residential aged care facility in NSW.

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Appendix 2A: Deisolation criteria for COVID-19 within NSW healthcare facilities

This information covers advice for HW return to work after having COVID-19 infection and deisolation of patients in NSW Health facilities and residential care facilities including those in RACFs, multi-purpose services and disability group homes. It is for use by service managers and teams looking after patients with COVID-19. More specific information on residential aged care facilities refer to NSW Health Advice to residential aged care facilities.

Advice about deisolation is influenced by the viral kinetics and transmissibility of the predominant circulating strain/s and the likelihood of serious illness from infection. Therefore, this advice will need to be reviewed as evidence evolves. Deisolation includes both testing and non-testing strategies depending on symptoms and the time since test positivity.

Testing post-release from isolation

As an overriding principle, any testing should be done in conjunction with an assessment that includes a symptom check, vaccination status, contact status, whether they are immunocompromised and if they have had prior infection, when the person recovered from COVID-19.

Recovered cases do not need surveillance testing however, if they develop symptoms consistent with COVID-19 within 5 weeks of their previous positive test should have repeat testing for COVID-19 and/or relevant respiratory pathogens.

Individuals are not considered a contact if the exposed HW, patient or visitor has recovered from COVID-19 infection, is not immunocompromised and the exposure has occurred within 5 weeks of the previous test. However, immunocompromised individuals (HW or patients) may be requested to meet the criteria below:

- Negative RAT on at least two consecutive respiratory specimens collected at least 24 hours apart, after 7 days have passed since the first positive test; OR
- Negative RAT on at least two consecutive respiratory specimens collected at least 24 hours apart, after 14 days have passed since the since the first positive test.

For other ARIs refer to CEC Infection Prevention and Control Guidelines for Management and Assessment of Acute Respiratory Infection.

COVID-19 Rapid Antigen Tests (RAT)

The use of RATs for the diagnosis and clearance of people with COVID-19 continues to evolve. The performance of a RAT does depend on the adequacy of sampling and test procedure, therefore any HWs who are performing a RAT must follow the manufacturers' instructions. For more information on rapid antigen tests from NSW Health see here.

For more information on COVID-19 and other ARI - Managing health worker exposures and return to work in a healthcare setting see here.

Recommendation on ARI testing see here.

Patient Deisolation Guidance

- Patients who are not isolated or cohorted (with other COVID-19 patients) during their infectious period should be assessed and contact tracing undertaken
- Deisolation requires at least 24 hours of symptom resolution (of fever and ARI symptoms related to COVID-19 infection)
- Reinfection may occur. Symptomatic testing required and high-risk contact require assessment if more than 5 weeks after previous positive test.

Deisolation decisions			
	Patient returning to non-COVID ward, bed space or out of isolation if in RACF	**Discharge to the community**	**Outpatient appointment required after discharge**
Patient illness	**NOT IMMUNOCOMPROMISED**		
Mild-Moderate	After day 7 AND negative RAT or PCR OR Day 10 without testing	Recommend isolate at home until day 5 AND at least 24hrs after resolution of symptoms[1] Avoid high risk settings until day 7	Requires RAT or PCR if either ongoing symptoms OR visit is before day 10
Severe or Critical	After day 10 AND negative RAT or PCR OR Day 14 without testing	Recommend isolate at home at least until day 5 AND at least 24hrs after resolution of symptoms[1] Avoid high risk settings until day 14	Requires RAT or PCR if either ongoing symptoms OR visit is before day 14
	IMMUNOCOMPROMISED (See CDNA definitions)		
All categories of illness	**After day 14 AND** Two consecutive negative RATs 24 hours apart OR Negative PCR	Recommend isolate at home at least until day 7 since positive test and until at least 24hrs after resolution of symptoms[2] Avoid high risk settings until at least day 14	Requires RAT or PCR if visit is prior to day 21[2] See here for NSW SoNG appendix for more information

1. Routine RAT is not required for patients being discharged to complete isolation at home. RAT may be required if entering a high-risk facility
2. Severely immunocompromised patients may be culture positive for more than several weeks. RAT may also be required if entering a high-risk facility after 21 days. HWs to wear appropriate PPE when providing clinical care.

Immunocompromised

As per CDNA definitions here.

Note: The CDNA definitions currently include patients on dialysis. Patients who are on dialysis but who do not meet other criteria for immunocompromise may not require extended isolation or testing for deisolation.

