

Pandemic Quarantine Facility Guide

Section 2: Infection Prevention and Control





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Contents

Introduction from Professor Dianne Stephens4
Section 2: Infection Prevention and Control5
Disease aetiology and transmission8
Infection Prevention Control Committee12
Zones in quarantine14
Hand hygiene23
Personal protective equipment (PPE)23
Viral screening45
Cleaning and disinfectant61
Waste management73
IPC Auditing74
References75
Appendices A77
Appendices B80
Appendices C85
Appendices D
Appendices E
Appendices F



Introduction from Professor Dianne Stephens

Welcome to this open access resource that we hope will assist in the planning and operation of quarantine facilities beyond the COVID-19 pandemic. The pandemic was a once in a lifetime health emergency event that occupied our lives for more than 2 years and required rapid development of new systems and ways of working across the health system. There was rapid innovation and adaptation of facilities to accommodate quarantine, isolation, and clinical management requirements for COVID-19.

Darwin in the Northern Territory is home to the National Critical Care and Trauma Response Centre, and they were tasked with coordinating AUSMAT teams to safely evacuate Australians trapped by the lock down in Wuhan, China in February 2020. The evacuated Australians needed to be quarantined for 2 weeks and once Christmas Island proved too remote for this activity, the Howard Springs workers accommodation village in Darwin was quickly adapted to meet this need. The village became the Howard Springs Quarantine Facility and later the Centre for National Resilience as the model of quarantine care was adapted to meet evolving needs of the local, national, and international arrivals and many important lessons were learned during this time.

This research project and toolbox development has effectively distilled the model of care and lessons learned during the two-year period of operation of the Howard Springs Quarantine Facility. It is a testament to hundreds of staff that worked tirelessly over the operational life of the facility to keep the residents, fellow staff, and the community safe. Too often in health we fail to capture and translate important lessons learned during health emergencies into guidance for the future – we hope this project reflects our lived experience at the Howard Springs Quarantine Facility in a way that is helpful the next time we need to stand up quarantine facilities in this country and beyond our borders.



Professor Dianne Stephens (OAM) NCCTRC Academic Partnerships Lead & Foundation Dean CDU Menzies School of Medicine



Section 2: Infection Prevention and Control

A quarantine service functions with an assumption that all residents on entry could carry a disease of concern (such as COVID-19). There is a requirement to enforce staff and resident self-responsibility with safe infection prevention and control (IPC) behaviours. An evidence-based set of IPC guidelines and equipment is required and this should be prepared and supported by dedicated and experienced IPC health professionals, with regular education and training. An IPC Committee is recommended to ensure the site is kept up to date with IPC advancements in response to evolving knowledge of disease aetiology and characteristics. These are additionally supported by disease surveillance, testing and contact management strategies and the Chief Health Officer's Directions (considered law) and legislation so they can be enforced with the aim of public safety.

IPC strategies are recommended to incorporate the quarantine facility chain of infection to demonstrate the risk of transmission from the facility to the local community.

Quarantine facility Chain of Infection





In Australia during the COVID-19 pandemic quarantine and isolation was guided by the evidence-based guide provided by the Communicable Diseases Network Australia Series of National Guidelines (CDNA SoNG).¹ This document is freely available online and has been updated regularly in accordance with advancements in disease understanding.

As the model of quarantine presented in this resource is based on a foundation of primary health care, the National Safety and Quality Health Service (NSQHS) Standards is another resource that presents the guidelines for the development of a high level of care and service provision within health services.²

This section of the Quarantine and Isolation Toolbox presents core IPC recommendations including public health considerations, epidemiological directions, disease characteristics and transmission. A complex overview of personal protective equipment (PPE), zones, viral screening and cleaning have been provided for adaption to different quarantine and isolation services.

Public

2.1 Public health considerations

Public health incorporates a multidisciplinary group with activities aimed to protect and promote health for the greater community. In public health emergencies, the right of the individual is often

second to the core focus of protecting the health of the wider population. This was exampled with quarantine and isolation which may not necessarily be a good experience for the individual but will effectively protect the community from disease transmission.

Introducing standard precautions for reducing the risk of disease transmission to individuals and the wider community is a core public health action. Those established for COVID-19 are transferable to reduce transmission risks for other communicable diseases and are recognized as:

- Hand hygiene
- Physical distancing
- Staying at home if unwell and seeking advice on viral screening.

During a pandemic response, emphasis on IPC measures to ensure a safe work environment is required, i.e. social distancing, hand hygiene, cough etiquette and cleaning and disinfectant of workplaces.

For communicable disease spread through droplet, airborne and contact means, cough etiquette is another vital standard precaution. Cough etiquette involves:

- Covering the mouth and nose with a tissue when coughing or sneezing and turn your head away from others.
- Immediately disposing of the tissue
- Performing hand hygiene with soap and water or use alcohol based hand sanitiser (ABHS).

Additional recommendations include laminating all notices which are required for long term use so they can be cleaned (surface cleaning requirements), and implementing rules such as no sharing of food to reduce the risk of general disease transmission.



6



2.2 Disease characteristics and epidemiology

Understanding how a disease is affecting a population informs IPC practices and ensures the correct education and training can occur to arm quarantine staff with the knowledge required to protect

themselves and the resident from disease. This includes understanding the disease aetiology, transmission, and implementation of disease specific IPC processes. The other important aspect of epidemiological studies is to identify the most vulnerable groups for whom disease transmission can potentially have dire consequences and implement measures to protect them.

This section of the resource presents those aspects of disease characteristics which need to be considered when preparing an IPC response to reduce risk of disease transmission. The areas covered include: disease aetiology and transmission, incubation periods, disease signs and symptoms, case definitions and contact definitions. There are a number of different aspects of a disease which need to be understood and these have been presented here with exemplars of COVID-19.

Understanding the various characteristics of the disease responsible for a pandemic is vital to inform IPC practices and develop legislation to guide safe behaviours with individuals and in the community.

During COVID-19 the most vulnerable to disease were identified as people who are likely to have higher mortality rates from infection and these residents should be flagged when entering a quarantine facility.¹ As presented in Section 4: Resident care, these residents are preferably located close to the resident zone entry point and both Pod and Medical Teams are alerted to ensure any health concerns are acted on quickly if detected during their daily health screen whilst in quarantine.

People who are more likely to acquire or develop an infection due to a weakened immune system are identified as:

- Aged 70 years or over.
- Aged 65 years or over and have a chronic medical condition.
- Are an Aboriginal and Torres Strait Islander person aged 50 years and over who has a chronic medical condition.
- People with weakened immune systems.

People who are more likely to develop severe COVID-19 compared to others includes factors of:

- Age- very young or very old.
- Presence of co-morbidities.
- Depressed immune system.
- Medication which may depress the immune system.

In addition to the above groups those who lack control over their personal environments and those who meet other criteria are also at risk and are identified as:

- People in aged care facilities.
- People in detention facilities.
- People in group residential settings.
- Travellers who have recently been overseas or cruise ship passengers.
- Those who have been in close contact with someone who has been diagnosed with COVID -19 (including in the 48 hours before their symptoms appeared).¹





2.2.1 Disease aetiology and transmission

The communicable disease underpinning this resource is based on COVID-19, a virus as opposed to a bacteria. Viruses are infectious particles that reproduce by 'commandeering' a host cell and using its machinery to make more viruses. Because viruses can't reproduce by themselves, they are not

considered to be 'living'. COVID viruses are small and this means they are likely to be airborne- they are so small they can attach to dust particles in the air and these particles are more likely to be encountered in closed in, poorly ventilated areas.^{1,3}



Size comparison of viral, bacteria, blood and dust particles

Consider this information in relation to a quarantine facility. Where possible activities considered risky are recommended to be carried out in open air- this is where the viral particles are "diluted" in the environment and literally disappear. High-risk activities such as viral screening is done on balconies, health checks are completed in the open environment and all arrivals are processed in large open spaces. Research demonstrated that in small and closed in rooms there is nowhere for the viral particles to go and this increases the risk of being exposed to them.



Disease Transmission

The mode of transmission presented here is based on COVID-19 presented as respiratory droplets, smaller particles (aerosols), direct physical contact with an infected individual and indirectly through contaminated objects and surfaces. Disease particles enter a person's system via their portals of entry identified as skin, gastrointestinal tract and respiratory tract.

Droplet transmission occurs with direct transfer of infected mucous (from an infected person) into the mouth, nose or eyes. This can occur through kissing or being in close contact with someone when they are talking, coughing or sneezing.

When an infected host sneezes or coughs, virus particles in mucous droplets are expelled and these droplets can travel at 75km/hr for up to 6 metres.¹ They are inhaled into the respiratory tract or absorbed through mucous membranes of the eye, mouth or nose.

Airborne transmission involves the direct inhalation of droplets or airborne particles into the respiratory system. For example, COVID-19 is expelled from the host's respiratory tract in a fine mist and it can stay suspended in the air for some time before falling to the ground.

This can happen when

- a person is coughing and sneezing with a high viral load OR
- a person sings or laughs expelling larger amounts of air OR
- when aerosol generating procedures (AGPs) are performed (which in quarantine may include cardiopulmonary resuscitation, non-invasive ventilation, use of high flow nasal oxygen and manual ventilation).⁴

The virus can transmit to a new host via airborne particles which are inhaled into the respiratory tract and/or absorbed through mucous membranes of the eye, mouth or nose.

Contact transmission is the indirect transfer of the virus from contaminated surfaces into the mouth, nose or eyes. This is more likely in high-risk areas such as those with a high number of people and a high level of surface contact occurring as seen in shared office spaces and shared equipment.

Droplets and viral particles drift down, landing on and contaminating surrounding surfaces. The virus can transmit to a new host via contact when it is transferred by touch (contact) from contaminated surfaces directly to the mucous membranes of the eye, mouth or nose where it is absorbed into the body.

2.2.2 Disease incubation periods

Understanding the disease incubation period is vital to inform quarantine and isolation requirements, this reduces the risk of releasing someone from quarantine who is still infected into the community. The incubation period for COVID-19 for example was 1 to 14 days, with most people becoming symptomatic 3 to 6 days after coming into contact with the virus.^{1,3}

It was found people with infection were able to transmit the virus from 1 to 3 days before the onset of symptoms. For the purposes of routine contact tracing with COVID-19, people are considered infectious from 48 hours before symptom onset. In high risk settings, this was extended to 72 hours before symptom onset guides. With COVID-19, many people remained asymptomatic throughout their infection, which means symptoms cannot be used to guide contact tracing in all cases.



9

2.2.3 Disease signs and symptoms

Understanding the disease signs and symptoms ensures staff are able to perform accurate health screens of residents (and themselves) and address any concerns early to prevent possible transmission of disease to others.

COVID-19 as an example presented many typical cold/flu like symptoms with up to 80% of unvaccinated experiencing a mild illness. As the virus evolved, different signs and symptoms became more or less significant. COVID-19 symptoms were identified as: fever (temperature of 37.5°C or higher), cough, chills or night sweats, sore throat, tiredness (fatigue), difficulty breathing, headache, muscle pain, loss of sense of smell and/or taste, nausea and vomiting, joint pain, loss of appetite, runny nose and acute blocked nose.¹

Older people and people who are immunosuppressed are at higher risk of severe symptoms and death. Up to 80% of symptomatic people who are infected with COVID-19 will experience symptoms beyond two weeks following onset of infection. ^{1,2,4}

All viruses change over time. Mutations over time may provide either a biological advantage or disadvantage to virus propagation. During the pandemic, some mutations have been designated 'variants of concern' due to their increased transmissibility and/or higher mortality. With COVID-19, the delta variant predominated in 2021 with increased mortality. The Communicable Diseases Genomics Network is actively monitoring variants in Australia.⁵

2.2.4 Disease case definitions

A disease case definition is a set of standard criteria used to assess whether an individual has a disease or not, it assists with measuring diseases occurring within a population.⁶ For COVID-19 there were two generic case definitions – confirmed cases and probable cases.

A Confirmed Case requires laboratory definitive evidence of current infection.⁶

A **Probable Case** includes individuals who have laboratory-suggestive evidence in the form of a rapid antigen test (RAT).⁶

For the purpose of quarantine the definition of a Close Contact is detailed in CHO Direction and defined that the person;

- resides in the same premises as an infected person; or
- is in close contact with an infected person for 4 hours or more while indoors with the infected person who is infectious; or
- someone who shares a closed space with a confirmed case for a prolonged period (i.e.: more than 2 hours) in the period extending from 48 hours before the onset of symptoms for the confirmed case; or
- is notified by the Chief Health Officer, their delegate, or an authorised officer that the person is a close contact of an infected person.

The aim of identifying contacts of people with COVID-19 is to interrupt transmission of the virus by quarantining. Of note, "In close contact", for the purposes of interpretation does not include where the quarantine facility's infection control measures of physical distancing, hand hygiene and mask wearing have been maintained. This means staff who enter zones wearing PPE and following IPC requirements are not considered close contacts even though they may have been in close proximity to positive cases.





A 'confirmed case' is detailed in CHO Direction that the person has;

- Returned a positive result to an approved COVID-19 testing procedure; or
- has been notified by an authorised officer or health practitioner that the person is infected with COVID-19

The aim of identifying contacts of people with COVID-19 is to interrupt transmission of the virus by quarantining.

In cases where there are emerging variants of concern, some jurisdictions may implement a more conservative approach to contact management. However, as the pandemic emerges, the close contact definition will continue to evolve to accommodate for the social consequences of quarantining a significant proportion of the workforce.





2.3 Infection Prevention Control Committee

Effective IPC in quarantine and isolation requires the support and participation of facility health staff. The IPC committee consists of people who work together to promote a shared culture of safety and

high quality care across the site. The committee should have representatives from both the medical and non-medical staff and be prepared to coordinate the site's IPC actions.

The key purpose of the committee is described as aiming to:

Support all areas to fulfil their IPC responsibilities for ensuring the provision of high quality and safe resident care by oversight and responsibility of key objectives relating to the Australian Commission on Safety and Quality in Healthcare as they pertain to the quarantine facility, the Centre Disease Network Australian National Guidelines for Public Health Units and COVID-19 specific directions and guidelines.^{1,2}

To be responsible for oversight of educational strategies to actively promote principles of infection prevention and control and to ensure that effective work practices are maintained to prevent the spread of infectious diseases.

The IPC committee should be one of the first committees established to support the quarantine facility in the achievement of identified roles and function specific to IPC.

The committee reports primarily to the Executive Director of the facility and the site Quality and Safety Committee.

2.3.1 Role of the IPC Committee

The role of the committee includes but should not be limited to:

- Develop, implement and embed a culture of continuous capability in the provision of preventing and controlling infections.
- Based on the quarantine service and relevant data the committee should develop, ratify and monitor the implementation of a quality improvement plan aligned to the Australian Guidelines for the Prevention and Management of Infection in Healthcare and existing quarantine systems.⁷
- Develop and monitor a program of scheduled audits directly related to IPC.
- Analyse data, evaluate current trends and incidence of infections and undertake control measures as indicated.
- Coordinate relevant follow-up of infection prevention and control issues identified.
- Review IPC-related incident reports and adverse events, and plan to address causative system vulnerabilities.
- Review and develop standard operating procedures for the quarantine facility.
- Monitor the potential spread of infectious disease in the facility, as well as develop plans for local outbreaks.

The core responsibilities of the committee are recognised as:

- Identifying training requirements for preventing and controlling healthcare-associated infections,
- Monitoring the performance of systems for the prevention and control of healthcare-associated infections.
- Reporting on the outcomes or prevention and control of healthcare-associated infection and monitoring available data on healthcare-associated infections.

It is anticipated that members of an IPC committee possess a comprehensive understanding of the quarantine facility operations, particularly with its obligations and practices for IPC. Members are expected to drive the implementation of all priority projects and initiatives and act as champions (role models) proving assistance with IPC matters where necessary.



The committee will need to be prepared to manage urgent IPC matters and disseminate actions and plans as required. As with any committee expectations, there is the expectation that committee members will be responsible in dealing with confidential matters and information and to keep this confidential. Any conflicts of interest need to be declared.

Membership

The Chair of the committee is recommended to be the site's Director of Nursing with the responsibility to:

- Set meeting agendas and preside at meetings.
- Obtain secretariat support.
- Ensure compliance with record management processes, including monitoring members' attendance.
- Ensure compliance with governance reporting processes to the government body, including minutes reports, action plans, workplans.

Other committee members are recommended to represent the following areas: clinical services, IPC professionals, medical services, education and training, quality and assurance and other members as aligned with the facility staff structure.

2.3.2 Examples of IPC Committee agenda items

The IPC committee is focused on IPC matters and this involves a number of agenda items that would be considered mandatory to address.

Items for ICP Committee Agenda

- Personal protective equipment- effectiveness of equipment, alignment with national recommendations, PPE auditing outcomes and education and training of staff.
- Reports of PPE/IPC breaches in practice.
- Resident management- PPE compliance.
- Infectious disease (in addition to COVID-19 for example) which may be present on site such as skin infections or gastroenteritis.
- Viral screening processes and reports.
- Vaccination outcomes
- Hand hygiene practices.
- Clinical and other waste.
- Site cleaning practices.





2.4 Zones in quarantine and isolation

There are designated zones within quarantine facilities and these require clear signage and mapped perimeters to ensure overall site safety. Zones are universally recognised to identity contaminated, potentially contaminated and uncontaminated areas and are designated 'green', 'orange' or 'red'

based on communicable disease risk.

