

Infection Control Expert Group

COVID-19 Infection Prevention and Control for Residential Care Facilities

Introduction

COVID-19 is an acute respiratory infection caused by SARS-CoV-2. Community transmission is increasing in Australia. Residential Care Facilities (RCF) are particularly vulnerable to outbreaks of respiratory infection and older residents are at risk of severe disease.

No COVID-19 vaccine is currently available. Avoiding exposure, through enhanced infection prevention and control (IPC) and social distancing measures is essential to reduce the risk of an outbreak occurring in a RCF and protect residents and staff if an outbreak occurs. Additional advice on the management of COVID-19 outbreaks in RCF has been published by the Communicable Diseases network of Australia.¹

The COVID-19 outbreak globally, and in Australia, is evolving rapidly and recommendations will be modified, in future, to deal with changing conditions.²

This document provides advice for IPC for COVID-19 specifically in RCF.

General principles of infection prevention and control in RCF

- Information about the elements of routine IPC should be provided to staff, residents (as far as possible) and visitors (as appropriate).
- All staff of RCFs should be trained in basic IPC practices, when they begin employment at the facility and at regular intervals e.g. annually.
- Training should be appropriate to their roles and include hand hygiene and the use of personal protective equipment (PPE).

Routine IPC measures relevant to any infectious disease risk include:

- **Hand hygiene** using soap and water or alcohol-based hand sanitiser e.g. after going to the toilet, coughing, blowing the nose and before eating. Additional hand hygiene is required when caring for a resident with a respiratory infection.
- **Appropriate use of PPE³**, especially when caring for a resident with a respiratory infection
- **Cough etiquette and respiratory hygiene** for staff, residents (if possible) and visitors
- **Environmental cleaning** (at least daily) of floors and surfaces; more frequent cleaning of frequently touched or soiled surfaces⁴
- **Isolation or cohorting** of residents with infection
- **Annual influenza vaccination** of residents and staff
- **Standard, contact and droplet precautions** when caring for a resident with a respiratory infection.

¹ See Communicable Diseases Network of Australia *Coronavirus national guideline for the prevention, control and public health management of COVID-19 outbreaks in residential care facilities in Australia* <https://www.health.gov.au/resources/publications/coronavirus-covid-19-guidelines-for-outbreaks-in-residential-care-facilities>

² For the latest information about COVID-19 see <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert> and the equivalent government websites in your State or Territory

³ Supplies of personal protective equipment may be limited during a significant outbreak especially if it is prolonged. State and Commonwealth authorities endeavour to secure and distribute adequate supplies. It should be used only as recommended.

⁴ See *Environmental cleaning and disinfection principles for health and residential care facilities* <https://www.health.gov.au/resources/publications/coronavirus-covid-19-environmental-cleaning-and-disinfection-principles-for-health-and-residential-care-facilities>

- **Limiting unnecessary movement** of residents and staff within and between facilities to help reduce transmission of infection.

Note: see relevant sections below for more detail and explanation of term

Spread of COVID-19

The virus that causes COVID-19 most commonly spreads through:

- Direct contact with droplets from an infected person's cough or sneeze, which can be avoided by cough etiquette and social distancing precautions (see below).
- Close contact⁵ with an infectious person
- Indirect contact by touching objects or surfaces (e.g. bed rails, doorknobs or tables) that have been contaminated with respiratory droplets from an infected person and then touching the face, especially mouth, nose or eyes.

Collection of respiratory specimens

Specimens for diagnosis of COVID-19 and other respiratory viral infection should be collected by a trained healthcare professional or pathology collector.⁵

Placement of residents within the RCF

With appropriate IPC precautions, many RCF residents with COVID-19 and their contacts can be safely cared for within the facility.

Placement of residents with suspected or confirmed COVID-19

Residents with **suspected or confirmed COVID-19** should be **isolated and cared for in single rooms**. When managing an isolated resident, the following applies:

- Residents should be isolated while they remain infectious (as determined by the public health unit)
 - During this period, if they are ambulatory and well enough, they may leave the room for exercise, with supervision, if contact with other residents can be avoided.
 - If residents must leave their room while infectious they should wear a surgical mask
- Staff and residents should be reminded of the importance of cough etiquette and respiratory hygiene.
- Staff and visitors in contact with ill residents should observe contact and droplet precautions (see below)
- Supplies of PPE should be available immediately outside the room.
- Special arrangements may be needed for care of residents with dementia who need to be isolated on a case-by-case basis.

