



## 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 identify 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.

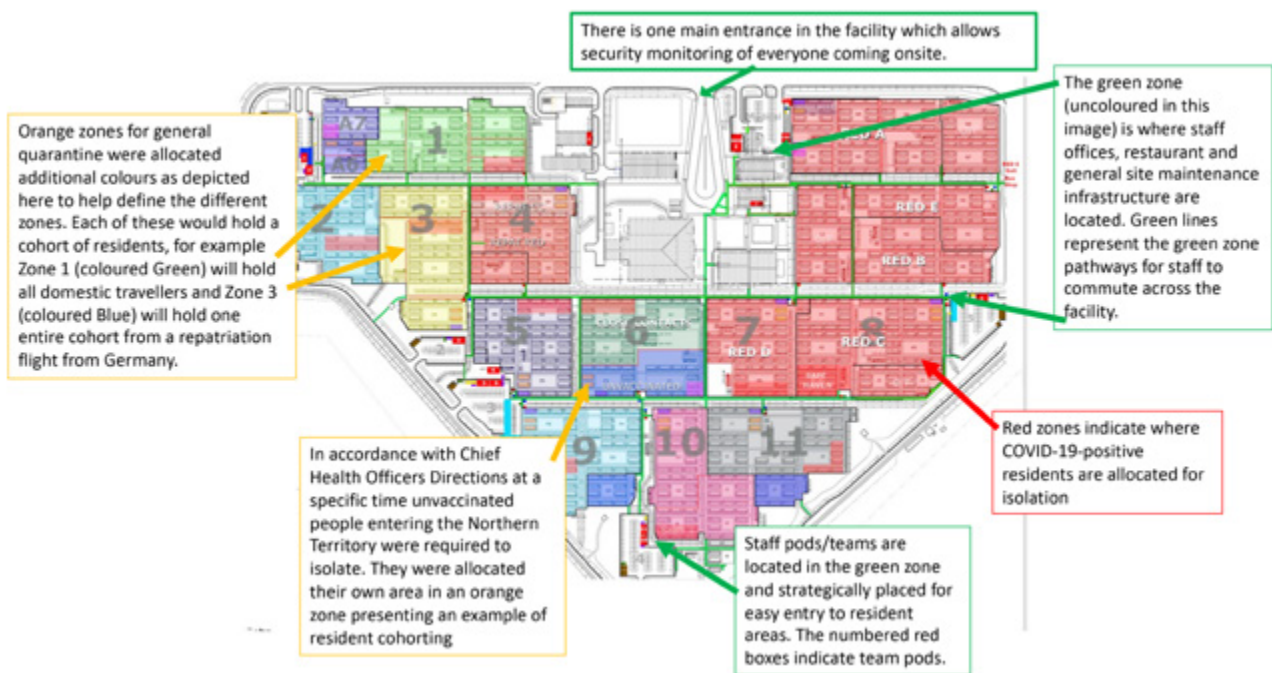
Security staff are required to monitor entry and exit of people from the red zone and all staff entering the red zone are strictly to enter in pairs and required to don full PPE/GMEG (gowns, gloves, eye protection and masks). Within the red zone, tasks that may be shared across teams in the orange zone 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.*