- Red zones are designated a contaminated area used for isolation, and the management of disease-positive cases (such as COVID-19 positive residents).
- Orange zones are designated as a potentially contaminated/infected areas used for routine quarantine, management of close contacts of disease-positive people and repatriation residents (noting these residents are considered international travellers and therefore pose a higher risk to the local community).
- Green zones are considered contamination free and this is the zone in which staff and offices are situated.

A complex overview of zones implemented in quarantine and isolation settings has been presented here. This includes a more detailed definition of zones and the staff/resident management occurring in the orange and red zones inclusive of moving residents between zones.

2.4.1 Definition of zones

Three zones should be implemented in the management of quarantined and/or isolated residents for suspected or confirmed positive disease cases: Green, Orange and Red zones. These are based on the risk of contamination.

- Green zone: Clean/uncontaminated
- Orange zone: Potentially contaminated
- Red zone: Presumed or confirmed contaminated.

Even though both quarantine and isolation refer to the process of separating people from others based on the risk of illness there is a difference between their definition in relation to pandemic management.

Quarantine: Is when individuals or cohorts who are asymptomatic are kept away from others due to the risk they may develop a disease. This risk can be based on being in close contact with an individual who is positive or coming from a location where disease risk is a concern.

Isolation: Is when people who have tested positive for disease or have significant signs and symptoms of disease (with testing pending) are separated from others.

The red zone is therefore used for isolation and the orange zone is used for quarantine. The one exception is for close contacts where the orange zone is also used for isolation.

In addition to using zones for the separation of residents, residents are also cohorted on arrival. The full overview of how to implement cohorts for residents can be found in Section 4: Resident Care.



2.4.2 General staff/resident zone considerations

Quarantine site teams include pod staff who are defined as the team of health staff who act as the key liaisons and support for residents in quarantine and isolation. This team will enter the zones to provide individual support and information to residents to assist them to resolve matters or seek support.

Entering the zones presents a risk of disease transmission and therefore work should be organised and clustered to minimise the number of times staff are required to enter the zones.

Additionally, establishing a routine with the time of zone entries allows residents to become familiar with the times staff will be accessible.

Entering the orange and red zones also requires the donning of PPE for each entry and clustering tasks will reduce the number of times staff must don PPE (saving resources and reducing waste). Other site activities such as site and room maintenance are delayed where possible until the zone is empty of residents and deemed a green zone, thus not requiring staff to wear PPE and reducing risk of transmission.

2.4.3 Mandatory requirements for residents of Red and Orange Zones

The Chief Health Officer Directions presents the rules and regulations on what residents in the red and orange zone must do and site policy and processes are aligned to these. For staff and residents this Direction is law and if a person does not follow the Direction, the Police have authority to issue an Infringement Notice with a financial penalty.

During COVID-19 the resident in quarantine was mandated to adhere to the following requirements which are transferrable to any highly transmissible communicable disease management:

- Stay in their allocated room, including on any veranda space allocated to the room, unless permitted by an authorised officer; and
- When not in their room, or on their veranda, must take all reasonable measures to stay at least 1.5 metres away from any other person in the quarantine facility, except for the person's spouse, de facto partner, child or parent; and
- Wear a face mask when outside their room unless an authorised officer permits the person to remove the face mask; and
- Comply with any directions given by the Health Team to avoid people congregating in a quarantine zone (noting the Health Team is also mandated to ensure the CHO Directions are followed); and
- Must not leave the quarantine zone in which the person's allocated room is located unless the person is escorted by a Health Team member, except in an emergency.

Residents in breach of the above requirements should be reported to the Pod Team Leader to facilitate subsequent management of infection control risk.



2.4.4 Green zone resident and staff management

GREEN ZONE

- > Clean uncontaminated area
- > All donning of PPE occurs in the green zone

The green zone is defined as any area not designated a red or orange zone and is a clean and uncontaminated area. It is a space where staff can move freely without PPE unless the Chief Health Officer's Directions issue rules to control local transmission. This may include the requirement to wear a mask indoors and outdoors when staff cannot maintain a distance of at least 1.5m from another person or a mandatory mask wearing in high-risk settings such as clinical areas, health care facilities, aged care and disability residential facilities, and correctional facilities.

Adherence to the hierarchy of infection control measures in the green zone is critical for safe operations. This means hand hygiene, physical distancing, and other hygiene behaviours must be observed by site staff at all times. The staff are required to avoid sharing of any object that may carry infection and sharing of food is not permitted.

Donning stations and all donning of PPE occurs in the green zone, these areas should be clearly signposted and in a space where the buddy system can be implemented.

It is recommended that a security officer is situated in the green zone at the entry to the orange zone to monitor all orange zone entries and exits. Security can record all resident and staff movements in and out of the orange zones through a staff swipe card system (where possible) or in written logs maintained at zone access points. This provides an important part of IPC site auditing for quality assurance purposes.

The facility entrance and security station, health centre, staff areas, core administration offices and site equipment, stores and maintenance are located in the green zones. Zones that are unoccupied by residents may also temporarily be designated as a green zone. This occurs if the zone is vacant and no disease positive residents were identified in the zone or more than 72 hours have passed since residents occupied the zone.

There may be circumstances where a green zone is temporarily identified as an orange zone (for example for a site resident evacuation or a large resident arrival). This requires clear communication so all site staff are aware of the change and include visible signposting of these areas when in use. Once the area is no longer deemed as an orange zone it should be environmentally cleaned and communication sent to advise the area has reverted back to a green zone.



2.4.5 Orange zone resident and staff management

ORANGE ZONE

- > Potentially contaminated area
- > Located between the red and green zones
- > All doffing occurs in the orange zone

The orange zone is considered a potentially contaminated area and therefore all staff entering an orange zone need to be wearing a level of PPE related to their role/task. PPE requirements in relation to roles and tasks are outlined in the PPE section of the IPC resource.



Staff in the orange zone

Each resident cohort in the orange zone will have a dedicated group of staff comprised of registered nurses (RN), administration officers (AO)/Assistants in Nursing (AIN) and operations staff organised in Pod Teams (a pod refers to the team of staff and aligns to their physical location within the facility). Utility-trained staff members (such as catering and cleaning staff) are able to enter the red and orange zones once they have completed IPC and PPE training.

All staff are required to maintain 1.5 distance between themselves and residents in all functions. Should a resident fail



to follow requests to remain at a distance, utility staff will exit the zone and seek the relevant Pod Team's assistance and health staff should address the matter with the resident at the time. All other agencies and contractors enter the orange zone based on tasks and must have the authorisation to be there and have received adequate IPC and PPE training to ensure they are safe whilst on site. Where possible, site maintenance is scheduled at times when there are no residents within a zone (which means it is deemed a green zone) to reduce transmission risk.

Visitors are not permitted in orange zones without prior written authorisation by the facility's Directors and only in exceptional circumstances. Approved visitors are escorted into the orange zone by site health staff and PPE/IPC observation is to occur. PPE for visitors follows IPC guidelines and is in accordance with risk of exposure. It is probable that visitors will require PPE training and mentoring during their visit which should be provided by the sites Education Team.

Residents in the orange zone

The resident arrival, management and departure process has been presented in Section 4 Resident Care of this web resource. During the COVID-19 pandemic, certain travellers were required to present a negative COVID-19 swab prior to being permitted to travel (such as with the repatriated residents). These residents and any who are not known to be disease positive are considered to be potentially contaminated and allocated to orange zones. If the resident tests positive or is identified as a close contact, they are subject to being directed to a different zone- either red zone for disease positive cases or the orange zone for a designated close contact cohort.

The person deemed a close contact will remain in isolation as determined by disease recommendations and will undergo regular viral screening. Instructions for the management of close contacts of a disease case include:

- Contacts of a confirmed or historical disease case are identified through contact tracing.
- Close contacts once confirmed are moved to a designated close contact zone, by quarantine personnel according to a strict infection prevention and control process.
- Close contacts are managed in a separate area to positive disease cases.
- The health of close contacts is actively monitored daily to identify residents who develop disease symptoms as well as undergo routine viral screening. If symptoms develop, the contact should undergo further viral screening.
- Contacts should be educated about their risk and the symptoms of the disease. They should be instructed to immediately report any symptoms that develop to the Health Team.

All residents entering the facility will have an initial health screening process on arrival which involves being asked, "Do you feel sick or unwell in any way?" and further questions to target the disease signs and symptoms.

Those who report disease symptoms are escorted to their room in the orange zone and a viral screen is performed by the Health Team as soon as practical. Any positive results mean the resident will be moved into a red zone. During the routine viral screening, any residents who return a positive result will also be moved out of the orange zone to minimise the risk of disease transmission to other residents. This is the same process used if residents are identified as close contacts.



2.4.6 Red zone resident and staff management

RED ZONE

> Contaminated area (with disease positive residents)

> PPE mandatory for entry into red zones

The red zone is where residents who are known to be disease positive are allocated for isolation. The amount of time required for isolation is directed by the CHO which will align with current disease management strategies. This time in isolation may also vary according to the resident disease signs and symptoms, for example if a resident is still symptomatic and unwell after reaching the end of the required isolation period they will be reviewed by the Medical Team and may require further isolation.

The red zone is recommended to be located adjacent/close to the site's medical clinic with easy ambulance access in the event of a resident's health deteriorating and requiring transfer to a hospital.

Red zone staffing comprises of registered nurses (RN), administration officers (AO)/Assistants in Nursing (AIN) and operations staff organised in P Health Teams who only work in the red zone. It is recommended that the most experienced quarantine health staff are assigned to the red zone.

RNs, AOs and AINs work under and experienced Nurse/Pod Team Leader supervision and management providing clinical care, support services, intake and discharge for all residents within the red zone.

Staff from red zone cohorts are separated from other staff as part of the site risk strategy, they will eat in different areas and are not permitted to interact with staff from other pods.

Red zone areas are secured by perimeter fencing and monitored by Security at static posts and roving patrols 24 hours a day, 7 days per week. This is especially important early in pandemics when there may be little known of disease characteristics and thus higher risk associated with community transmission if people were to abscond from the facility. Additional red zones may be created on demand with clear messaging of new zones provided in the sites leadership meeting which will then filter this to the pods and teams.

Security staff are required to monitor entry and exit of people from the red zone and all staff entering the red zone are strictly to enter in pairs and required to don full PPE/GMEG (gowns, gloves, eye protection and masks). Within the red zone, tasks that may be shared across teams in the orange zone are all handled by the Health Team who will do health check rounds daily (and a second daily health round to follow up any resident demonstrating health concerns), room lockout call outs during the day, click and collect deliveries and linen drops on day 7. The site Welfare Team will provide telephone service only and any Specialist Team members who need to enter the red zone are required to be escorted by a Red Team health staff.



Other site processes which differ in the red zone for risk management are:

- All catering staff to don full PPE for meal deliveries (GMEG as opposed to MEG). Catering staff should deliver meals in orange zone first then doff and don again to deliver in the red zone.
- Cleaning staff entries to the red zone are only to occur when absolutely necessary as assessed by Health Team Lead.
- Site maintenance teams and contractors enter the red zone only when absolutely necessary and under the Health Team supervision.
- Waste management personnel to wear full PPE for rubbish removal.
- Red zone laundry cleaning is done by residents only (if the facility provides access to a laundry for residents). Health Teams and Waste Management Team will keep an eye on state of the laundry

2.4.7 Site and room repairs and maintenance



Section 2 Figure 1: Map of Centre for National Resilience presenting zone allocations.

Site and room repairs and maintenance are to be reported to the facility manager. It is recommended any damage repair and maintenance issues are managed by shifting the resident to another room whenever possible and doing repairs when the room is empty, clean and able to be zoned green for the repair and maintenance period.

If a repair or maintenance is required in the red zone, namely that it cannot wait for the usual zone schedule, the essential worker (plumber/electrician etc) will be escorted into the red zone area by a registered nurse. The worker must be in GMEG with the registered nurse observing their PPE at all times noting that some jobs can be physical with a high risk of damage to PPE.

All tools are to be cleaned by disinfectant wipes or chlorinated solution as per IPC policy before exiting the zone.



2.4.8 Process of transferring residents between zones

Residents who require a transfer between zones (orange to orange close contact zone or orange to red zone).

For residents who are required to be moved between zones, it is vital this is communicated across the site to the relevant stakeholders (for example associated Health Team, police, catering etc) and ensure everyone is aware of the time the move will occur to minimise the risk of staff crossing paths with the residents being moved. Strategic planning is required to discuss any issues that may interfere with transferring a resident from one zone to another.

Unless there is a critical infection control or health risk, notification to the resident of the move will occur during the day. The transfer route is planned to minimise crossing through green zones with the goal to take the shortest and safest route to avoid contact between residents and other people on site. The plan should include the number of trips needed to transfer multiply residents and/or multiple teams may be required so that staff do not have to remain in PPE for extended periods. When transferring resident(s), staff must wear gown, gloves, mask and eye protection (GMEG - PPE). As per the infection control procedure, each staff member must have a buddy.

Site communication script for transferring resident across zones

The site health director is required to make a general broadcast on the internal CB radio: "General Broadcast. Code Move, movement of (say number of residents e.g. 40) from Zone XX to Close Contact XXX. The transfer will be via XXXXX Way, down XXX Ave to the ring road commencing at 5 pm. Please stand clear of the path. (say your title, e.g. Director of Health) Out". Close

Health Team Leaders should respond, "Message received (say the title e.g. Director of Health). Out"

Alternatively, an email or text can be sent to relevant site teams.

When moving residents across zones health staff on duty will:

- Inform residents of positive viral screening test or listing as a close contact and present the implications for their quarantine stay.
- Explain the reason for the move and the need for isolation and allay anxiety and answer the resident's questions.
- Gather information from the resident such as
 - Whom they travelled with (family/companions)
 - Health care requirements (if any)
 - Allied health requirements such as mobility, mental health needs and/or interpreter.
 - Establish if they have equipment that needs to be moved with them such as high chair, shower chair, cot mattresses, and prams.
- Explain the process of the move with respect to health checks and testing.
- Inform the resident of the time the move will occur and their responsibilities.
 - Inform the resident they must stay inside their room, until the transfer. Advise the resident it is
 important that their luggage and all of their belongings are ready to transport by the designated time,
 and trolleys (if required) will be available half an hour before the move.
 - Directly before moving, the resident is responsible to take all of their food or empty it in the bins outside the room.



- Family groups or travelling companions can be transferred together, and their luggage placed together.
 If they are not family or travelling companions, their luggage cannot be mixed. Consider that staff must doff and re-don, between individual or family group transfers, and clean the buggies between transports. Therefore time management of this process is important. Orange Zone staff are not to enter Close Contact or red zones. Prepare the Close Contact health staff to meet residents at entrance to the zone to show them to their rooms.
- Move the residents in small cohorts. The transferring team must have a line of sight of residents to
 observe residents' compliance with PPE and infection control measures. If walking, a single line is
 needed. Staff are to be positioned at the front and end of the line so staff can observe the resident's
 PPE and infection control compliance.
- Residents over the age of 5 must wear a mask during the transfer. Residents must maintain 1.5 meters distance between themselves and other residents/staff and avoid any contact with the belongings of others
- If using a buggy to transfer residents the residents must travel on the back of the buggy, facing away from staff. The orange zone clinical staff and non-clinical staff will transport the resident(s) and their luggage to the Close Contact doffing station at the prearranged time.
- The responsible pod staff need to record a summary of the relocation in the resident health records and resident management information technology system (RMITS).

Notifying stakeholders of a move into another zone ensures ongoing coordinated resident management. As soon as a move has occurred the pod's Team Leader must notify:

- Reception
- Catering
- Medical Administration
- Director of Nursing
- Director of Operations
- Tele wellbeing
- The relevant Health Teams
- If the resident was receiving special care from the Physiotherapist, Occupational Therapist, Mental health Nurse, Interpreter services or Social Worker, they should also be notified by email.

In the notification, the following information needs to be included.

- the resident(s) name,
- flight number (if applicable) or cohort
- their original room number,
- their new room number
- a simple explanation for the room move
- the location of their original room's key
- and any other relevant information.

NOTE: avoid including clinical information in this email as the email is being sent to some non-clinicians.





2.5 Hand hygiene

Hand hygiene needs to be a consistent IPC activity across the quarantine site and appropriate resources including instructional posters, alcohol-based hand rub (ABHR) and sinks with handwash need to be provided in logical places. Education and training on how and when to perform effective hand hygiene

needs to occur during staff orientation.

Recommendations for COVID-19 were for ABHR to contain a minimum of 70% alcohol to be effective. Posters representing hand hygiene methods are readily available online. The posters chosen should be laminated and placed throughout the quarantine facility at points where ABHR is positioned and above all sinks.

Hand hygiene training and guides is freely accessible through the World Health Organisation (WHO), the guidelines for hand hygiene in health care is the resource to action.⁸



2.6 Personal protective equipment (PPE)

The quarantine and isolation facility has the responsibility to provide appropriate and quality personal protective equipment (PPE) to their staff. During the COVID-19 pandemic there were many issues with lack of access to appropriate PPE with many clinical areas unable to sustain the level of PPE required during the COVID-19 pandemic.

It is necessary to adapt levels of PPE to the epidemiology in the community and the facility. For example, PPE at quarantine facilities with outdoor resident management (such as that at CNR) are required to include consideration for weather elements. Factors such as working in hot conditions in PPE present a risk for heat stress, and therefore time restrictions are required when wearing PPE. Other specific equipment such as N95 masks need to pass staff fit-testing whilst also being comfortable to wear.