If a single room is not available, the following principles can guide resident placement:

- Residents with the same virus⁶ who are assessed by the RCF as suitable roommates, can be housed together (cohorted) in the same room within a section of the facility.
- Ill residents sharing a room should be physically separated (more than 1.5 metre apart) with privacy curtain between them drawn to minimise the risk of droplet transmission.

⁵ Refer to *Interim advice on non-inpatient care of persons with suspected or confirmed Coronavirus Disease 2019 (COVID-19), including use of personal protective equipment (PPE)* <https://www.health.gov.au/resources/publications/interim-advice-on-non-inpatient-care-of-persons-with-suspected-or-confirmed-coronavirus-disease-2019-covid-19-including-use-of-personal-protective-equipment-ppe>

⁶ An acute respiratory illness may be due to COVID-19 or many other respiratory viruses. Laboratory tests are required to identify the cause. It is important that ill residents be separated until the causative pathogen for each ill resident is known. Only residents with the same respiratory pathogen may be cohorted together.

- Staff in direct contact with ill residents should observe contact and droplet precautions ([see below](#)).
- Staff caring for residents who have COVID-19 should be cohorted as far as possible to avoid potential exposure of additional staff and residents.

Placement of residents who are close contacts of a confirmed COVID-19 case

- Any resident who has been in close contact with someone who has confirmed COVID-19 (another resident, staff member or visitor), in the 24 hours before the onset of symptoms, but remains well, should be quarantined in a single room for 14 days.
- They should be monitored for symptoms of COVID-19 (at least daily).
- Individual supervised exercise or activity outside the room should be limited to areas where contact with other residents can be avoided.
- If a single room is not available, residents who meet the criteria for quarantine can share a room, with the same precautions as for room-sharing by confirmed cases ([see above](#)). However, if COVID-19 is confirmed in only one resident the other will be classified as a close contact and need to remain in quarantine.

Hospital transfer of residents with suspected or confirmed COVID-19

- Transfer to hospital should be considered for residents whose condition warrants it, in consultation with relatives and taking into account their previous health status and advanced care directive.
- If transfer is required, the ambulance service and hospital must be advised, in advance, that the resident is being transferred from a RCF where COVID-19 is suspected or confirmed.
- If urgent medical attention is required call 000 and advise the operator of the COVID-19 risk.

IPC measures when a resident has suspected or confirmed COVID-19

Standard Precautions are IPC practices used routinely in healthcare and in any RCF with a suspected or proven COVID-19 outbreak, where **they apply to all staff and all residents**.

Key elements are:

- **Hand hygiene** before and after each episode of resident contact and after contact with potentially contaminated surfaces or objects (even when hands appear clean).
 - gloves are not a substitute for hand hygiene. When gloves are worn hand hygiene should be performed before putting them on and after taking them off.
- **Use of PPE** if exposure to body fluids or heavily contaminated surfaces is anticipated (gown, surgical mask, protective eyewear, and gloves).
- **Cough etiquette and respiratory hygiene**
 - cough into a tissue (and discard tissue immediately) or into the bend of the elbow; perform hand hygiene.
- **Regular cleaning of the environment and equipment.**
- **Provision of alcohol-based hand sanitiser** at the entrance to the facility and other strategic locations.

Note: All RCF staff should be **trained in the correct use of PPE**, appropriate to their role. Incorrect removal of PPE is associated with a risk of personal contamination and spread of infection.

Transmission-based precautions are IPC practices used ***in addition*** to standard precautions to reduce transmission due to the specific route of transmission of a pathogen.

Respiratory infections, including COVID-19 are most commonly spread by contact and droplets. Less commonly airborne spread may occur e.g. during aerosol generating procedures.

A. Contact and droplet precautions

These precautions apply to:

- care of all residents with suspected or confirmed COVID-19
- all staff when in contact with ill residents
- health care providers during clinical consultation or collection of diagnostic specimens.