Significantly immunocompromised persons may include, but are not limited to, those who:

- have had an organ transplant and are on immune suppressive therapy
- have had a haematopoietic stem cell transplant in the past 2 years
- are on immune suppressive therapy for graft versus host disease
- have had an active haematological malignancy
- human immunodeficiency virus infection with CD4 T-lymphocyte count below 200 cells/per mm^3 (age adjusted for children)
- are receiving dialysis (but additional risk assessment recommended)
- or other conditions specifically noted by the treating medical practitioner.

Disease Severity Categories (for deisolation of some patients)

As per the National COVID-19 Evidence Taskforce see here. These are replicated in this guidance.

Appendix 2B: Recommendations for COVID-19 surveillance testing in NSW healthcare facilities

As an overriding principle, any testing should be done in conjunction with an assessment that includes a symptom check, contact status, whether they are immunocompromised and whether the person has recently recovered (for COVID-19 in the last 5 weeks).

Note: In the absence of the recommended test or result being available, consultation, investigation or treatment should proceed using a risk assessment and implementing IPAC and hierarchy of controls including appropriate patient placement and PPE.

COVID-19 test information

Nucleic Acid Tests (NAT or PCR)

Sample types for NAT

- **Combined deep nasal and throat swabs**: These are the traditional sample types consisting of a single flocked swab used to collect a throat sample followed by bilateral deep nasal sample for the highest sensitivity. Combined throat and deep nasal swabs are indicated for COVID-19 diagnosis in symptomatic individuals. They may be poorly tolerated in the repeated sampling required for routine surveillance testing.
- **Rhinoswabs**: Self-collected nasal mucosa sampling using the Rhinoswab device may be better tolerated but with lower sensitivity than combined nasopharyngeal and throat swabs. Rhinoswabs may be used for routine surveillance testing in asymptomatic staff in an attempt to maintain compliance. They should not be used for diagnostic purposes in symptomatic individuals.
- **Saliva:** Saliva testing usually has lower sensitivity compared to other sample types, and so may require daily testing to overcome this. If local validation shows high sensitivity, then saliva testing could be done third daily. Saliva testing was used for surveillance in individuals with professional contact with patients with COVID-19 such as border and quarantine workers.

Test platforms used for NAT

- **Standard NAT**: Typical run times are between 2 and 6 hours, with expected turnaround times of 12 to 48 hours depending on prioritisation and transport. Sample pooling has been validated on NSW Health Pathology platforms and is used to conserve reagents and increase testing capacity when the number of positives is low. Pooled testing is NATA accredited. Pooling is not suitable when the number of positives exceeds approximately 3% because of the need for a second round of PCR testing to identify the positive in a pool (leading to delays in diagnosis and increased reagent utilisation). The reduced testing capacity when prevalence and testing volumes are high results in extended turnaround times.
- **Rapid NAT**: Rapid NAT platforms provide shorter run times (GeneXpert 45 minutes, Roche Liat 20 minutes) but are of relatively limited availability due to constraints on consumables and throughput.

Rapid Antigen Tests (RATs)

- Rapid antigen tests can be performed outside of a laboratory, with a turnaround time of 10-15 minutes. The sensitivity of rapid antigen tests is approximately 70-90% in symptomatic cohorts, but only 50% in asymptomatic cohorts. While the specificity is 99.5%, in populations with a low prevalence, many positive RATs will be false positives, and so reflex NAT testing is required to confirm positive RAT tests.

The Public Health Laboratory Network provides useful and regularly updated guidance on laboratory testing here.

The following tables provides recommendations for COVID-19 surveillance testing for patients and HWs aligned with the response and escalation framework alert levels. Also refer Winter Strategy: Testing and IPAC for Acute Respiratory Infection.

TABLE A: COVID-19 SURVEILLANCE TESTING FOR PATIENTS (AND CARERS/PARTICIPANTS IN CARE)

⚠ **Note: Symptomatic testing always applies** ⚠ **Test type:** May be PCR standard, PCR-Rapid or RAT

If a patient has not been able to source or complete a test and where the risk assessment deems testing is required, the responsibility for providing and completing falls to the LHD/SHN. In the absence of obtaining a result, patients' consultation, investigation, or treatment should proceed using a risk assessment and implementing IPAC and hierarchy of controls including appropriate patient placement and PPE.