Challenging Environmental Elements for CNR



Section 2: Figure 2: Centre for National Resilience, challenging environmental elements identified by staff when wearing personal protective equipment. This complex overview of personal protective equipment (PPE) in quarantine is focussed on staff requirements for safe management of residents in quarantine and isolation. Information on PPE specifically for residents can be found in Section 4: Resident Care. Education and training of PPE has been covered under Section 3: Health Workforce as part of the orientation of new staff. In this section PPE refresher sessions and competency information has been provided in the Appendices. Posters to demonstrate the donning and doffing process have been provided in the PPE sections for Infection Prevention and Control.

PPE refers to the equipment used to protect quarantine staff and residents from disease transmission. With the increased global use of PPE during COVID-19 maintaining adequate stock was problematic and procurement of equipment needs to be established early (with recommendations to use local industry where possible). In Australia, PPE was assessed against Standards Australia (AS) and the Australian Register of Therapeutic Goods (TGA). ^{9,10}

There is a minimum level of PPE required for safe interaction with residents in quarantine and this is referred to as MEG- mask, eye protection and gloves. When physical distancing of 1.5 meters cannot/will not be maintained with residents, an additional level is added as a minimum requirement and this referred to as GMEG- gown, mask, eye protection and gloves.

The hierarchy of PPE is based on the recommendations from the Australian and New Zealand College of Anaesthetists (ANZCA) (page 11).¹¹

Transmission-based precautions are used in an escalating and cumulative fashion in addition to standard precautions where the suspected or confirmed presence of infectious agents represents an increased risk of transmission

- *I.* Contact precautions comprise the use of gloves, a theatre scrub suit or protective gown and/or apron.
- *II.* Droplet precautions comprise a surgical mask (minimum level 2 barrier), eye shield or goggle protection, an impervious apron or long sleeve gown and gloves.
- III. Airborne precautions for the primary airway proceduralist and team include N95/P2 respirator, eye shield/goggle protection, long-sleeved fluid impervious gowns, gloves +/- double gloves for intubation. The use of powered air purifying respirators (PAPRs) and elastomeric respirators may also be considered but it is acknowledged that their use requires specific training in donning, doffing and cleaning, and that supply may be limited. It is imperative that disposable headwear be worn in operating theatres and if required by local infection control policy and discarded safely after any case. Local guidelines on treatment of footwear should be followed, as these vary considerably.



2.6.1 Underpinning knowledge and understanding of PPE for the quarantine environment

The quarantine facility has the responsibility to ensure staff are aware of the policies and standards of practice in place relating to the sites infection prevention and control including standard precautions and PPE. The highest rates of healthcare worker (HCW) acquired infections occur when changing PPE, or where PPE is worn inappropriately or poorly applied.

Key points for staff to acknowledge are:

- A 'buddy' system is considered mandatory for staff wearing PPE and entering resident zones.
- Wearing PPE, particularly in stressful situations, can lead to emotional and physical exhaustion. Staff members should be on alert for others around them who are overwhelmed, and provide support and assistance as required.
- All donning of PPE should occur in green zones.
- All doffing of PPE should occur in orange zones.
- Minimise equipment entering a red or orange zone recognising these will be considered contaminated and will need to be cleaned or discarded on exiting the zone.
- No more than 2 hours should elapse between PPE changes, to allow for adequate rest and rehydration. More frequent changes may be required.
- Remember hand hygiene when doffing each PPE item.

2.6.2 Staff uniforms

It is recommended quarantine facilities invest in scrubs for their staff and require staff to change into their scrubs on arrival to work and change again prior to leaving the facility. Scrubs can then be laundered separately to other laundry (through contract arrangements if not able to be done on site).

Closed footwear is to be worn at all times and shoes worn into red and orange zones are to be left onsite. For staff who do not change their footwear onsite but enter the resident zones, it is a requirement they clean their shoes with disinfectant wipes before they leave the zone.





2.6.3 Types of PPE

2.6.3.1 Masks

Masks are designed to cover the mouth and the nose and range from cloth, disposable surgical masks to respirators. Surgical masks are graded from 1 to 3 in relation to the level of protection they offer the wearer and vary in their ability to act as a barrier to the transmission of droplets, fluid and aerosols. The higher the level the more protection the mask offers. Surgical masks are recommended to be provided to residents for use during their quarantine time.

2.3.6.2 Mask fit testing

Mask fit testing provides an additional layer of risk mitigation by ensuring quarantine workers entering orange and red zones in quarantine, wear well-fitting masks to reduce the risk of transmission. Routine mask suitability and fit checking (which should be completed prior to equipment procurement) involves ensuring the mask is comfortable, not itchy and has an acceptable smell. The staff should be able to perform a routine fit test by checking for leaks on inhalation and exhalation or on movement.

All N95/P2 masks should be formally assessed for their fit, and this can be completed with respirator fit testing. Fit testing, as defined in the Australian/New Zealand Standard 1715: 2009, is a validated method for matching P2/N95 respirators with an individual's facial shape.¹²

Fit testing should be performed by an appropriately trained person. Every staff member who enters an orange and/or red zone, including workers and visitors, are required to be fit tested. A range of styles and sizes of P2/N95 respirators may need to be fit-tested to find one that achieves a protective seal.



Healthcare workers who wear P2/N95 respirators should complete fit testing before first use and perform a fit check properly each time they are used. Fit checking ensures the respirator fits the user's face snugly (i.e. creates a seal) to minimise the number of particles that can bypass the filter through gaps between the user's skin and the respirator seal, which can be checked by gently inhaling. If the mask is not drawn in towards the face, or air leaks around the face seal, readjust the mask and repeat the process or check for defects in the mask.

• If a suitable P2/N95 respirator cannot be found an alternative should be considered.

An airtight protective seal is difficult to achieve in the presence of facial hair that underlies the edge of the P2/N95 respirator.

- The face must be smooth and/or clean-shaven to achieve a good airtight seal.
- Facial hair should be removed or an alternative type of P2/N95 respirator be considered, refer to Appendices C which presents a Centres for Disease Control resources on facial hair and masks.¹³

Fit testing does not guarantee a respirator will not leak, particularly if a different type or size is used to one previously fit tested. A repeat fit test is required if a different P2/N95 respirator is utilised.

• This reinforces the need to fit check each time a respirator is used.¹⁴

Fit testing should be conducted annually, and after significant changes in weight or after facial surgery of a staff member. The IPC Team needs to maintain a record of all fit test results and make them available to staff members.

Fit testing devices

Fit testing devices are used to test the facial fit of negative pressure respirators. It utilises a nebuliser (particle generator) to produce a sodium chloride aerosol which is then sampled from inside the face piece of the respirator and the ambient atmosphere.

The particles are counted both inside the respirator and ambient air and a fit factor based on the ratio of these particle counts is recorded.

Each individual fit test involves several exercises including different head movements and talking, to simulate the effects of movement within the working environment. Fit factors for each exercise are combined to give an overall fit factor, which is used to determine whether the tested respirator gives an adequate fit for the individual.

The fit testing device is fitted with an internal N-95, which selects particles of size 0.04µm for the fit test. This is the particle size at which P2 particulate filters are most efficient. By doing this the filter efficiency is removed as a variable in the test and the variations in particle count will be due to facial fit rather than filter efficiency. Disposable Class P2 respirators must be tested with the N95 enabled and with the particle generator on.

Staff need to be aware prior to their first test they should not smoke, drink strong coffee or chew mentholated gum or lozenges as these can negatively affect the fit test. Additionally people are required to be clean shaven for a fit testing device to be considered effective.



2.3.6.3 Mask-wearing recommendations

- Masks can be worn for up to 4 hours unless soiled or damp.
- Do not touch the mask or face whilst wearing a mask. Treat the front of the mask as contaminated.
- Hand hygiene must be performed upon touching or discarding a used mask.
- Masks must be discarded after removal. They are never to be reapplied, stored or reused.
- Masks are not to be worn under the nose or left dangling around the neck or ear.
- Perform hand hygiene before putting on and after taking off a mask.
- Be aware of how a mask may affect communication and adapt voice volume and behaviour to accommodate this.

Putting on your mask

Colour faces outside Nose clip on top Place mask over nose and mouth, hook behind your ears.



Fit nose clips Pull under chin





Section 2: Table 1: Description, purpose, TGA requirements and uses of different mask types.

Mask type	Description	Purpose	Requirements	Use examples
Surgical Mask Level 1 barrier	urgical Mask evel 1 arrierDisposable masks which are graded from 1-3 level that should fit snuggly over the mouth and nose.Urgical 	General patient care and medical procedures where the wearer is not at risk of blood or body fluid splash. Protect staff and/ or the patient from droplet exposure to microorganisms	 TGA certification AS4381: 2015 Single-use face masks for use in health care 	Droplet transmission based precautions for COVID-19
Surgical Mask Level 2 barrier		Medical procedures where minimal blood or other fluid droplet exposure is likely to occur	 TGA certification AS4381: 2015 Single-use face masks for use in health care 	Changing dressings on small or healing wounds.
Surgical Mask Level 3 barrier		Surgical procedures, major trauma first aid or in any area where the health care worker is at risk of blood or body fluid splash	 TGA certification AS4381: 2015 Single-use face masks for use in health care 	Operating Theatres Emergency Department major trauma first aid areas



N95/P2	The respirator mask covers the nose and mouth with a tight seal and offer protection against airborne infectious agents.	Prevention of aerosol transmission during an Aerosol Generating Procedure (AGP)	•	TGA certification AS1716: 2012 Respiratory protective devices	Aerosol Generating Procedure without risk of blood or body fluid splash
N95/P2 with Level 3 barrier	They are graded as either surgical or non- surgical with surgical respirators being fluid resistant and non- surgical respirators are not fluid resistant. P2 and N95 are both respirator masks.	Prevention of aerosol transmission during Aerosol Generating Procedure during surgical procedures, major trauma first aid or in any area where the health care worker is at risk of blood or body fluid splash	•	TGA certification AS1716: 2012 Respiratory protective devices AND AS4381: 2015 Single-use face masks for use in health care	Aerosol Generating Procedure WITH risk of blood or body fluid splash
Cloth Mask	These masks also referred to as utility masks can be washed and are reusable. They are made of fabric with recommendations for three layers of fabric required with a water- resistant outer layer for the mask to be effective. These are for use in community settings and are not deemed appropriate for quarantine or isolation PPE requirements.	General protection from droplet exposure to microorganisms where the wearer is not at risk of blood or body fluid splash.			Non-clinical / non- public facing HCW roles. Patient/visitor protection



2.6.3.2 Body protection- Gowns and shoe coverings



These coverings are used to protect the body and clothing, and single-use gowns are recommended for quarantine and isolation PPE requirements. It is advised gowns are fluid-resistant, have long sleeves (to the wrist), and cover the neck to the knees. Depending on the type of role and activities to be performed it may be necessary for gowns that fully cover the back and do not separate when the person is sitting (for example if they were required to travel in a vehicle in PPE, the gown should cover their back). Impervious blue gowns are ranked from level 1-4 in accordance with their level of protection against fluid. They are not ranked by the TGA.

A gown suitability check should be performed before procurement of equipment to check the sleeves cover the staff to the wrists and they reach from neck to knees. If required gowns need to provide adequate overlap at the back so the gown does not separate when the wearer sits and the gown reaches below the knee when sitting. In addition the gown should be comfortable to wear and easy to remove without risk of contamination to the wearer.

Shoe coverings are not recommended in quarantine and isolation environments, in accordance with the World Health Organisations recommendations, contamination of

COVID-19 from shoes was considered very low.¹⁵ It is instead recommended that staff have a set of shoes which are left at work/quarantine facility and used for their quarantine work only.

Gown Barrier	Risk of exposure	Gown Description
Level 1	Minimal fluid	Used for situations where risk of exposure to blood, body fluids/ substances or irrigation fluids is MINIMAL Provides a barrier to small volumes of fluid Single test of water impacting the surface of the gown material is conducted to assess barrier protection performance.
Level 2	Low fluid	 Used for situations where risk of exposure to blood, body substances or irrigation fluids is LOW Provides a barrier to larger amounts of fluid penetration through splatter and some fluid exposure through soaking Two tests are conducted to assess barrier protection performance: 1. Water impacting the surface of the gown material 2. Pressurising the material

Section 2: Table 2: Types of gowns and their barrier against fluids.



Level 3	Moderate fluid	Used for situations where the risk of exposure to blood, body substances or irrigation fluids is MODERATE Provides a barrier to larger amounts of fluid penetration through splatter and more fluid exposure through soaking than Level 2 Two tests are conducted to test barrier protection performance: 1. Water impacting the surface of the gown material 2. Pressurising the material
Level 4	Highest fluid and microbial barrier	Used for situations where the risk of exposure to blood, body substances or irrigation fluids is HIGH Provides a barrier to large volumes of fluid penetration and greater resistance to fluid soaking than Level 3 In addition to the other tests conducted under levels 1-3, barrier level performance is tested with simulated blood containing a virus – if no virus is found at the end of the test, the gown passes
Shoe coverings	Range from minimal to moderate protection against droplets	Provide a physical barrier between the shoe and the environment. Considered single-use and disposable.
Head covering	Range from minimal to moderate protection against droplets	Recommended for use by quarantine staff who wear a hijab or head covering. Provide a physical barrier to cover the hijab (Note the head covering is recommended to be doffed after removing the gown and gloves, then perform hand hygiene and then remove the goggles).



2.6.3.3 Gloves

These are used to protect the hands against body fluids and contamination. They are all single-use and disposable with three main types- sterile, non-sterile and utility. Gloves are made from different materials with the most common being latex, nitrile and vinyl. Due to latex allergies, it is recommended a variety of glove types are available in quarantine and isolation and they should be powder-free. Long cuff gloves are available and these reach further up the wrist. These are suitable for certain processes in quarantine where activities may increase the risk of a gap occurring between the gown and the glove (such as viral screening or manual activities).

Section 2: Table 4: Glove types, descriptions and purpose.						
Glove type	Description	Purpose				
Sterile gloves	8 CAMER CAMER Ler Providered	Used for sterile procedures. May be used in quarantine and isolation for viral screening. Available with long cuffs.				
Non-sterile gloves		For general use as PPE and the most suitable glove for quarantine.				
Utility gloves		Used for non-resident processes and can be re- usable, although they are not recommended for reuse in the quarantine setting unless they can be safely cleaned.				



2.6.3.4 Face shields and goggles

Face shields and eye goggles are designed to protect the wearer's eyes from exposure to droplets and splashes of body fluids. Glasses worn as corrective eyewear are not suitable for use as PPE and if required a face shield is required to be worn over glasses unless goggles which are specifically designed to fit over glasses can be sourced. It is also advised goggles are acquired which contain an anti-fog component.

Туре	Description	Reusable or disposable	Uses
Goggles	These are designed to protect the eyes from body fluids and splashes. They have clear lenses and side shields and need to fit snugly to the face, particularly from the corners of the eye across the brow). Available as uncorrected (non-prescription) or corrected (prescription) goggles	Can be disposable or cleaned for reuse	General use in quarantine and isolation as part of standard PPE
Face shields/ visors	A transparent face shield to protect the whole face. They can be worn over the top of other PPE and corrective eye glasses. They are available in various designs with foam or plastic headbands or arms like glasses. Face shields extending from chin to crown provide better face and eye protection from splashes and sprays; face shields that wrap around the sides may reduce splashes around the edge of the shield.		For use when performing viral screening or if corrective eyewear is required.

Section 2: Table 5: Face shield and goggles/eye protection description and uses

2.6.4 Guide for levels of PPE

The use of PPE is required for confirmed, suspected, quarantined or isolated cases of disease and the level of PPE required varies on level of contact between people or as advised by CHO Directions. All PPE recommendations should be aligned with National Guidelines.¹ During COVID-19 the general recommendation was for quarantine staff to wear a surgical mask, however in quarantine facilities where staff are often working with infected people at times when there is limited information regarding disease aetiology and characterises it is recommended the higher level of N95/P2 mask be used.

For staff safety all resident arrivals require staff to wear full PPE (GMEG) no matter what their task is. This point on the resident journey can be unpredictable and residents may be unwell requiring immediate intervention. All residents are considered potentially infected when they arrive at the quarantine facility.

Gloves, mask and eye protection can be retained for up to 2 hours whilst in the zone, but should be safely doffed if moist or contaminated (including touching surfaces that may be contaminated) or a breach (such as glove tear) occurs.



2.6.4.1 PPE guidance

Section 2: Table 6: Presentation of PPE requirements determined by contact level and user role.							
Contact level	For use by	Hand hygiene	Disposable gloves	Disposable gown	Surgical mask	P2 or N95 mask	Goggles or face shield
			S.	Ŧ		(\bigcirc)	
General public	All staff, and departing residents	\checkmark					
General public restrictions as directed by the Chief Health Officer	All staff, visitors and departing residents				√		
Droplet, airborne and contact precautions	All care/ exposure with residents; • provided more than 1.5m away from resident						
Droplet, airborne and contact precautions	All care/ exposure with residents; • provided within 1.5m of the resident • on resident arrivals						



2.6.4 Buddy system

A buddy system is mandatory within the facility and this requires two staff members to be present to ensure PPE is correctly donned and it is safely doffed. The routine for a buddy system is for one person (usually the nurse) to be in the contact/full PPE role and one person (administration) to be in non-contact PPE.