Key elements are:

- **Standard precautions** (as above)
- **Use of PPE** including gown, surgical mask, protective eyewear, and gloves **when in contact with an ill resident**
 - Protective eyewear can be in the form of safety glasses, eye shield, face shield, or goggles.
- **Isolation of ill residents** in a single room. If a single room is unavailable see: "Placement of residents with suspected or proven COVID-19" (above)
- **Enhanced environmental cleaning and disinfection** of the ill resident's environment⁷
- **Limit the number** of staff, healthcare workers, and visitors in contact with the ill resident
- **Nebulisers** have been associated with a risk of transmission of respiratory viruses and their use **should be avoided**. A spacer or puffer should be used instead.

Note: When caring for an asymptomatic resident in quarantine, contact and droplet precautions should be observed (PPE includes a gown, surgical mask, protective eyewear, and gloves), though eye protection is optional. If the resident later becomes symptomatic/is a confirmed case of COVID-19, staff contacts not wearing eye protection should not be quarantined as close contacts if all other precautions had been observed and they remain well, unless direct contact with respiratory secretions had occurred (i.e. a splash injury to the face).

B. Airborne precautions

These precautions are recommended, **in addition to all precautions outlined above**, when performing certain high-risk procedures on patients with COVID-19 and **their use is unlikely to be needed in a RCF**.⁸

Note: P2/N95 respirators should be used only when required for high-risk procedures and when caring for severely ill patients who are coughing excessively (as per RCF guidelines) and only by staff who have been trained in their use. They should be fit checked with each use to ensure an adequate face seal is achieved.

Exclusion from work RCF staff for COVID-19

- A RCF staff member who has **epidemiological risk factors for COVID-19⁹** or **symptoms of acute respiratory infection (ARI)** should stay away from work, seek medical advice and remain in quarantine until cleared.

Preparing for and responding to COVID-19 outbreaks in RCFs

The RCF should form an **Outbreak Management Team** which should develop an Outbreak Management Plan, key IPC elements of which would include:

- Develop easily accessible internal policies and procedures on routine, standard and transmission-based IPC precautions (as outlined above) and an outbreak management plan.

⁷ See *Environmental cleaning and disinfection principles for health and residential care facilities*
<https://www.health.gov.au/resources/publications/coronavirus-covid-19-environmental-cleaning-and-disinfection-principles-for-health-and-residential-care-facilities>

⁸ Refer to *Interim recommendations for the use of personal protective equipment (PPE) during hospital care of people with Coronavirus Disease 2019 (COVID-19)*. <https://www.health.gov.au/resources/publications/interim-recommendations-for-the-use-of-personal-protective-equipment-ppe-during-hospital-care-of-people-with-coronavirus-disease-2019-covid-19>

⁹ CDNA National Guidelines for Public Health Units *Coronavirus Diseases 2019 (COVID-19)*.
<https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm>

- Include or seek advice from an IPC professional in development of the outbreak management plan.
- Acquire adequate supplies of PPE, alcohol-based hand rub and cleaning materials.
- Ensure RCF staff know the symptoms and signs of COVID-19, and are trained in IPC procedures (as above), including use of PPE.
- If the numbers of cases, contacts and/or resident areas or zones affected increase significantly, the use of PPE may need to be extended beyond the indications recommended in this document.
- Develop a systematic strategy for case detection and management of residents or staff in the facility who develop symptoms of ARI such as fever or cough.
- Ensure daily hand-over time for ARI monitoring and outbreak detection for those assigned to this task
- Notify the local Public Health Unit if an ARI or COVID-19 case or outbreak is suspected.
- Ensure that residents have reviewed their Advanced Care Directives, in consultation with relevant family members or persons with medical power of attorney.

Resident movement during an outbreak

- Avoid transfer of residents to other facilities to minimise spread.
- Limit internal movement of residents, visitors and staff within the facility, as far as possible, to minimise spread.
- Implement social distancing measures in communal living/dining areas
 - Suspension of group social activities for residents may need to be considered

New admissions and readmissions during an outbreak

- Admissions of new residents into the facility should be restricted. Depending upon the extent of the outbreak and the physical layout of the building, restrictions may be applied to one floor, a wing or the entire facility.
- The reasons for recommended restrictions are:
 - the risk of infection for the newly admitted resident
 - the potential to prolong the outbreak by adding new, susceptible residents.
- Residents who have been transferred to hospital for any reason, including COVID-19, **should be readmitted to the facility** as soon as they are well enough to be discharged from hospital.
- New or returning residents should be screened for evidence of fever or ARI.