	Alert Level see Risk Dashboard here			
	Foundational	**Yellow Low transmission**	**Amber Moderate to high transmission**	**Red High Transmission, outbreaks**
ED presentations – Adult	No routine testing	No routine testing	Test all symptomatic and targeted testing based on risk assessment	Recommend testing all ED presentations
ED presentations – children	No routine testing	No routine testing	Test all symptomatic and targeted testing based on risk assessment	Recommend testing all ED presentations
Admissions (adult and paediatric)	No routine testing	Consider targeted** testing admissions; no routine follow-up testing	Test all symptomatic and targeted testing based on risk assessment	Test all admissions and consider re-test days 3-5
Adult parents/carers staying with hospitalised children	No routine testing	No routine testing	Test parents/carer when child is tested	Test parents/carer when child is tested
Elective admissions (adult and paediatric)	No routine testing	No routine testing	Consider testing symptomatic admissions, prefer PCR* 24-48 hours prior to admission	Test **all** elective admissions, if using PCR*, 24-48 hours prior to admission
Emergency surgery	No routine testing	Consider targeted testing admissions PCR-rapid	Consider PCR-rapid test for all admissions	Test all Consider using PCR-rapid as primary test
Outpatient appointments - including home visits (community care)	No routine testing	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' and/or if mask needs to be removed for consultation**
Drop-in Clinics (SH Clinics, D&A)	No routine testing	No routine testing	Test all symptomatic and targeted testing based on risk assessment	All: RAT on presentation

Antenatal appointments and presentations	No routine testing	No routine testing	No routine testing	Telehealth where possible RAT prior if face-to-face for appointments longer than 15' and/or if mask needs to be removed for consultation**
Antenatal and postnatal wards: (only direct admissions, does not include those admitted through Birth Unit)	No routine testing	Consider targeted testing admissions	RAT or PCR-rapid on admission and Recommend retest days 3-5	Test all admissions with RAT or PCR-rapid and consider retesting days 3-5
Birthing Unit presentations	No routine testing	Consider targeted testing admissions	RAT or PCR-rapid on arrival	RAT or PCR-rapid test on arrival
Participants in care including support person	No routine testing	No routine testing	RAT or PCR- rapid on arrival. RAT 2–3x weekly while baby is in nursery	RAT or PCR-rapid on arrival. RAT 2-3x weekly while baby is in nursery
Elective caesarean section	No routine testing	No routine testing	PCR*, RAT or PCR-rapid on admission	PCR-rapid or RAT on day of admission PCR* testing the day prior to admission
Dialysis	No routine testing	Consider weekly testing	Test 2 – 3 x week at site depending on visit schedule	All: RAT on presentation or PCR-rapid
Chemotherapy/radiotherapy appointments	No routine testing	No routine testing Consider weekly testing for patients with frequent appointments	Test 2 – 3 x week at site or at community testing centre	All: RAT on presentation or PCR-rapid
Mental Health unit admissions	No routine testing	Consider RAT on admission	RAT or PCR-rapid on admission. Recommend retest days 3-5	Test all admissions and consider retest on day 3-5
Transfer back to RACF or Group home	Testing as per above guidelines 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 of acquisition or transmission that warrants 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 HW safety.

There is usually a seasonal increase of patients with respiratory pathogens, and it is expected to include patients with COVID-19. In the event of significantly increased community transmission, surveillance testing on admission and 3 - 5 days later may be recommended. This would initially be in high-risk settings and for high-risk patients. Any recommendations beyond this would be reviewed by the Risk Escalation Panel.

TABLE B: SURVEILLANCE TESTING FOR STAFF

	Alert Level see Risk Dashboard here			
	Foundational	**Yellow Low transmission**	**Amber Moderate to high transmission**	**Red High Transmission, outbreaks**
Staff who work in high-risk areas – ICU and ED	No routine testing	No routine testing	Consider testing 2-3 x/week PCR or RAT	Consider testing 2-3 x/week RAT or PCR
Staff in COVID wards/outbreaks	Consider testing 2-3 x/week RAT or PCR			
Staff working in transplant units, haematology, and oncology wards	No routine testing		Consider testing 2-3 x/week – RAT or PCR	

Appendix 2C: Visitors and participants in care visiting guidance during COVID-19 and ARI season

NSW healthcare facilities should continue to support patients to receive visits from partners, family, friends, participants in care (PIC), carers and/or volunteers whilst maintaining a safe environment to minimise the risk of transmission of any infectious disease.

Supporting visitor access and management of visiting practices can be achieved through clear guidance and communication to visitors; screening or testing as appropriate for higher risk environments, encouraging vaccination, education and supervision of visitors and PIC using the correct PPE and other IPAC strategies such as hand hygiene and physical distancing.

Implementation of local visitor policies supporting visits from partners, family, friends, PIC, carers and/or volunteers should be considerate of compassionate, support and care needs of the patient. The IPAC principles should be seen as how to engage, support and manage visitors in the health facility rather than how to restrict their attendance.

For more information on visitation guidance refer *Chapter 3: NSW IPAC Response and escalation framework*.