The buddy system forms part of staff safety measures and this covers the following factors:

- All staff entering zones to interact with residents are visibly checked to ensure their PPE is correctly and safely donned.
- If there are altercations with residents, staff are less vulnerable in pairs (noting residents do not routinely have criminal record checks, and some residents may have mental health or anger problems exacerbated by being in quarantine).
- Staff can keep each other safe by monitoring their tolerance to environmental risks such as heat stress whilst in PPE and have a backup for any arising health emergencies (both for staff or residents).
- Staff doffing PPE is correctly and safely completed ensuring there is no risk for contamination to be transferred to the individual, quarantine staff and community.

Section 2: Figure 3 Layout of the resident orange zone at CNR: blocks of resident rooms (viewed as A, B, C, D) and pathways for staff, security station and entry point with donning and doffing stations.




2.6.5 Donning and doffing

The procedure for donning and doffing PPE needs to be standardised across the facility and be consistent with the current health guidelines. This means all staff/teams must practice the same donning and doffing process in accordance with the level of contact precautions required.

All staff are required to pass a donning and doffing competency prior to entering a resident zone to demonstrate they understand the process and can safely perform this. A PPE competency should then be expected of all staff entering resident zone every 2 weeks to ensure they remain competent and confident with the process. Regular PPE refreshers are also recommended to maintain staff investment in this process. These sessions can be more informal and incorporate different approaches such as using paint or quizzes. A copy of the competency form has been provided in Appendices A and examples of PPE refresher session activities have been provided in Appendices B.



2.6.5.1 Donning PPE

Donning should be conducted in the green zone, a space that is considered always clean. Donning stations all need to be prepared exactly the same with PPE organised in the order it will be donned. They need to be clearly labelled as being in the green zone and have all required PPE and posters to ensure staff are supported to correctly don their PPE. The donning station should only contain the PPE required.

In quarantine facilities, the security station is recommended to be positioned at the donning station this has three main advantages:

- 1. Security can record all staff entering and exiting the resident zone ensuring staff safety and as an additional quality and safety auditing record.
- 2. Security are an additional person to ensure PPE is correctly and safely donned prior to entering the zones.
- Adds to resident safety by having a manned contact point at resident/zone entry points.

Hand hygiene with alcohol-based hand rub (ABHR) is important when donning as staff will be touching their face to apply their mask and eye protection. In addition, consideration needs to be given to any equipment being taken into the zone. This should be



cleanable with alcohol wipes/disinfectant or will need to be disposable. Paper for example should not leave the zone, in the case of paper notes, a photo image of these needs to be acquired at the doffing station and the paper then disposed of as contaminated waste. If phones are taken in these must remain in the hand (not put in pockets due to risk of contaminating uniforms) and need to be cleaned on exit. Placing phones in clear ziplock bags with disposal of the bag on exit is another approach.



2.6.5.2 Staff attire when wearing PPE

- Arms are bare below the elbows when entering the quarantine zone (enables good hand hygiene).
- All jewellery to be removed.
- Long hair is to be tied up and secured.
- Beards should be trimmed to improve the effectiveness of PPE (recognising beards impact the seal of a mask potentially allowing viral particle transmission, therefore making masks less effective).

Donning steps need to be simple and clear, the mnemonic of MEG and GMEG are helpful to remind staff of the required donning steps.

Section 2: Figure 4: Donning of personal protective equipment for non-contact (MEG) and full contact (GMEG) roles.





2.6.6 PPE- When in the zone

As soon as staff leave the donning station and enter the orange zone they are considered to be in a potentially contaminated area and must conduct all activities in the assumption that viral particles/ risk of contamination is throughout the zone. When in the orange or red zone with residents it is important staff remain in their buddy system and only the person in the contact role is ever within 1.5 meters of residents. Team members in the zone need to have master keys for resident rooms and have maps of the zone (If required).

Staff need to be self-aware of their behaviour in the zone:

- Don't touch their face, hair, mask or eye protection.
- Don't touch anyone else (helping with mask etc).
- Ensure all required equipment is carried in the hands or in a cleanable container for example, phones, pens and clipboards are carried in the hands (ensuring staff don't put their hands in their pockets).
- Any equipment which goes into the zone needs to be cleaned or disposed of on exit.
- Any PPE breaches need to be immediately assessed for their level of risk and appropriate actions taken to ensure staff safety (for example leaving the zone to replace torn gloves) with the breach reported.

2.6.7 Doffing PPE

Doffing is a critical part of quarantine safety and needs to be situated in the orange zone (away from the donning area). The buddy system is an important and supportive part of the doffing process ensuring staff are safe when doffing and eliminating risk of disease transmission to the individual, quarantine facility staff and wider community. The same doffing process must be followed by all staff with the doffing stations set up with required equipment (alcohol-based hand rub), waste disposal bins and posters to guide practice.

Once staff have completed doffing, and exited the orange zone they should notify the security staff situated at the donning station so their exit from the zone is recorded.

Doffing steps need to be simple and clear, the mnemonic of GEM and GGEM are helpful to remind staff of the required doffing steps.



Section 2: Figure 5: Doffing of personal protective equipment for non-contact (GEM) and full contact (GGEM) roles.





2.6.8 Video resource for donning and doffing of PPE.



https://www.youtube.com/watch?v=dXgN7DssBd8

2.6.9 Sanitising of reusable items

Any equipment taken into the zones must be cleaned on the exit. It is recommended there are buckets of disinfectant located at each doffing station for equipment that can be soaked to be cleaned such as goggles. Items that cannot be soaked need to be thoroughly cleaned with disinfectant wipes. If a number of items need to be cleaned the below process is recommended.

Section 2: Figure 6: Process of cleaning and sanitising items when leaving the orange or red zones.

Cleaning items when exiting the orange zone



2.6.9.1 Soaking of reusable items process

- Mix solution into the CLEAN bucket (check the ratio of bleach per water required. This is usually 20mls bleach in 5 litres water).
- Allow the reusable item to soak for 30 minutes.
- Once 30 minutes has passed, take the reusable item out of the solution with tongs or heavy duty gloves and lay out on a towel to air dry.
- Once reusable item is dry it can be reused.



2.6.10 IPC/PPE breach management

Quarantine services need a clear pathway and strategy to respond to IPC/PPE breaches and staff need to be aware of their responsibility when a breach occurs. Training in what constitutes a breach and required actions should occur as part of the staff orientation process. In quarantine, there are five core risk areas for breaches to occur.

- 1. Donning and doffing of PPE: this includes unsafe or incomplete donning & doffing, incorrect or missed hand hygiene, failure of the buddy system, poor waste disposal, inadequate or lack of cleaning of equipment
- 2. Personal protective equipment: failure or breakage of PPE or lack of PPE equipment
- 3. Environmental factors: weather- extreme heat/sweating and rain, site accidents or hazards
- 4. Staff behaviours: touching the face in PPE, using phones in PPE, lack of awareness of zones
- 5. Resident behaviours: touching staff, coughing or sneezing on staff, young children's unpredictable behaviours

Breaches of concern are those in which possible transmission of viral particles has occurred resulting in staff potentially being infected. These incidents require immediate intervention to reduce the risk of disease transmission, such as leaving the zone with their buddy, doffing and washing contaminated area (if appropriate), isolating the staff whilst the buddy report to the Pod Team Leader and Medical Team for review. In high-risk breaches the Medical Team should intervene with the IPC professionals and decisions made on whether the individual at risk requires isolation/ quarantine.

It is important to have a reporting system for breaches as this identifies where further education and training may be required, a review of processes should be undertaken or PPE equipment assessed for suitability and durability.

Recommendations if a IPC/PPE breach occurs

- If a breach occurs ensure staff remain calm.
- Move straight to the doffing space with a buddy and doff avoiding any further self-contamination.
- Doff PPE and with the buddy system to ensure staff are safe and no further breach or risk of contamination occurs.
- Isolate staff the member if deemed necessary and report to the Health Team Leader.
- <u>All</u> PPE breaches are to be recorded.
- If required seek medical advice from the Infection Control Nurse or onsite Medical Officer



2.6.11 PPE Auditing

An infection control audit is directed by the Infection Prevention and Control professional leader or their IPC delegate. An audit of IPC/PPE practice is recommended to be performed daily with teams who are interacting with residents. These reports then should be provided to the Director or Nursing and Director of Medical Services and reviewed by the IPC committee.

Auditing the PPE donning and doffing process is a valuable tool to inform the Education Team where further education and training is required. It provides an ad hoc education opportunity, informs the auditor of PPE suitability and adds to the overall safety of the staff and site. Specific times when additional audits should be performed in relation to PPE is on the arrival of residents to the quarantine site as this is considered one of the more riskier points of resident interaction.

An example of an auditing form has been provided on the next page.



Personal Protective Equipment Auditing Form										
Date	Activity (i.e.: resident arrival process, resident health screening team)									
Area										
Number of Audits	1	2	3	4	5	6	7	8	9	10
Healthcare worker type										
H=Nurse, D=Doctor, AO=Admin officer,										
C=Catering, Con=Contractors, P=Police,										
ADF= Australian Defence Force, O=Other										
Equipment & Waste										
PPE is available and easily accessible										
PPE available is correct										
A waste receptacle is available										
Signage is clearly displayed										
Total Compliance										
Donning PPE										
1. Performs hand hygiene										
2. Dons disposable surgical gown/apron										
3. Dons appropriate mask correctly +/- fit check										
4. Dons eye protection correctly										
5. Dons gloves										
6. Buddy check										
Total Donning Compliance										
Comments										



2.7 Viral screening

The potential risks associated with quarantine workers and residents contracting disease in the quarantine facility and subsequent spread to community settings are mitigated by a multifaceted prevention and management approaches. Prevention is supported by a hierarchy of controls

approach to mitigating the risk of transmission. The controls include mandatory site induction processes, personal protective equipment (PPE) training and refresher training and infection prevention controls, auditing across all work groups and locations on the site and enforcing of directions to residents in quarantine. During a pandemic with a communicable disease, viral screening of staff and residents becomes part of the routine risk management strategy.

The following guides present the delivery of high-quality, safe and appropriate screening and surveillance processes based on COVID-19 management in a quarantine facility. The aim is to prevent transmission and further spread through the early identification of disease-positive individuals. Viral screening is presented for both staff and residents.

Viral screening using approved tests is a tool to support the pandemic response but does not replace public health and hygiene measures that include site induction, PPE training for staff, standard precautions, hand hygiene and distancing requirements or vaccination and ongoing education of all staff and residents. This includes not coming to work if unwell and isolating if required to do so.

During the COVID-19 pandemic, legislation required all staff working in a quarantine facility to be subject to daily COVID-19 swabbing (self-swabbing). This risk management strategy prevented infected staff from infecting others which could lead to an entire Health Team becoming infected leaving the facility short-staffed.

Regular viral screening for staff and residents means infected individuals can be detected early, limiting the risk of infecting others and linking them early with treatments if required.

The following overview presents the process for staff and residents' viral screening modelled on the processes used for COVID-19.

2.7.1 Viral screening used in COVID-19

Laboratory testing for SARS-CoV-2 was important for individual resident and staff diagnosis, and to guide public health management strategies. The main sample type submitted for testing early in the COVID-19 pandemic was respiratory tract samples (deep nose and throat swab). This is analysed by nucleic acid testing using polymerase chain reaction (PCR) to detect SARS-CoV-2. It is important to collect a high-quality specimen as the quality of the sample influences the sensitivity of PCR to detect SARS-CoV-2.^{16,17}

With increasing case numbers and demand for pathology services stretched, rapid antigen tests (RATs) became more widely used once they were approved for diagnosis and monitoring of close contacts. Antigen tests are immunoassays that detect the presence of a specific viral antigen, usually the Nucleocapsid protein. RATs must be approved by the Therapeutic Goods Administration, whether or not self-administered. While RATs can provide a result within 15–30 minutes, they are generally less sensitive compared to PCRs and they have low throughput compared to Nucleic Acid Amplification (NAA) tests.^{16,17}

Serology may be useful for the diagnosis of historical COVID-19 cases. With COVID-19 moving from a pandemic to an endemic disease, and high levels of COVID-19 vaccination rates in Australia, serology testing became less useful for acute diagnosis.^{16,17}



Section 2: Table 8: Determining the result of viral screening		
Using a PCR	Using a RAT	
The results of viral screening (PCR) should be available on the site's pathology result platform and relayed by the overarching communicable disease team and pathology leads.	Negative: The presence of only the control line (C) and no test line (T) within the result window indicates a negative result. Positive: The presence of the test line (T) and the	
Relevant quarantine health staff should have access to this site.	control line (C) within the result window, regardless of which line appears first, indicating a positive result.	
Should the CT value be required, pathology needs to be called by a senior staff member or a doctor.	The presence of any test line (T), no matter how faint, indicates a positive result.	
	Invalid result: If the control line (C) is not visible within the result window after performing the test, the result is considered invalid. When an invalid result is observed, the test will be repeated with a new test kit.	

2.7.2 Staff viral screening

Monitoring and auditing of staff swabbing ensure all staff and contractors entering the quarantine facility are adhering to the viral screening requirements. All workers or visitors who enter the quarantine facility and leave their vehicle must complete viral screening every day they enter the site irrespective of how long they may be on site. Staff and visitors are required to complete their viral screening within 2 hours of arrival.

Staff roles involved in testing are;

- Nurse Management Consultant IPC (or allocated IPC professional) is responsible for process management, compliance auditing and clinical governance.
- Clinical administration identifies, prepares and issues viral swabs (RATs and PCR tests) to appropriate staff/ teams, maintains staff testing clinic and pathology equipment, maintains records of staff test results, files records in accordance with the sites records keeping framework and records staff's or visitor's positive viral screens.
- Health staff performs tests for all residents, interprets results appropriately, acts according to result of the test, maintains IPC measures at all times, records positive tests in the sites records keeping framework and outcome of all resident's viral screening in the resident management information technology system (RMITS).
- All quarantine staff and visitors perform testing at the start of the workday or attendance at the facility in accordance with CHO Directions.

For all agencies and contractor's it is the responsibility of each agency and contractor lead to;

- Ensure their workforce and visitors are aware of the individual responsibility to undergo viral screening testing when onsite in the quarantine facility.
- To review the end-of-day staff swabbing emails to ensure all staff on shift that day completed testing; and
- To follow up with staff who do not complete testing with repeated non-compliance to be viewed through a human resources framework.

A swabbing/viral screening clinic with the dedicated purpose to facilitate staff swabbing is recommended. Onsite staff receive emails from the IPC team as a reminder to swab as required and other organisations managers are contacted about their staff. Information about staff who are noted to frequently not swab is referred to their managers.





2.7.3 Management of staff positive viral screening results

Staff who receive a text notice of a positive PCR or their RAT is positive when they are at home, are to remain at home under the Human Resource framework of their respective agency or contractor for the required length of time set out by the CHO Direction, or until resolution of symptoms if longer than the CHO required period.

Staff, visitors and contractors who receive positive test results whilst on site will be notified via their Health Team Leader, site Health Director, Medical Team or IPC professional. If the Health Team member is aware of their result first they inform the Clinical Administration Team who will relay this information.

The affected staff member (if still on site) must be advised to don a mask, clean their work area, notify their direct line manager, and leave CNR. They then commence isolation at a suitable place in accordance with the CHO Direction and inform their close contacts.

The positive test result will be kept in the swabbing area until the staff member has been informed. The Health Team is responsible to enter the result on the staff's medical record.

If a test is invalid, clinical administration will contact the staff member or line manager to request the staff member return to complete another test.

Tests are disposed of in general waste after the result is documented.

2.7.4 Reporting of positive staff

Keeping track of staff who are positive and close contacts is important to ensure staff levels are maintained to continue with uninterrupted quarantine service delivery. Staff are required to ensure they complete the registration of their positive test in accordance with state and territory legislation and follow the steps outlined on the public website for positive test notification. This should be done as soon as the person is safely isolated, as this will assist them in the next steps and accessing appropriate support.

Each agency or contractor is to update the sites' Executive Director and relay the information to the Health Leadership Team of the number of staff they have as either a case or close contact for recording in the daily Leadership Team meeting minutes. Service delivery impacts due to staff absence that cannot be individually resolved by the agency or contractor are to be raised in this same meeting for whole of-site leadership resolution to ensure service continuity.

The site risk management database should also have an entry of who was infectious at work and/or any identified PPE breaches (noting this may be used to support extended sick leave requests). Other agencies and contractors to record according to their relevant workplace risk management register.

2.7.5 Workplace contact tracing

The line manager of the staff member is responsible to conduct contact tracing for the staff member relating to their time at work. This information will assist to:

- establish if there are any close contacts within the quarantine facility,
- identify any infection control breaches, and
- if the staff member was infectious at work, map any impact on staffing and service delivery and identify any procedures or messaging that require enhancement.

For contact tracing, the infectious period is considered the period extending from 48 hours before onset of symptoms. If the case is asymptomatic, the infectious period is the period extending from 48 hours before the initial positive test.



2.7.5.1 Contact tracing information gathering

Information gathered to support workplace contact tracing is to include:

- Full name and staff HRN.
- Date of the staff's positive PCR or RAT test.
- Date when the person first noticed symptoms of the disease (COVID-19), if at all.
- If the person knows from whom they were infected by (i.e. COVID-19 positive person in work or personal life) and the date of last exposure.
- If the person knows where they may have been infected (i.e. work or personal environment).
- Identify if they worked shifts up to three days before the positive test or onset of symptoms.
- Activities whilst at work during this period including activities, colleagues or similar to identify close contacts or situations of risk.
- If there were any breaches of PPE during a person's infectious period, this includes any PPE use or risky behaviour in any of the quarantine or green zones of the quarantine facility.