Visitor restriction and signage

While COVID-19 is occurring in the community, movement of visitors into and within the facility should be limited and social distancing measures introduced.¹⁰ The following **IPC precautions** should be implemented:

- Children under 16 should be excluded, as they may not be able to observe IPC precautions.
- If appropriate IPC precautions can be implemented to protect staff and other residents, visiting restrictions may be relaxed in the context of end-of-life palliative care.
- Encourage and facilitate phone or video calls between residents and their friends and family members to maintain social contact while visiting restrictions are in place.
- Ensure that all visitors, including essential external providers and visitors to residents:
 - Visit only one resident (or essential staff member).
 - Go directly to the resident's room or area designated by the RCF, and avoid communal areas.
 - Maintain separation of 1.5 metres from residents, if possible.
 - Use alcohol-based hand rub or wash their hands before entering and on leaving the RCF and the resident's room.
 - Practice cough etiquette/respiratory hygiene.

¹⁰ See Communicable Diseases Network of Australia *Coronavirus national guideline for the prevention, control and public health management of COVID-19 outbreaks in residential care facilities in Australia* <https://www.health.gov.au/resources/publications/coronavirus-covid-19-guidelines-for-outbreaks-in-residential-care-facilities>

- If visiting a resident who is in isolation or quarantine, observe contact and droplet precautions, as directed by RCF staff.
- Post signs or posters at the entrance and other strategic locations to remind visitors of the precautions including donning and doffing instructions at PPE station.
- Screen visitors on entry to the facility for epidemiological (recent travel, contact with a COVID-19 case) and clinical risk factors (acute respiratory infection).

Duration of isolation precautions for confirmed COVID-19 patients

- Cessation of isolation precautions for residents who have had COVID-19 should be determined on a **case-by-case basis** by the local Public Health Unit.¹¹
- Outbreak precautions for the facility should remain in place until at least 14 days after last case has been diagnosed or on advice from the Public Health Unit.

Environmental cleaning

- During an outbreak, enhanced cleaning of communal areas and residents' rooms is required. Frequently touched surfaces should be cleaned frequently and any resident care equipment cleaned and disinfected between each use or used exclusively for individual residents.¹²

Handling of Linen

- Soiled linen should always be treated as potentially infectious.
- Routine procedures are adequate for handling linen from residents in a RCF with a COVID-19, including those in quarantine or isolation .
- However, all linen should be laundered on site and not taken home for laundering by relatives, if that has been the practice previously.
- Grossly contaminated/soiled linen should be placed in a soluble plastic bag and then placed in the linen skip or the linen skip should be lined with a plastic bag for soiled linen.

Food service and utensils

- The principles of food hygiene should be observed in food preparation and service.
- Staff should perform hand hygiene before preparing or serving food to residents .
- Disposable crockery and cutlery are not required.
- Crockery and cutlery should be washed in a dishwasher, if available; otherwise wash with hot water and detergent, rinse in hot water and leave to dry.
- Cutlery and crockery from ill residents does not need to be washed separately as hot water and detergent will inactivate any residual contamination.
- Staff should wash or sanitise their hands after collecting or handling used crockery and cutlery, from residents, as trays and utensils can be contaminated with saliva or respiratory droplets.

Waste Management

- Waste can be managed in accordance with routine procedures.
- Clinical waste should be disposed of in clinical waste streams.

¹¹ See Communicable Diseases Network of Australia *Coronavirus national guideline for the prevention, control and public health management of COVID-19 outbreaks in residential care facilities in Australia* <https://www.health.gov.au/resources/publications/coronavirus-covid-19-guidelines-for-outbreaks-in-residential-care-facilities>

¹² See *Environmental cleaning and disinfection principles for health and residential care facilities* <https://www.health.gov.au/resources/publications/coronavirus-covid-19-environmental-cleaning-and-disinfection-principles-for-health-and-residential-care-facilities>

- Non-clinical waste is disposed of into general waste streams.

Management of Deceased Bodies

- Advice for handling of bodies affected by COVID-19 have been endorsed by CDNA and AHPPC.¹³
- Normal processes apply to the management of deceased bodies.
- The same precautions should be followed when handling the body as when caring for the resident during life i.e. contact and droplet precautions if the deceased has been suffering from COVID-19.
- Deceased bodies should be placed in a leak-proof bag; staff handling deceased bodies should wear gown, surgical mask, protective eyewear and gloves.