It is recommended that information is recorded in a timeline of each day the case was believed to be infectious at work to determine if there are close contacts due to cumulative exposure time to the positive case.

2.7.5.2 Identification and management of workplace close contacts

If there are identified close contacts within the quarantine facility, the agency or contract lead is responsible to contact the manager of any other affected agency or contractor to advise a close contact has been identified in their work unit. Each agency or contractor lead is responsible to manage their own staff under their respective Human Resources framework and the CHO Direction regardless of whom the positive case may have been.

2.7.5.3 Return to work of positive case (based on COVID-19 standards)

A positive case is required by to isolate as determined by the CHO Direction, during COVID-19 this was for a minimum of 7 days if asymptomatic or 10 days if still symptomatic on day 6 after their positive COVID-19 test.

If asymptomatic, a staff member may return to work after midday on the 7th day from their COVID-19 positive test or after midday on day on the 10th day from their COVID-19 positive test if all of their symptoms have resolved. If a person remains symptomatic on their 10th day, they are not to return to work, as they remain unwell and likely have a more severe form of COVID-19.

If they have not already engaged with their GP, they are to be recommended to contact their GP for ongoing medical assessment and treatment as required. Positive cases may test positive to COVID-19 after their symptoms have resolved and these 'historical cases' will be captured as 'weak positives' by the PCR testing required under the CHO Direction for Quarantine Workers.

If a historical case is identified in PCR testing, no isolation or action is required other than the normal infection control requirements of quarantine and green zones. Staff are to submit the relevant leave applications according to their agency or contractor's Human Resource requirements and entitlements.



2.7.6 Staff swab compliance

The recommended staff electronic ID card can provide an audit trail of arrival, departure, and testing. By swiping the staff card the IPC Team can cross-check those staff and contractors who were on site and against those who underwent testing. Each agency and contractor is responsible to ensure their staff, subcontractor's staff and/or approved visitors are added to the site swab list and undertake swabbing when on site. Visitors are registered under the agency or contractor providing for their supervision on site.

- 1. The swabbing auditing system aims to collect, monitor, assess and report surveillance data to the workforce, governing body, consumers and other relevant groups in order to identify and manage compliance with staff swabbing requirements.
- 2. Swabbing data is collected weekly with a full cross-check of site entries and completed swabs.
- 3. The Administration Team in the staff-swabbing clinic keep a record of all staff who attend the clinic each day. This is matched against site entry data, filtered to swab requirements based on time spent on site, exclusion after being Covid-19 positive etc. as per CHO directions.
- 4. A results summary is prepared and presented weekly with the follow-up of any non-compliance issues.

2.7.7 Viral screening clinic

The viral screening clinic needs to be strategically placed in an area preferably with an open-air space for staff to swab. If this is not possible then implementation of MERV-13 air filters, portable air cleaners (with HEPA filters), and/ or upper-room germicidal ultraviolet irradiation systems is required according to the logistics of the dedicated space.¹⁸ The hours of operation of the clinic need to be aligned with staff and visitors' presence (for example 06.00 to 22.00 hrs) noting the mandated rule was for **all staff to complete their viral screening within 2 hours maximum of entering the site**.

2.7.7.1 Staffing and PPE

Clinical administration staff are capable of running the viral screening clinic during hours of operation with 2 staff members (noting this may need to be increased depending on staff numbers of the facility).

- 1 staff member is responsible for the creation of testing packs when staff present for testing; and
- 1 staff member is responsible for reading and documenting the results.

As a viral screening clinic will have people performing swabs the transmission risk is considered elevated. It, therefore, needs to be mandated that clinical staff always wear a surgical mask irrespective of current mask mandates that must be changed every two hours when they are working in the clinic.





All staff and visitors are allocated a hospital registration number (HRN) and this is used with the medical records system in which their testing will be recorded. As presented in the resident care section, the medical records system is recommended to be shared with that used by the local government health care facility (whether primary or secondary care services). If a staff member or visitor does not have a HRN, the sites Clinical Administration Team need to have the training to complete the staff's registration and issue them a HRN.

It is deemed critical that staff swabbing is recorded for every staff member every day and a reliable system is established to ensure this is accurately recorded.

Section 2: Table 8: Staff and visitor viral screening clinic process for self-swabbing with rapid antigen tests (RAT) or Polymerase Chain Reaction (PCR) test.





To avoid overcrowding at the staff viral screening clinic it is recommended that Health Teams swab in their pods. All team tests are to be completed before they enter a zone for the first time on that day. It is noted that any resident emergency response takes precedence over testing.

Section 2: Table 9: Health team's viral screening process for self-swabbing with rapid antigen tests (RAT) or Polymerase Chain Reaction (PCR) test in their pods.





2.7.8 Staff RAT testing process

Refer to Appendices D for an example of the process resources used for staff with RAT testing.

- Sanitise hands
- Check the details on the sticker are correct
 - Follow instructions for RAT provided in the testing area
 - a) Open the RAT kit, pull out the test and read the instructions
 - b) Add the solution up to the line on the testing tube
 - c) Collect the nasal sample by twisting the swab up your nose
 - d) Do this 5 times on the left nostril and then on the right
 - e) Place swab into the testing tube
 - f) Snap off the stick and screw on the cap
 - g) Swirl the testing tube gently
 - h) Remove the bottom lid
 - i) Gently squeeze 5 drops onto the testing pad
- Place the test in the box with your name sticker and time test was done in the area dedicated to result reading
- Sanitise hands
- There is no need to isolate pending result for surveillance testing
- Wipe down the table with Clinell wipe that you have used

2.7.9 Viral screening of residents

All residents undergo viral screening in the zone during their quarantine. If residents have a positive screen, the do not have to be swabbed again. All residents must have clinical records commenced for them to record their viral screening. The resident will have a hospital registration number (HRN) allocated against which their testing will be recorded. If a resident does not have a HRN, the Clinical Administration Team will complete the registration. Additional information on the actual swabbing process is covered in the education and training guides located in *Section 3: Health workforce*. This includes information on gaining informed consent from residents for swabbing.





Section 2: Table 10: Polymerase Chain Reaction (PCR) screening process for residents.



Transport of resident swabs to the designated pathology department should coincide with the delivery of staff swabs (transporting these at the same time reduces the risk of multiple exposure to swabs by staff). Open communication between the pathology and Health Leadership Team is required to identify dates and times when large numbers of swabs are anticipated and the flagging of any swabs of concern. This might include a resident swab where they were displaying disease signs and symptoms and therefore a result is required as soon as possible to ensure disease transmission risk is addressed and the resident is provided with any recommended treatments as soon as possible (such as antiviral treatments).

2.7.10 Process to swab multiple residents.

Within large quarantine facilities, there is a requirement to perform large numbers of viral screenings/swabbing of residents at one time, for example, this may occur with one cohort of 200 repatriated residents. As per zone guidelines this process is highly organised to minimise the amount of time staff spend in the zone. Performing this process exposes staff and equipment to aerosols from the resident and care must be taken to maintain strict infection control.



Section 2: Table 11: Process to swab multiple residents- PCR Test

Preparation for multiple residents PCR swabbing

Clinical administration tasks:

The clinical administration officers use a Master List of residents to prepare the pathology request form with the resident's details.

- Pre-print label with three (3) resident identifiers, name, date of birth, suburb/or country of origin and hospital registration number (if known).
- Indicate what day swab is being collected, for example, day 1 or day 5 swab and mark this on this sticker.

Pod Team tasks

- The Pod Team collects the swabs, specimen containers, labels, plastic bags and pathology request forms from clinical administration.
- They collect the esky from the health clinic (esky is used to store swabs during the swabbing round).
- The Pod Team places the labels on the specimen container and swabs into the zip lock part of the plastic pathology bag.



- Pod staff are to also check that details on the labels and pathology request correspond with the resident Master List.
- Pod staff add the resident's room number on the pathology form, place this form and additional labels in the open/side pouch of the plastic pathology bag.
- When all swab packages are prepared, the Pod Team(s) agree on a swabbing route prior to leaving the pod using the quarantine site map for their area and sort the swabs into a logical order, i.e. by room number so these are easy to navigate one the swabbing round proceeds.
- Ensure supplies are stocked, take swabs, esky and additional supplies (see below for items required).
- Prepare a list to check the swabs, when later transferring the swabs to the fridge (double check process to ensure all residents have been swabbed).



Setting up a buggy for the swabbing round

When performing multiple swabs it is recommended to use a buggy to transport equipment.

The buggy is taken into the zone for the purpose of the swabbing process and will be set up after donning with supplies generally stored in tubs under the doffing table.

The buggy is to be viewed as a vehicle that has a CONTACT side and a NON-CONTACT side.

All NON-CONTACT materials are placed behind the driver. These areas cannot be compromised during the swabbing process.

Staff will not always be able to sit on a buggy while entering the zone or while swabbing.

Buggy driver

Nominating the driver of the buggy is important. This person will set the pace of the swabbing process by determining the advancement of the buggy but also identifies the room numbers in advance as the Pod Teams approach.

The driver cannot leave the buggy when swabbing commences.

Preparing the buggy

CONTACT/ NON-CONTACT separation of staff and equipment is to be strictly observed at all times.

Material in CONTACT area (placed behind the passenger seat).

This includes:

- Gloves in the size of the CONTACT staff.
- Clinical waste bag (can be used for multiple swabbing processes).
- Hand sanitizer to be used if 1st pair of gloves is compromised and need to be changed.

Material in NON-CONTACT area (placed behind the driver).

This includes:

- Container/box with swabs in order of rooms, map of the resident zone if required.
- Esky for completed swabs.
- Disinfectant wipes.
- Pen to correct/ complete details on swabs/ pathology form, i.e. phone number.

NB: CONTACT staff do not touch items in the non-contact area or enter the non-contact area.

NOTE: If only one resident needs to get swabbed, the buggy and additional equipment are not required. The Health Team will wear the appropriate PPE, enter the zone and obtain the swab as per the swab procedure, then exit the zone via the doffing station where the pathology bag is wiped with disinfectant wipes and taken to the health clinic fridge.



Personal protective equipment used in swabbing		
Contact Staff (staff performing swab)	Non-contact staff	
Gown	Mask- N95/P2	
Mask- N95/P2	Eye protection- face shield used in swabbing	
Eye protection- face shield used in swabbing	Gloves- single layer of gloves	
Gloves- a double layer of gloves: 1 st pair with long cuff, 2 nd pair regular gloves to be changed between resident swabs		
Due es duns DCD		

Step 1: NON-CONTACT staff takes one swab pack and the team approaches a resident, leaving all other swab packs in the box.

Step 2: CONTACT staff member asks the resident to confirm their details- name and date of birth.

NON-CONTACT staff ensures this matches information on the pathology form AND swab. Missing phone numbers are documented at this point, on the pathology form and on an extra paper to enter into the database later.

Step 3: CONTACT NURSE to explain the procedure (throat and nasal swab) and obtains verbal consent.

Step 4: NON-CONTACT nurse peels open the swab packet, ensuring that the swab stick is exposed, the CONTACT nurse removes the swab from the packet.

Step 5: To swab the throat, extend the swab into the oral area until you hit the back of throat. Roll swab around to left, right, left. Place same swab up one nasal passage until you meet resistance. Roll swab around then remove (NB: this is NOT a nasopharyngeal swab). Place swab up the other nasal passage. Roll/twist swab then remove.

Step 6: NON-CONTACT nurse holds out the specimen container and CONTACT nurse places the swab back into the tube, taking care not to come in contact with the bag or hand of NON-CONTACT staff.

Step 7: NON-CONTACT staff seals the swab lid and lets the swab drop into the zip lock section of the pathology bag. They seal the zip lock section and wipe the outside of the bag with a disinfectant wipe before placing the pathology bag in the esky. The disinfectant wipe gets disposed into the clinical waste bag.

Step 8: The CONTACT nurse removes gloves and applies new gloves (gloves are changed after each resident swab).

Step 9: Steps 2 to 9 are repeated until all swabs have been obtained.



On completion of resident swabbing round

Once all residents have been swabbed (with any who refuse to be swabbed or are not located are noted on the Master list) staff proceed to the doffing area.

Equipment to clean the buggy and swabbing equipment on exit is all located at the doffing station (it is recommended to keep equipment specific for swabbing rounds in a sealed plastic container under the doffing table when not in use).

NON-CONTACT staff will wipe equipment with disinfectant wipes, wipe the esky for transport back to the health clinic and wipe the buggy, with focus on contact surfaces.

The NON-CONTACT staff doffs whilst being observed by their CONTACT staff buddy. The CONTACT staff doffs with the NON-CONTACT staff observing.

The esky and buggy are then returned to the health clinic.

Delivering swabs to the health clinic

The Pod Team Leader facilitates the transfer of the swabs to the health clinic.

- A team of 2 staff transport the swabs to the health clinic.
- The 1st staff dons gloves and confirms the swabs with a checklist (sorted by room number) with the 2nd staff in order to identify any swabs not done.
- They transfer all the swabs into a large plastic bag. On the bag they note the Pod number/ resident zone information, swab day (eg day 1, day 5, or day 12) then place the labelled plastic bag into the designated swab fridge (this fridge should be clearly labelled for this purpose).
- Staff wipe the esky with a disinfectant wipe before returning it to the clinic.

Completion of resident swab process

Documentation of all residents who were swabbed is an important step of this process.

Once all swabs have been completed and delivered to the health clinic fridge for collection by pathology document of swabbing needs to be entered into resident records.

This should be entered into the resident's RMITS and medical records.

Pod staff need to follow up with any residents of concern or additional resident requests which may have occurred on the swab round.

For example, any residents who exhibited signs or symptoms of the disease should have been advised to remain in their rooms and flagged for the potential to be moved pending their swab result.



Section 2: Table12: Process to swab multiple residents- RAT Test

Preparation for multiple residents RAT testing

Clinical administration tasks:

The clinical administration officers use a Master List of residents to prepare the correct number of RAT tests.

- Pre-print labels with three (3) resident identifiers, name, date of birth, suburb/or country of origin and hospital registration number (if known).
- Staff indicate what day swab is being collected, for example, day 1 or day 5 swab and mark this on this sticker



Pod Team tasks

- The Pod Team is to collect the RAT tests and labels from clinical administration.
- Pod staff are to also check that details on the labels correspond with the resident Master List and label all the RATs.
- Staff ensure RAT test supplies are stocked: labelled RAT tests, rubbish bag, laminated instructions on how to perform a RAT test.
- Prepare a master list to double check the process to ensure all residents have been RAT tested.
- The team organises itself into 2 teams: one team is delegated to distribute the RAT tests to residents and provide instructions
 - one team is to then record the results of the RAT test (by taking a photo), collect all instruction sheets and dispose of RATs.

Refer to Appendices D for examples of the RAT testing resources

Personal protective equipment used in swabbing		
Contact Staff (staff performing swab)	Non-contact staff	
Gown	Mask- N95/P2	
Mask- N95/P2	Eye protection- face shield used in swabbing	
Eye protection- face shield used in swabbing	Gloves- single layer of gloves	
Gloves- a double layer of gloves: 1 st pair with long cuff, 2 nd pair regular gloves to be changed between resident swabs		



Procedure RAT

Team 1

 In the Zone: The contact person distributes the RAT tests and laminated instructions to each resident after confirming name and date of birth. These staff assist with instructions if necessary (staff do not need to witness the RAT test unless they are concerned with the residents' level of compliance or understanding).



- Clean person records on tick sheet each test distributed and the time they were given.
- Once all tests are distributed Team 2 is contacted (via phone or radio) and they will don and enter the zone.

Team 2

- Team 1 hands over and exits zone: Clean person takes the resident tick sheet and identifies who to collect tests from.
- Contact person carries iPad and photos each completed RAT test ensuring they capture in one image: box with resident label, packet with RAT batch number and RAT test with result lines visible.

Contact person carries yellow biohazard bag to collect used tests and dispose of these in the doffing bins at the zone exit.

On completion of resident RAT testing round

Once all residents have completed their RAT test (noting any who refuse to participate or who are not located on the Master list) staff proceed to the doffing area.

Equipment to clean the buggy and equipment on exit is all located at the doffing station (it is recommended to keep equipment specific for RAT testing rounds in a sealed plastic container under the doffing table when not in use, such as the laminated RAT test instructions for residents.

NON-CONTACT staff will wipe equipment with disinfectant wipes with a focus on contact surfaces.

The NON-CONTACT staff doffs whilst being observed by their CONTACT staff buddy. The CONTACT staff doffs with the NON-CONTACT staff observing.

Completion of resident RAT testing process

Documentation of all residents who were RAT tested is an important step of this process.

Documentation of RAT testing needs to be entered into the resident's RMITS and medical records.

Pod staff need to follow up with any residents of concern or additional resident requests which may have occurred on the RAT testing round.

For example, any residents with positive RAT tests should have been advised to remain in their rooms and the organising of moving the resident into a red zone to be commenced.



2.7.11 Residents who refuse to have viral screening

It is important viral screening requirements and government legislation/ CHO Directions align to ensure:

- Clear expectations of viral screening for residents are presented in a public-facing space.
- There are processes in place for the resident who refuses to be screened.
- These consequences are reasonable and enforceable onsite (CHO Directions in the Northern Territory meant if a test was refused, the resident's quarantine was extended by 7 days at their own cost).

If a resident refuses to be screened the site health staff have a responsibility to ensure the resident is aware of why they are being screened and how this will be carried out. During the COVID-19 pandemic, different swabbing practices resulted in some people being fearful of the swabbing process (due to pain and discomfort). Additionally providing an outline of the process (carried out by nurses), the rationale to ensure they have access to adequate health care in the event disease is detected and for the safety of other residents (related to disease transmission) can aid the resident in consenting to be swabbed. Residents may also consent once they understand the requirements to spend extended time in quarantine for refusing a swab.

2.7.12 Resident positive viral screening results

During COVID-19 it became apparent that polymerase chain reaction (PCR) tests can continue to return positive results even after a person has recovered from infection.¹⁶

On the initial notification of a positive result for viral screening using a PCR test, it needs to be determined if this may be related to a recent or new infection.

Determining if the current positive test reflects a historical case or an active infection is the role of the Medical Team lead in conjunction with the pathology department. The resident should be interviewed to determine their infection/ COVID- 19 history. Until this assessment outcome is known, the resident will be managed as disease/Covid-19 positive.

When a resident's viral screen result is confirmed as positive and they are located in the orange zone they will need to be moved to the red zone where positive cases are isolated. The site's Director of Medical Services contacts the duty Doctors, Director of Nursing and Nurse Management Coordinator of Infection Prevention and Control. The information is then passed to the Pod Team Leader of the red zone and the Pod TL for the zone where the resident is staying and a nurse and a doctor arrange to enter the zone to give the news to the resident face to face.

The site Doctor on duty will:

- 1. Inform resident of positive test and implications for their quarantine stay (this should include a health assessment to identify severity of disease signs and symptoms)
- 2. Explain the reason for the move and need for isolation
- 3. Allay anxiety and answer questions
- 4. Explain the process with respect to health checks and testing

The Pod nurse will:

- 1. Explain to the resident the plan for the move, what to take and when it will occur. Explain to the resident that they need to pack and move all their belongings including food items to take to the red zone
- 2. Determine how much time the resident will need to pack and be ready to move.

A full outline of moving residents between zones due to positive viral screening results is presented in the Zones In Quarantine section of this IPC resource.







2.8 Preventing and Controlling Infection through cleaning and disinfectant

Disease transmission by direct contact with contaminated surfaces is preventable with good cleaning and disinfectant practices. The role of cleaning is to reduce the number of infectious particles that may be present on a surface and therefore reduce the risk of transmission. Cleaning and disinfecting

are not the same things.

- Cleaning involves physically removing dirt and organic matter from surfaces.
- Disinfecting involves the use of chemicals to eliminate germs on surfaces.
- It's important to clean before disinfecting because organic matter and dirt can reduce the ability of disinfectants to eliminate germs.

Frequently touched surfaces such as bench tops, shared computers, door handles, light switches, toilets and taps need to be cleaned more regularly and then disinfected.

Recommendations during COVID-19 were that surfaces contaminated with respiratory droplets as a result of someone coughing should be immediately disinfected with the use of: disinfectants containing 70% + alcohol, hydrogen peroxide (oxygen bleach) or sodium hypochlorite (chlorine bleach) for hard surfaces. Disinfectants also must remain on a surface for enough time to eradicate the virus particles and this can be found in various product recommendations.¹⁹

These three factors in combination help ensure that cleaning and disinfection practices are of a high standard





A full resource presenting considerations and methods to clean across the quarantine site (including resident zones) has been presented here. It is recommended that for the purpose of environmental cleaning, the resource prepared by the Australian Commission on Safety and Quality in Health Care *Principles of environmental cleaning: product selection* is also consulted.²⁰

Establishing an effective cleaning process is a priority for a quarantine service to protect its staff and residents from infections. The type and level of PPE and the methods of cleaning all vary depending on the location of cleaning in relation to zones and the purpose of the area being cleaned. For example, health clinic areas will require a more frequent cleaning regime undertaken supported by the clinic and cleaning staff, as opposed to cleaning the resident's room which will occur once when the resident has exited the facility (with residents responsible to self-clean their rooms whilst in quarantine and isolation).

This resource presents a number of directions and recommendations for cleaning across the quarantine site.

2.8.1 Cleaning the quarantine site

The Cleaning Team are a vital part of the quarantine facilities staff, they require the same PPE and IPC training as all staff on site as well as additional support to learn the cleaning specific to quarantine facility requirements (in alignment with that of communicable disease risk). Regular auditing should be completed on staff cleaning techniques and all cleaning in each area needs to be documented to record when cleaning was undertaken, the date, time and by whom. This all provides evidence the cleaning was completed and is treated as an official site document.

Each area within the quarantine site needs to have a set of designated cleaning equipment to avoid crosscontamination. For example, the cleaning equipment used for the vaccination clinic is to be used and stored for this purpose only and should not be used in any other areas on site. All cleaning equipment must be cleaned and stored appropriately after each use in a space allocated for this purpose only (no other equipment should be stored in the same area as the vaccine clinic cleaning equipment).

A colour coding system of equipment ensures that materials and equipment are not used in multiple different areas (reducing risk of cross-contamination). For example, red-coloured equipment is only used for the resident red zones.

Cleaning should always be completed from clean to dirty with low touch or lightly soiled areas cleaned before those considered high touch or heavily soiled areas.

Cleaning should also be from high-reach surfaces to low-reach surfaces. Whenever cleaning in bathroom areas turn the extraction fan on to reduce exposure to chemical/cleaning fumes.





All cleaning chemicals need to be stored safely according to their individual guidelines and the date the product is opened should be clearly written on the product or accompanying auditing documents. The main rule is that different disinfectants and detergents should not be mixed together as this can cause explosions and danger to the eyes or inhalation injuries. The recommended PPE should also be used for the product in alignment with IPC site PPE requirements.

At the quarantine facility, the outdoor walkways and road areas do not require any specific cleaning. Even if these areas form part of the resident arrival process access can continue as usual immediately following the completion of the arrivals process. If any building areas are used these require more specific cleaning to be done.

Any rooms/buildings used for the resident arrival process are cleaned following each arrival process using routine cleaning standards for the floors and wiping down all potential touch points in the area (mirrors, door handles, and tables) with disinfectant. Once this surface cleaning/ wiping down of all the touch points has been completed the area can be accessed as a green zone.

A guide to the recommended routine cleaning frequencies has been presented in Appendices A. This is based on the following level of risk as presented in the below table and is adapted from the Australian Commission on Safety and Quality in Health Care, National Safety and Quality Health Service Standards (Second Edition).²



Section2: Table 13: Health care settings level of risk to determine cleaning requirements.		
Risk rating	Settings	
Very high risk	An outbreak in a high-risk area	
High risk	Intensive care unit, high dependency unit, burns unit, renal unit, operating suites, and emergency departments.	
Significant risk	General hospital wards, COVID-19 vaccination clinics, quarantine facility staff areas, and medical clinics.	
Low risk	Rehabilitation, primary health care centres, long-term care, office-based, domiciliary nursing services.	

2.8.2 Cleaning techniques

When cleaning any areas across the site, cleaning staff are required to work from low-risk to high-risk areas, in the order as defined on the table provided in Appendices A. On entering the areas to be cleaned the space should first be assessed for hazards such as spilt water or sharps and it needs to be ascertained it is an appropriate time for cleaning (considering there may be clients in the health clinic or a leadership meeting may be taking place). The cleaning equipment from the designated storage area for the area to be cleaned is to be accessed (only use the cleaning equipment allocated for this area).

The minimum PPE for general site cleaning in green zones is:

- chemical gloves •
- safety glasses ٠
- safety boots •
- high visibility clothing ٠
- dust/surgical mask •

Section 2: Table 14: Instructions on cleaning techniques to implement across the quarantine site (including resident rooms)	
Areas to be cleaned	Instructions
Cleaning bathrooms	Turn extraction fan ON.Pre-treat the hand basin, shower and toilet with the recommended cleaning chemical.Apply cleaning chemical to all surfaces to give it time to activate whilst other duties are performed.NOTE: PPE must be worn at all times when applying cleaning chemicals.





Empty waste bin	To avoid bending, lift the waste bin and place on the desk. Place both hands on either side of waste bin and loosen top of liner from bin. Tie the liner at top to secure rubbish and place outside (this will be deposited into a larger collection bin).
	Disinfect bin as required ensuring bin is dry before liner is replaced. Remove next bag from roll of liners. Place bag in bottom of bin. Secure tight new liner in bin and return to designated location.
	NOTE: Use correct manual handling techniques.
	NOTE: Clean up any mess/spills immediately.
Clean Desk	Clean desk by spraying recommended cleaning chemical on the cloth and wipe down the surface including the edges of the desk. Conduct a visual inspection of the desk to ensure that smears are eliminated.
	NOTE: Do not remove any items from desk; clean around them.
Clean outside cupboards and doors	Clean outside of cupboards doors, edges and handles by spraying recommended chemical on and wipe down entire surface with yellow microfiber cloth. Conduct a visual inspection of the cupboard to ensure that smears are eliminated.
	NOTE: Be aware of any sharp edges when cleaning near the underside of cupboards.
Clean bench/desk	Clean bench/desk by spraying recommended cleaning chemical on the cloth and wipe down surface including the edges of the bench. Repeat the process until bench is fully cleaned Conduct a visual inspection of the desk to ensure that smears are eliminated.
	NOTE: Be aware of any sharp edges when cleaning near the underside of benches.
Clean outside of refrigerator	Use a warm damp cloth to wipe over the outside surface and seals of the refrigerator with warm soapy water. Using a clean microfiber cloth, dry the outside of fridge leaving no streak marks.
Sanitise telephone	Spray small amount of disinfectant onto a clean yellow microfibre cloth. Wipe the earpiece, mouthpiece, phone handle and keypad, the base of phone and surrounds. Wipe the entire phone with paper towel to remove any residue.
	NOTE: Do not spray disinfectant directly onto phone. NOTE: Use correct manual handling techniques.
	NOTE: Ensure that area is well ventilated before commencing task. NOTE: Clean up any spills immediately.
Remove cobwebs	Using a cobweb broom, remove webs by standing to the side of the working area and brushing cobwebs away from the body, alternating between high and low areas.
	NOTE: Use correct manual handling techniques.
	NOTE: Ensure clear access to area is maintained while conducting task.



Refill and clean paper towel dispenser	Use key to unlock top of dispenser (if required). Open the front panel and insert required amount of towels ,do not overfill. Close the front panel and lock and check that dispenser is in working order and clean. Damp wipe and clean all internal surfaces to remove grease marks or any other stubborn stains. Damp wipe outside of dispenser including underneath.
	NOTE: Use correct manual handling techniques and wear gloves to prevent contact with sharp edges.
	NOTE: Do not place towels on floor, shelf or cistern NOTE: Do not open packets until required.
	NOTE: Do not use abrasive items to clean dispenser.
Clean mirrors and windows	Spray glass cleaner on to a clean microfiber cloth. Clean the surface using systematic overlapping passes. Clean away any excess chemical solution. Polish glass or mirror to remove any smears with a paper towel or dry microfiber. If possible, move to a different angle to check sheen of mirror or glass. NOTE: Use correct manual handling techniques.
	NOTE: Ensure that area is well ventilated before commencing task. NOTE: Clean up any spills immediately.
Clean vanity basin	Rinse the basin with clean water and apply recommended chemical including around the base of taps. Wait a few minutes for the chemical to activate. With a microfibre cloth, carefully activate the chemical all over the area concentrating on areas around base of taps and nozzles. Thoroughly rinse the microfibre cloth at the same time rinsing the basin and wipe surrounding vanity space until all chemical residue is eliminated. Buff taps and handles. Rinse the cloth with clean water and dry cloth by wringing out excess water, wipe all areas as dry as possible. Replace consumables as necessary (e.g. soap).
	NOTE: Use correct manual handling techniques
	NOTE: Clean up any spills immediately.



Clean and sanitise shower recess	If installed, hang shower curtain over top of shower to one end or remove if replacing. Apply cleaning chemical and wait few minutes for the chemical to activate, and then scrub the shower walls one section at a time from the top down using a doodlebug or equivalent. Rinse after scrubbing each side. Concentrate on any joined areas as necessary. Scrub and rinse the soap container, taps and shower rose using a green scourer. Use a doodle bug (this is a floor scrub attached to the bottom of a mop with a flexible head) to scrub the floors to reduce manual handling. Scrub and rinse the base of the shower paying attention to the join area of the walls as necessary. Use a doodle bug to scrub the floors to reduce manual handling. Remove any items that are trapped in the drain cover. Rinse shower recess thoroughly. NOTE: Use correct manual handling techniques. NOTE: Ensure that area is well ventilated before commencing task. NOTE: Clean up any spills immediately.
Clean toilet	Ensure hands are washed, dry and sanitised before applying any chemical gloves. Remove all solid matter by flushing toilet. Apply cleaning chemical directly to the inside of bowl, including under the rim. Wait a few minutes for the chemical to activate. Remove any splashes and marks from surrounding walls. NOTE: Do not leave the chemical soaking in toilet unattended. NOTE: Ensure that area is well ventilated before commencing task. NOTE: Clean up any spills immediately. NOTE: Do not mix cleaning chemicals.
Sweep and mop floors	Ensure clear access to area prior to commencing task. Move all obstacles (where applicable) using correct manual handling techniques. Seek assistance if required. Start in one edge or corner and sweep in overlapping strokes. Pull the broom against the floor in one direction and lift it back to that edge in the other direction. Make sure the broom reaches into the angle of each corner so that you sweep out the dust from there. Work around the room, collecting the debris into a small pile or piles. Be systematic, working generally from one direction to another. Once the debris has been swept into a pile, use a small brush and pan to collect and remove to the appropriate waste bin. Fill mop bucket with warm water and add chemical to the water using correct dilution rate. Ensure mop head is securely connected to mop handle. Place mop in bucket and wring out until damp. Mop the area length wise along the skirting boards Change water and chemical in mop bucket regularly and rinse mop frequently. NOTE: Use correct manual handling techniques. NOTE: Ensure that broom and mop handle is of the appropriate length. NOTE: Handle chemical as per SDS NOTE: Clean up any spills immediately
Clean up	Ensure area is clean and tidy. Return equipment back to designated storage areas. Wash hands with warm soapy water and sanitise before commencing next task.





2.8.3 Managing the cleaning of resident rooms

During their stay resident's rooms are to be cleaned by the residents. Basic cleaning material is provided in the resident's welcome pack and additional cleaning materials can be obtained via click-and-collect. The provided cleaning materials include: a bucket, dustpan and broom, disinfectant wipes, hand sanitiser, tissues, and dish wipes.

Areas in the facility that are vacated by residents who have completed 14 days of quarantine are considered green zones. If other residents remain in the zone it is still considered an orange zone and PPE must be worn.

A daily situation report (sit rep) to reflect room cleaning requirements facilitates clear communication across cleaning teams and ensures room availability and other information is consistently updated.

Daily room cleaning sit rep report

The following information is to be included in the daily room cleaning sit rep report.

- Total Rooms cleaned, fitted and available for occupancy in all zones
 - provides guidance on where new resident arrivals can be directed.
- Current occupied rooms
 - this should correlate with the number of residents on the sites master list
- Current International occupied rooms
 - this should correlate with the number of residents on the sites master list
- Dirty awaiting Clean
 - Allows planning for cleaning team staffing numbers and resources required
- Rooms locked out for Maintenance
 - Allows planning for maintenance team and flags room unavailable for resident allocation.
- Respite rooms
 - These are located in certain zones to allow cleaning staff to doff and redon in a safe place and cool down/take a break.
- Awaiting check after maintenance complete
 - Presents where priority action is required to ensure these rooms can go back online for resident occupancy.
- Locked out for High clean
 - Allows planning for high cleaning team staffing numbers and resources required.
- Rooms classified as a biohazard
 - Allows planning with the IPC professional for the cleaning approach, staff and resources for contaminated rooms.
- Offline for reasons other than maintenance
 - Ensures these rooms are flagged as unavailable for resident occupancy.
- Total rooms

Residents will be given a linen pack every 7 days to change their own linen and instructed to place used linen in a provided linen bag outside their room for collection by the site facilities staff. The resident's linen can be washed onsite or contracted to a cleaning agency offsite.



2.8.4 Cleaning of resident rooms in the green zone

All orange zone rooms are provided a normal clean if the resident did not test positive during their quarantine. This should be done once the residents have vacated the zone meaning the zone is then considered a green zone. If a resident in the orange zone tests positive for COVID-19 and is moved to a room in the red zone, the original room is closed with a sign placed on the door with the date the room was last occupied by the resident.

The NT Health guideline states that the air settlement time required to achieve 99.99% microorganism removal in an average patient room is 3 hours and 27 minutes.²¹ At the Centre For National Resilience a 24-hour vacancy period was installed prior to any resident room cleaning. This is considered a very conservative period to allow viral particles in the air to settle on surfaces and for the COVID-19 virus to degrade and become non-infectious.

A core part of the site processes is consultation with facility teams to rotate the use of zone rooms to enable blocks to be turned into green zones for routine cleaning and maintenance. This ensures the zone is not available for quarantine during the green zone period facilitating a safe space for staff to work.