¹³ See *Advice for funeral directors* https://www.health.gov.au/sites/default/files/documents/2020/03/coronavirus-covid-19-advice-for-funeral-directors-advice-for-funeral-directors-covid-19_1.pdf

APPENDIX 1: CONTACT AND DROPLET PRECAUTIONS FOR SUSPECTED OR CONFIRMED COVID-19

Requirements	Contact and Droplet Precautions for COVID-19
Single room	Yes, or cohort with patient with same virus (in consultation with infection control professional, or infectious diseases physician), or maintain spatial separation of at least 1.5 metres It is recommended that single patient rooms be fitted with ensuite facilities. In the advent of no ensuite facilities, a toilet and bathroom should be dedicated for individual or cohort patient use.
Negative pressure*	No
Hand hygiene	Yes
Gloves	Yes, if there is direct contact with the patient or their environment.
Gown/apron	Yes, if there is direct contact with the patient or their environment.
Surgical Mask	Yes, Surgical mask. Remove mask after leaving patients room.
Protective eyewear	Yes, may be in the form of safety glasses, eye shield, face shield, or goggles
Special handling of equipment	Single use or if reusable, reprocess according to IFU before reuse. Avoid contaminating environmental surfaces and equipment with used gloves.
Transport of patients	Surgical mask if coughing/sneezing and other signs and symptoms of an infectious transmissible disease spread by airborne or droplet route. Surgical mask for patient when they leave the room. Patients on oxygen therapy must be changed to nasal prongs and have a surgical mask over the top of the nasal prongs for transport (if medical condition allows). Advise transport staff of level of precautions to be maintained. Notify area receiving the patient.
Alerts	When cohorting patients, they require minimum of 1.5 metres of patient separation. Visitors to patient room must wear a fluid resistant surgical mask and protective eyewear and perform hand hygiene. Remove PPE and perform hand hygiene on leaving the room. Patient Medical Records must not be taken into the room. Signage of room.
Room cleaning	Enhanced cleaning

APPENDIX 2: RECOGNISING AND MANAGING COVID-19 IN RESIDENTIAL CARE FACILITIES

QUICK REFERENCE GUIDE

Activity	DETAIL
COVID-19 suspected or Acute Respiratory Illness	<p>Symptoms present:</p> <ul style="list-style-type: none"> ○ a cough ○ shortness of breath ○ fever <p>Inform your senior nursing staff on duty</p>
Implement precautions as soon as resident shows Acute Respiratory Illness symptoms	<ul style="list-style-type: none"> ○ Increase infection prevention and control measures ○ Contact resident's GP ○ Isolate resident if possible ○ Collect swabs as directed by medical officer ○ Warn visitors of risk
Nominate an infection control coordinator	<p>Name:</p> <p>Ph: Pager:</p>
Notify	<ul style="list-style-type: none"> ○ Your State/Territory Public Health Unit ○ Resident's GP and relatives or representative, all staff, all visiting GPs, allied health workers, volunteers, or anyone in contact with your facility
Document	<ul style="list-style-type: none"> ○ Details of resident(s), staff with symptoms ○ Onset date of acute respiratory illness symptoms for each resident ○ Types of symptoms ○ Their contacts – to identify 'at risk' groups
Manage residents who are ill	<ul style="list-style-type: none"> ○ Isolation from residents who are well ○ Dedicated staff where possible ○ Dedicated equipment: hand basin, single-use towelling, en-suite bathroom, containers for safe disposal of gloves, tissues, masks, towelling ○ Staff use personal protective equipment ○ Transfer to hospital if condition warrants
Restrict contact	<ul style="list-style-type: none"> ○ Infected staff off work as determined by their medical officer ○ Limit staff movement into restricted area ○ Warn visitors and limit visit times ○ Suspend all group activities
Prevent spread	<ul style="list-style-type: none"> ○ Increase infection prevention and control measures ○ Personal hygiene – wear gloves, mask, ensure good hand hygiene ○ Environment – enhance cleaning measures ○ Medical – Transfer to hospital if required

HAND HYGIENE BEFORE AND AFTER CONTACT WITH RESIDENTS