The process for cleaning a resident room in the green zone for preparation for the next resident entry is as follows:

- PPE is donned in accordance with cleaning requirements.
- As the room is in a green zone, PPE for the purpose of disease transmission is not required, PPE to be worn is in accordance with cleaning chemicals recommendations.
- The resident's room is stripped of all dirty linen and this is put into linen bags for collection.
- The room is cleaned (in accordance with the general cleaning outline presented in Table 14).
- New linen packs are placed in the room and the bed is made.
- Room supplies set up in the room.

2.8.5 High cleaning of contaminated rooms.

At times there may be a high turnover of residents requiring cleaning staff to clean rooms of positive residents prior to the 24 hour vacancy period. Rooms cleaned within 24 hours of the positive resident's departure will be provided a high clean.

No fogging or misting is recommended due to inhalant risk and the time taken to settle out of the air (poses a risk to staff). Surface cleaning and disinfection are recommended and this is performed with an approved surface cleaning and disinfectant solution.

The process for cleaning a positive room is as follows:

- Full PPE is donned using GMEG and in accordance with cleaning requirements.
- The resident's room is stripped of all dirty linen, this is put into linen bags for collection. For multiple room cleans this is left on the resident balcony for collection. For single-room cleans the linen bag is taken to the designated spot for laundry collection.
- The room is cleaned (in accordance with the general cleaning outline presented in Table 15).
- Once cleaning is completed, PPE is doffed and staff are to redon in clean PPE
- New linen packs are placed in the room and the bed is made.
- Room supplies set up in the room.





Section 2: Table 15: Instructions on how to clean resident rooms (considered contaminated) in the red or orange zones

Preparation

Acquire the cleaning materials using only those delegated for use in contaminated rooms. Use of disposable products is recommended.

Stock linen cart with adequate supplies of linen and ensuring adequate:

• 240L bin liners

Donning PPE

Remove all jewellery (earrings, rings) Obtain and inspect PPE. Do not use damaged PPE, discard and/or inform your Supervisor as appropriate.

The PPE for this task is:

- Surgical Mask for non-patient contact or N95 Respirator for close patient contact less than 1.5 metres for greater than 15 minutes contact
- Safety goggles, Safety Shield only if you are wearing own glasses
- Disposable gloves

NOTE: the PPE mask has a potential compromise with facial hair- wearers are required to be clean shaven.

Areas to be cleaned	Instructions
Entering OCCUPIED accommodation room	 Knock on door. The resident should open door with their mask on, if not remind them to do so. Ask the resident to preferably sit on their balcony when cleaning their room. Bring in cleaning equipment Spray bottles 240L bin liner for linen Broom & dustpan brush Disposable cloths NOTE: Isolated residents with mask on can sit on their balcony whilst you clean the room
Entering UNOCCUPIED accommodation room	 Unoccupied Knock on door to announcing housekeeping arrived. Place all clean linen required on outside table. Bring in cleaning equipment Spray bottles 240L bin liner for linen Broom & dustpan brush Disposable cloths NOTE: Accommodation room door MUST remain closed at all times, this is followed in the Orange or red zone cleaning.



70

Room Clean	Begin with removing coverlet from doona and pillow cases and place in centre of bed (on top of existing linen).
	NOTE: Hold contaminated linen away from body
	NOTE: Do not shake linen just roll into a ball
Cleaning ensuite	Switch on exhaust fan
	Apply cleaner disinfectant to toilet bowl
	Apply cleaner disinfected to shower
	Apply cleaner disinfectant to vanity basin
	 Remove used bathroom linen (to be placed on bed)
	Exit room closing bathroom door.
	NOTE: Hospital strength cleaner & disinfectant MUST be used.
Stripping bed	Move bed to access all corners. Fold in the corners of the fitted sheet gently and remove sheet protector from underneath adding into a pile of used linen. Wrap used linen using a fitted sheet and place into 240L bin liner. Apply sanitising mist over the bare bed and corner walls where bed is placed and reposition the bed to the corner.
Room surfaces and fittings	Clean & sanitise horizontal surfaces and clean fittings in the room Apply disinfectants to disposable cloths and wipe down shelving, desk and nightstand. Place used cloth into the waste basket. Apply sanitising mist to cleaned surfaces.
Floor sweep	Sweep floors gently to a pile in centre of the unsuited and accommodation room using a pan and brush to collect and dust/waste.
	Dispose into waste basket.
Sanitising ensuite	Clean and sanitise ensuite. Clean mirror, shower recess, basin and toilet as per Table 2. Dispose used cloths in waste bin. Remove liner from waste basket and tie up and place outside of accommodation room. Apply sanitising mist to all surfaces including walls and inside door of ensuite.
	NOTE Hospital-strength sanitiser must be used.
Make Bed and sanitise accommodation room.	Make Bed and sanitise accommodation room. Leave accommodation room and remove disposable gloves (place in bin liner). Apply hand santiser 5 moments of hand hygiene rub (hands must be dry) and then apply new disposable gloves once hands are dry.
	Collect linen required and enter accommodation room from outside table. Place clean linen on sanitised surface and make bed as per Table 2.
	Room servicing- Apply sanitising mist to all surfaces including walls and inside door of ensuite.



Floor clean	Mopping Floor - Collect mop and bucket from outside of accommodation room. Mop floor as per Table 2. Damp mopping commencing from the ensuite directed towards to accommodation door. NOTE: Hospital grade cleaner and disinfectant MUST be used.
Final room clean	Apply sanitising mist to accommodation door handle on inside and outside of room. Place bagged rubbish in bin liner and place bagged linen / rubbish back at collection point. Remove disposable gloves, apply hand sanitiser 5 moments of hand hygiene rub (hands must be dry) and apply new disposable gloves. Proceed to next room in isolation (if applicable).
Doffing PPE	

Prepare bin liner for contaminated clothing.

Remove PPE in the following sequence at Doffing station (while placing into bin liner)

- Disposable gloves
- Apply hand sanitiser
- Face shield / goggles
- Apply hand sanitiser
- Hand sanitiser
- Mask / respirator (do not touch face)
- Hand sanitiser

NOTE: Place bagged contaminates into YELLOW biohazard bin.

2.8.6 Sanitising of reusable items

When staff are exiting the red or orange zone they are often carrying items that can be reused if they are adequately sanitised (including cleaning equipment). This may include reusable goggles, pens, or medical equipment.

Buckets of disinfectant are recommended to be located at each doffing station following these guidelines.

Prepare the disinfectant following the ratio of bleach 20mls in 5 litres water (unless otherwise specified on the container).

- Mix solution into the CLEAN bucket.
- Allow the reusable item to soak for 30 minutes.
- Once 30 minutes has passed, take the reusable item out of the solution with the tongs or heavy duty glove and lay out on a towel allow to air dry.
- Once reusable item is dry it can be reused.


2.8.7 Cleaning site buggies

Buggies need to be routinely cleaned as they are recognised as a shared asset and should be left clean and hygienic for the next team's use. There are two aspects to cleaning buggies, one is routine cleaning of the buggy presented here. The second is cleaning the buggy upon exiting from a resident zone. In this case, the buggy needs to be wiped over with disinfectant wipes focussing on all touch points. All equipment that entered the zone on the buggy needs to be removed and cleaned at the doffing station.

Routine cleaning of the site buggies

- Park the vehicle on a flat surface in a well-ventilated area. Ensure the vehicle has the brake applied and the buggy is choked to ensure the vehicle will not move. The key is removed from the ignition.
- Clear items from the vehicle to a safe storage area.
- With a hand brush or small hand broom sweep the floor area and back tray if required. If the cart has built-in cupboards (domestic) ensure these are clean and litter free.
- Wash over the exterior panel's windshield with warm soapy water and rinse, wiping the area dry.
- Hose out the back tray if required and clean with warm soapy water using a bristle brush.
- Clean the tyres by hosing them down high contact areas using disinfectant wipes- dash, steering wheel, gears, seats, and seatbelts.
- Restock vehicle



2.9 Waste Management

The process for managing the removal of waste is covered in the *Section 1: Processes, infrastructure and communication*. From the IPC perspective, the following core points need to be followed.

- Biohazard waste goes into yellow biohazard bags and is managed in accordance with approved processes and procedures. PPE waste at doffing stations is collected as clinical waste.
- All other waste is treated as general waste and managed by the facilities manager.
- Residents are responsible to remove their waste from their rooms, including disposing off the waste generated by the food supply. Waste bins are provided in each resident area.
- Waste bins are collected from the resident zones by a contractor, with staff wearing appropriate PPE.
- Waste collected during the process of swabbing is collected in clinical waste bags and later treated as general waste as per guidelines.

All waste management approaches need to consider the environmental impact (sustainable practice), and costs, and aim to improve health and safety (reduces the risk of spreading infection).



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2.10 Auditing

Auditing forms a core part of site quality assurance practices and ensures processes are working as planned.

For IPC purposes auditing is focused on:

- IPC and PPE training and education
- Hand hygiene
- PPE: equipment procurement, quality and purpose, donning and doffing, fit testing.
- Staff vaccination: number of vaccinations acquired and number administered (noting any wastage), staff vaccination compliance, staff who are able to administer vaccinations, AIR, AIEFs.
- Cleaning: techniques/processes and their outcomes, equipment, staff and resident areas.
- Viral screening/ Swabbing: residents and staff swabbing compliance, techniques/processes, and equipment. Positive results and outcomes.

It is recommended that all quarantine staff have an electronic ID card. This ID card is used for IPC monitoring (entry to site, staff viral screening and meal areas). This provides an audit trail of arrival, departure, testing and measures congregation on site and being tested that is monitored by the audit team and can be matched against gate entry and exits. This also provided important information if onsite contact tracing is required. Each agency and contractor is responsible to ensure their staff, subcontractor's staff and/or approved visitors are added to the CNR swab list and undertake swabbing when on site. Visitors are registered under the agency or contractor providing for their supervision on site.

Spot checks and auditing occurs across the site, including the Green Zone to promote the hierarchy of controls for reducing disease transmission. The focus remains on ongoing education and support with escalation to the agency or contractor lead of issues or concerns regarding their staffing cohort for resolution. Additional auditing information and management can be found in *Section 1: Processes, infrastructure and communication*.



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Content Acknowledgement

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Appendices A

Personal Protective Equipment Donning and Doffing Competency

It is recommended that PPE competency is undertaken by staff every two week to ensure competency and currency with PPE equipment and recommendations.

Underpinning Knowledge and Understanding:

- Ensure you are aware of the policies and standards of practice in place relating to Infection Prevention and Control including Standard and Additional Precautions and PPE: i.e.: bare below the elbows
- The highest rates of healthcare worker (HCW) acquired infections occur when changing PPE, or where PPE is worn inappropriately or poorly applied.
- A 'buddy' or 'observer' should always watch doffing of PPE to check contamination does not occur.
- Wearing PPE, particularly in stressful clinical situations, can lead to emotional and physical exhaustion. Staff members should be on alert for others around them who are overwhelmed, and provide support and assistance as required.
- All donning of PPE should occur in green zones.
- All doffing of PPE should occur in orange zones.
- No more than 2 hours should elapse between PPE changes, to allow for adequate rest and rehydration. More frequent changes may be required.

Confirmation of assessment details by participant: I confirm that:

- The purpose of this assessment has been clearly explained to me
- The performance criteria to be used in this assessment has been discussed with me and I am aware that I will be assessed against this criteria
- I am aware of how the assessment will be done and the requirements relating to this assessment
- •

Signature: _____



Donning PPE

Performance Criteria	Rationale	Competent	Not Yet Competent
 Performs hand hygiene before donning PPE: Wash hands or use alcohol-based hand rub 	Hands cleaned to before applying PPE to prevent transient contaminants		
 Dons impervious long sleeve gown: Fully cover torso from neck to knees Fasten at the back and neck 	Provides a barrier to prevent clothes and skin underneath becoming exposed to anybody fluid splash.		
 Dons P2/N95 respiratory mask: Coloured side facing out Secure ties at the middle of the back of head and neck Fit flexible metal band to the bridge of the nose 	Mask provides wearer with an air filter protecting mucous membranes of nose and mouth		
 Performs a mask fit check: 1. Ensure mask is sits across bridge of the nose and under the chin 2. Forcefully breath in and out several times and check that mask collapses slightly on inhalation and expands on exhalation 3. Move head up and down and then left to right – the wearer should not feel air leaks/gaps between the face and mask 	Fit check ensures mask is fitted securely and allows for identification of possible issues prior to exposure		
 Dons eye protection: Place over face/eyes and adjust to fit Prescription glasses are not appropriate protection and goggles/ face shield must be applied over the top If using a hair net, don face shield after hair net is in place 	Provides a physical barrier to prevent exposure of mucous membranes to body fluids		
 Dons gloves: Extend gloves to cover wrist/cuff of impervious gown Ensure no gaps are present. 	Protect staff member from transmission of contaminants		





Doffing PPE

Perform	nance Criteria	Rationale	Competent	Not Yet Competent
Doffs g 1. 2. 3. 4. 5.	own and gloves: Grasp the gown in the front Pull away from your body so that the ties break, touching outside of gown only with gloved hands As you remove gown, peel off gloves at the same time, only touching inside of gloves and gown with your bare hands Whilst removing gown, fold or roll inside out into a bundle Place the gown and glove bundle into general waste bin	Maintain safe removal that avoids contamination to skin and mucous membranes of staff under the PPE		Competent
Perforn •	n hand hygiene: Wash hands or use alcohol-based hand rub	Cleans hands of potential contamination during removal of gloves and gown		
Doff ey	e protection: Remove goggles by lifting side arms and without touching the front If disposable, discard into general waste bin If reusable, place into designated receptacle for reprocessing If using a face shield, doff following gown and gloves	Maintain safe removal that avoids contamination to skin and mucous membranes of staff under the PPE		
Perforn •	n hand hygiene: Wash hands or use alcohol-based hand rub	Cleans hands of potential contamination during removal of eye protection		
Doff ma	ask: Grasp bottom ties or elastic off the mask, then the ones on top and remove without touching the front of the mask Discard mask into ge^neral waste	Maintain safe removal that avoids contamination to skin and mucous membranes of staff under the PPE		
Perforn •	n nand hygiene: Wash hands or use alcohol-based hand rub	cleans hands of potential contamination during removal of eyewear and mask		





Appendices B

PPE Refresher Sessions

It is a recommendation for staff working in quarantine with residents to have PPE refreshers every day, these should take place at the commencement of each shift and be delivered by the Health Team Leader. Every 2 weeks every staff member will be required to have their PPE Competency completed.

Daily PPE session attendance should be recorded for quality assurance and auditing purposes.

PPE Activities

Setting up a donning station

Objective: To ensure staff can assemble required PPE and place in the correct order for donning

Equipment: PPE (mask, gown, ABHR, gloves, eye protection), timer

Activity: Have enough PPE for each person to assemble these in the correct order for donning and see who can do this accurately and in the fastest time.

PPE doffing

Objective: To understand potential for self and the environment to be contaminated if PPE is not correctly removed and practice the safe doffing of contaminated PPE.

Equipment: PPE (N95/P2 mask, gown, ABHR, gloves, eye protection/face shield), paint (or something similar)

Activity: Have 2 staff members don in full PPE and cover parts of them with paint (or something similar) to represent COVID/contaminant. Have the staff members doff without getting contaminated. Other team members should be observing and providing feedback and guidance for safe doffing.

Appropriate and inappropriate use of PPE

Objective: To reinforce the correct use of PPE

Equipment: Print out sheet of different PPE use for each person to complete, see Appendix A (or read out each one and have group decide, or put tasks on A3 paper and have staff respond on this).

Activity: Provide the following examples of usage of PPE and have team members identify what PPE equipment is required for each.

Glove doffing

Objective: To understand potential for hands and the environment to be contaminated if gloves are not correctly removed and practice the removal of gloves.

Equipment: PPE –gloves, ABHR, paint (or glitterbug gel or something similar)

Activity: Have 2 staff members don gloves and cover parts of them with paint to represent COVID/viral contaminant. Have the staff members doff without getting contaminated. Other team members should be observing and providing feedback and guidance for safe doffing of gloves.



Hand Hygiene

Objective: To ensure staff are routinely maintaining correct hand hygiene practices and identify where additional hand hygiene education may need to occur.

Equipment: ABHR

Activity: Routinely ask everyone to perform hand hygiene before you get started and provide feedback on how well, or poorly it may have been completed.

Hand Hygiene

Objective: To ensure staff are maintaining correct hand hygiene practices and identify where additional hand hygiene education may need to occur.

Equipment: ABHR, hand wash sink, glitterbug (or similar) set

• Activity: Have everyone use the glitterbug cream or gel and view with the ultraviolent light. Perform hand hygiene and review with light to assess effectiveness.

Hand Hygiene and infection control

Objective: To ensure staff are maintaining correct hand hygiene practices and identify where additional hand hygiene education may need to occur.

To identify how contaminants can be easily spread across and workspace (and self) and reinforce infection control processes.

Equipment: ABHR, hand wash sink, glitterbug powder set (or similar with powder), clinell wipes

 Activity: Place glitterbug on door handles and other frequented areas prior to staff coming in for shift Have team meeting and use ultraviolet light to review where the glitterbug has ended up (it could be on scrubs, face, other surfaces etc. Perform hand hygiene and infection control cleaning (cleaning from clean to dirty) to remove. Reassess with light the effectiveness of the cleaning and hand hygiene.

PPE breach reporting

Objective: To ensure staff are aware of what constitutes a PPE breach and are competent and confident to notify their Pod Team Leader and utilise the reporting system for PPE breaches.

Equipment: Use of the reporting system online training system if available or use of the below template.

Activity: Have everyone complete the breach report.

Remember all PPE breaches need to be reported, and ensure team members are aware of what constitutes a PPE breach (including glove tears, touching of face wearing gloves, gown tears etc.). Please note that PPE breakage in donning does not constitute a breach but does need to be recorded and relayed to the Infection Prevention Team via email for quality assurance purposes.



Breach reporting template

Element	Questions as part of the review process	Relevant reporting label		
Where	Where did the incident occur?	Where did it happen		
Who	Who is reporting the incident?	Who is reporting the incident		
WIIO	Who was affected?	Who /what was affected		
When	When did the incident occur?	When did it happen		
Classification	How is this incident classified?	Classification		
	What are the characteristics of the incident?	How classified Primary incident type		
	Describe what happened	What happened		
	What initial actions did you take?	What happened Immediate actions taken		
What	What is the incident severity rating (ISR) at the time of the incident report?	Incident assessment Set severity rating		
	Answer the why and how did the incident	Incident assessment Possible contributing		
	occur? What factors contributed to it?	factors		
Investigation and follow up	What investigation was undertaken and required follow up if any done?	Investigation and followup		

PPE Allocation

Objective: To maintain staff familiarity with PPE equipment.

Equipment: Print out of a person laminated if possible (A3 size or bigger), blue-tack, printouts of PPE-mask, gown, gloves and eye protection laminated if possible.

Activity: Have each staff member wear a blindfold (have enough blindfolds for each person so this is not shared between staff) and stick the PPE on the right spot on the image of the person.

PPE donning and doffing task

Objective: To maintain staff competency with PPE donning and doffing.

Equipment: PPE (N95/P2 mask, gown, ABHR, gloves, eye protection/face shield)

Activity: Put everyone's name in a hat and whoever gets their name pulled out needs to demonstrate correct and safe PPE donning and doffing to the rest of the team.

Level of PPE required.

Objective: To ensure staff are confident with the correct level of PPE required for different tasks performed in the orange zone.

Equipment: Print out sheet of different tasks for each person to complete, see Appendix B (or read out each one and have group decide, or put tasks on A3 paper and have staff respond on this.

Activity: Provide the following examples of tasks performed in the Orange zone and have team members identify what PPE equipment is required for each.



Identify what PPE is required for the following tasks. Note tasks have been based on PPE required for COVID-19 in an Orange zone.

Different PPE required: surgical mask, N95 mask, face shield, gown, gloves, eye protection

Tasks	Required PPE
Routine COVID-19 health check with questions and temperature.	N95/P2 mask, gown, gloves, eye protection/ face shield
Check someone's blood pressure as part of a primary assessment.	N95/P2 mask, gown, gloves, eye protection/ face shield
Accompany someone on a routine COVID-19 health check as the clean/contact person.	N95/P2 mask, gloves, eye protection/face shield
Clean a room in the Orange zone after people have completed their quarantine period and left.	N95/P2 mask, gloves, eye protection/face shield, gown
Clean a room in the Orange zone after a person has been relocated due to a COVID-19 positive swab result.	N95/P2 mask, face shield, gown, gloves, eye protection
Deliver meals to residents	N95/P2 mask, gloves, eye protection/face shield
Perform routine maintenance on the washing machines in the laundry areas	N95/P2 mask, gloves, eye protection/face shield, gown
Perform a COVID-19 swab	N95 mask, face shield, gown, gloves
Attend a child resident who has fallen over and is bleeding from a head laceration	N95 mask, face shield, gown, gloves
Escort a new resident to their room	N95/P2 mask, gloves, eye protection/face shield, gown
Attend a callout to unlock a door for a resident who has locked themselves out	N95/P2 mask, gloves, eye protection/face shield



Disease aetiology and characteristic (COVID-19) review

Objective: To ensure staff remain updated on latest disease (COVID-19) & PPE research, news and facts to inform their professional practice

Equipment: Access to computers and internet

Activity: Have everyone spend 5-10 minutes looking up the latest research, news and facts on COVID-19 and PPE and each person to then present one of their findings back to the group.

Websites to suggest:

- National Government dedicated websites
- The Department of Health, Series of National Guidelines (SoNGs)
- The Lancet. COVID-19 Resource Centre
- Australian Government Department of Health
- World Health Organisation: Coronavirus disease (COVID-19) pandemic
- Centres for Disease Control and Prevention



Appendices C

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Appendices D

Process resources used for staff with RAT testing





Appendices E

Process resources used for residents with RAT testing



All people entering a Northern Territory remote community with a first dose COVID-19 vaccination rate below 70% from Greater Darwin, Katherine, Alice Springs or interstate, are required to get a Rapid Antigen Test up to 72 hours prior to entering. A list of low vaccinated remote communities can be found at: <u>coronavirus.nt.gov.au/stay-safe/low-vaccinated-communities</u>

This website is constantly updated as vaccination rates increase, so please check regularly.

Completing your Rapid Antigen Test at home or work

If undertaking a Rapid Antigen Test at home or work, please follow the manufacturers instructions to help you take your test and interpret the results correctly.

Interpreting your results

The Rapid Antigen Testing pad will show your results within 15-20 minutes. If your result is negative – one line will appear on the testing pad If your result is positive – two lines will appear on the testing pad

If your result is NEGATIVE (one line):

For proof of your negative test:

Take a photo of your test, showing the date and time the photo was taken

If your result is POSITIVE (two lines):

- Immediately self-isolate
- Call the NT COVID-19 Hotline on 1800 490 484.

For more information

For more information on Rapid Antigen Testing, please contact the COVID-19 Hotline on 1800 490 484. If you require further assistance to complete your Rapid Antigen Test, please visit one of our NT testing sites in Greater Darwin, Alice Springs and Katherine. More information on accessing these services is available at <u>coronavirus.nt.gov.au</u>

For more information coronavirus.nt.gov.au









coronavirus.nt.gov.au



Appendices F

Risk rating	Settings
Very high risk	An outbreak in a high-risk area
High risk	Intensive care unit, high dependency unit, burns unit, renal unit, operating suites, and emergency departments.
Significant risk	General hospital wards, COVID-19 vaccination clinics, quarantine facility staff areas, and medical clinics.
Low risk	Rehabilitation, primary health care centres, long-term care, office-based, domiciliary nursing services.

Minimum Cleaning Frequency

Element	Very high risk	High risk	Significant Risk	Low risk	Method
Alcohol- based hand rub dispenser, bedside	Clean daily	Clean daily	Clean daily	Clean weekly	Detergent
Alcohol-based hand rub dispenser, not in patient/ treatment rooms	Clean daily	Clean daily	Clean daily	N/A	Detergent
Bath	Clean daily & spot/ check clean once daily	Clean daily & spot/check clean once daily	Clean daily & spot/check clean once daily	Clean daily & spot/check clean once daily	Detergent
Bed	Clean frame daily Clean underneath weekly Clean whole on discharge	Clean frame daily Clean underneath weekly Clean whole on discharge	Clean frame daily Clean underneath weekly Clean whole on discharge	When visibly solled & whole on discharge	Detergent Detergent + disinfectant for multi- resistant organism (MRO)
Bed rails	Clean twice daily & after discharge	Clean daily & after discharge	Clean daily & after discharge	Clean weekly & after discharge	Detergent Detergent + dsinfectant for MRO



Element	Very high risk	High risk	Significant Risk	Low risk	Method
Bedside table	Clean twice daily & after use	Clean daily & after use	Clean daily	Clean weekly	Detergent Detergent + disinfectant for MRO
Bidet	Clean three times daily	Clean three times daily	Clean daily	Clean daily	Detergent and disinfectant
Blood pressure cuff	Clean after use	Clean after use	Clean after use	Clean after use	Detergent
Call bell	Clean Daily Clean after discharge	Clean Daily Clean after discharge	Clean Daily Clean after discharge	Clean Weekly Clean after discharge	Detergent
	Clean twice daily	Clean daily	Clean daily	Clean weekly	Vacuum with high efficiency particulate air filter
Carpet (soft floor)	Clean 6-monthly	Clean 6-monthly	Clean annually	Clean annually	Steam clean (or shampoo)
Catheter stand/ bracket	Clean daily & after use	Clean daily & after use	Clean before initial use, after use & monthly	Clean before initial use, after use & monthly	Detergent
Ceiling	Spot clean daily & wash yearly	Spot clean daily & wash yearly	Spot clean weekly & wash yearly	Spot clean monthly & wash every 3 years	Detergent/Damp dust
Chair	Clean twice daily	Clean twice daily	Clean daily	Clean weekly	Detergent Detergent + disinfectant for MRO
Chair, dental and surrounds	N/A	N/A	N/A	Clean daily & when visibly solled	Detergent
Cleaning equipment	Clean after use	Clean after use	Clean after use	Clean after use	Detergent Detergent + disinfectant for MRO
Clipboard	Clean daily & between patient use	Clean daily & between patient use	Clean daily & between patient use	Clean weekly	Detergent



Element	Very high risk	High risk	Significant Risk	Low risk	Method
Commode	Clean contact points after use Clean whole daily	Clean contact points after use Clean whole daily	Clean contact points after use Clean whole daily	Clean contact points after use Clean whole weekly	Detergent Detergent + disinfectant for MRO
Computer & keyboard (general ward use, non- mobile, located outside patient area)	Clean twice daily or when visibly solled	Clean daily or when visibly solled	Clean daily or when visibly solled	Clean weekly or when visibly solled	Manufacturer's recommendations Install keyboard covers or washable keyboards where feasible
Computer & keyboard (used and/ or located in close proximity to patient e.g. patient bay or room)	Clean twice daily or when visibly solled Clean between patients Clean after discharge	Clean daily or when visibly solled Clean between patients Clean after discharge	Clean daily or when visibly solled Clean between patients Clean after discharge	Clean weekly or when visibly solled Clean between patients Clean after discharge	Manufacturer's recommendations Install keyboard covers or washable keyboards where feasible Detergent
Curtains and blinds	Bed curtains - change or clean weekly and upon discharge Patient with MRO or other infectious disease - change bed curtains or clean upon discharge Clean, change or replace yearly	Bed curtains - change or clean monthly Patient with MRO - change bed curtains or clean upon discharge Clean, change or replace yearly	Bed curtains - change or clean biannually Patient with MRO - change bed curtains or clean upon discharge Clean, change or replace bi- annually	Bed curtains - change or clean annually Patient with MRO - change bed curtains or clean upon discharge Clean, change or replace bi- annually	Replace with laundered curtains or steam clean while in place. Follow manufacturer's recommendations
Door knob/ handle, general	Clean twice daily	Clean daily	Clean daily	Clean Weekly	Detergent
Door knob/ handle, patient	Clean twice daily	Clean daily	Clean daily	Clean daily	Detergent Detergent + disinfectant for MRO
Drip/ intravenous stands	Clean contact points after use	Clean contact points after use	Clean contact points after use	Clean contact points after use	Detergent Detergent + disinfectant for MRO



Element	Very high risk	High risk	Significant Risk	Low risk	Method
Fan, patients	Clean daily & between patient use	Clean daily & between patient use	Clean daily & between patient use	Clean weekly & between patient use	Detergent Detergent + disinfectant for MRO
Floor, non-slip	Damp mop twice daily	Damp mop twice daily	Damp mop daily	Damp mop daily	Detergent Detergent + disinfectant for MRO
Floor, polished	Dust removal & clean twice daily	Dust removal & clean daily	Dust removal & clean daily	Dust removal & clean weekly	Detergent for routine Consider electrostatic mops Detergent + disinfectant for MRO
Fridges	Weekly & defrost as required Three times daily spot check clean when necessary	Weekly & defrost as required Daily spot check— clean when necessary	Monthly & defrost as required Daily spot check— clean when necessary	Monthly & defrost as required Daily spot check— clean when necessary	Detergent
Fridge (drug)	Clean weekly	Clean weekly	Clean weekly	Clean weekly	Detergent
Glazing, internal (incl. partitions)	Spot clean daily & full clean weekly	Spot clean daily & full clean weekly	Spot clean daily & full clean weekly	Clean weekly	Detergent
Hoist, bathroom	Clean contact points after use	Clean contact points after use	Clean contact points after use	Clean contact points after use	Detergent
Drip/IV stand & poles	Clean daily & clean contact points after use	Clean daily & clean contact points after use	Clean contact points after use	Clean contact points after use	Detergent
Light switch	Clean daily	Clean daily	Clean weekly	Clean weekly	Detergent
Bedside locker	Clean contact points twice daily	Clean contact points twice daily	Clean contact points daily	Clean contact points weekly	Detergent + disinfectant for MRO



Element	Very high risk	High risk	Significant Risk	Low risk	Method
Nanual handling (i.e. hoists)	Clean contact points after use	Clean contact points after use	Clean contact points after use	Clean contact points after use	Detergent + disinfectant for MRO
Mattress	Clean when visibly soiled/ bodily fluids & after discharge	Clean when visibly soiled/ bodily fluids & after discharge	Clean when visibly soiled/ bodily fluids & after discharge	Clean when visibly soiled/ bodily fluids & after discharge	Detergent + disinfectant for MRO
Medical equipment (e.g. IV infusion pumps, pulse oximeters) NOT connected to a patient	Clean daily (when in used between patient use	Clean daily (when in used between patient use	Clean daily (when in used between patient use	Clean weekly (when in used between patient use	Detergent + disinfectant for MRO
Medical gas equipment	Clean daily	Clean daily	Clean daily	Clean weekly	Detergent + disinfectant for MRO
Microwave	Clean daily	Clean daily	Clean daily	Clean daily	Detergent
Nebuliser, portable (when in use)	Clean daily & after use	Clean daily & after use	Clean monthly & after use & before initial use	Clean bi- monthly & after use & before initial use	Detergent
Notes folder	Clean daily	Clean daily	Clean weekly	Clean weekly	Detergent
Over bed tray table (over way table	Twice daily	Daily	Daily	Weekly	Detergent + disinfectant for MRO
Oxygen equipment	Clean daily & after use	Clean daily & after use	Clean monthly & after discharge & before initial use	Clean monthly & after discharge & before initial use	Detergent
Patient slide/ board	Clean daily & after use	Clean daily & after use	Clean monthly & after use	Clean monthly & after use	Detergent + disinfectant for MRO
Pillow (waterproof cover)	Clean when visibly soiled/ bodily substances & after discharge	Clean when visibly soiled/ bodily substances & after discharge	Clean when visibly soiled/ bodily substances & after discharge	Clean when visibly solled/ bodily substances & after discharge	Detergent + disinfectant for MRO
Sharps bin trolley	Clean daily	Clean twice weekly	Clean weekly	Clean monthly	Detergent
Shower	Clean daily & one spot check clean daily	Clean daily & one spot check clean daily	Clean daily	Clean daily	Detergent + disinfectant for MRO
Sink (hand washing)	Clean twice daily & after use	Clean twice daily & after use	Clean daily	Clean daily	Detergent



Element	Very high risk	High risk	Significant Risk	Low risk	Method
Surfaces (general horizontal) in patient room e.g. ledges	Clean twice daily & spot clean after use	Clean twice daily & spot clean after use	Clean daily & after discharge	Clean weekly & after discharge	Detergent + disinfectant for MRO
Telephone	Clean twice daily & spot clean after use	Clean twice daily & spot clean after use	Clean daily	Clean weekly	Detergent
Toilet	Clean twice daily & spot clean after use	Clean daily & spot clean after use	Clean daily	Clean weekly	Detergent
Toilet seat, raised	Clean twice daily & spot clean after use	Clean twice daily & spot clean after use	Clean monthly & before initial use & spot clean after use	Clean monthly & before initial use & spot' clean after use	Detergent + disinfectant for MRO
Trolley, dressing	Clean utilised surfaces before & after use Clean whole trolley weekly	Clean utilised surfaces before & after use Clean whole trolley weekly	Clean utilised surfaces before & after use Clean whole trolley weekly	Clean utilised surfaces before & after use Clean whole trolley weekly	Detergent + disinfectant for MRO
Trolley, linen	Clean contact points daily Clean whole trolley weekly	Clean contact points daily Clean whole trolley weekly	Clean contact points daily Clean whole trolley weekly	Clean contact points weekly Clean whole trolley monthly	Detergent
Trolley, resuscitation	Clean daily	Clean twice weekly	Clean weekly	Clean monthly	Detergent
TV, fixed (out of patient reach)	Clean weekly	Clean weekly	Clean weekly	Clean weekly	Detergent
TV, patient bedside (mobile and within patient reach)	Clean daily & between patients	Clean daily & between patients	Clean weekly & between patients	Clean monthly & between patients	Detergent/damp dust
Walls	Spot clean daily & dust weekly & full clean yearly	Spot clean daily & dust weekly & full clean yearly	Spot clean weekly & full clean yearly	Spot clean weekly & full clean yearly	Detergent/damp dust
Washbowl, patient	One full clean daily and between patient use	One full clean daily and between patient use	One full clean daily and between patient use	One full clean daily and between patient use	Detergent + disinfectant for MRO
Waste receptacle	Clean weekly & spot clean when visibly soiled/bodily substances	Clean weekly & spot clean when visibly soiled/bodily substances	Clean weekly & spot clean when visibly soiled/bodily substances	Clean weekly & spot clean when visibly solled/bodily substances	Detergent
Wheelchair	Clean daily & after use	Clean daily & after use	Clean monthly & after use	Clean monthly & after use	Detergent

Source: Adapted from National Health Service National Specifications for Cleanliness

