Introduction

Cohorting is one of many layers of protection or control measures available to prevent the spread of infection, with others including vaccination, screening, ventilation, hand hygiene, environmental cleaning and use of personal protective equipment. This document summarizes approaches and options for how congregate living settings, such as shelters, group homes, and retirement homes can cohort residents to help prevent the spread of COVID-19 during an outbreak. The document is intended to assist public health units to support congregate living settings with COVID-19 outbreaks, and is specific to COVID-19. Some of the principles in this document may also be applicable in other situations when cohorting may be instituted. This is an evergreen document that will be updated as new information becomes available.

This document provides the options for possible cohorts, considerations regarding the cohorts, and summarizes what personal protective equipment (PPE) staff should wear while providing direct care (e.g., assisting with feeding, washing, bathing, shaving, toileting, turning and managing wounds) within each cohort.

It should be noted that the principles and ideas outlined in this document may not be applicable, appropriate or possible in some outbreaks and facilities. They are presented as concepts and options for local public health units to consider and tailor for the specific congregate living settings and outbreak circumstances.
Glossary

**Congregate living settings**: Living situations where people, most or all of whom are not related, live together in a single facility with shared living space (e.g., bedrooms, bathrooms, kitchens, living rooms and/or dining rooms). Congregate living facilities include a wide range of settings, such as long-term care facilities, retirement homes, group homes, correctional and youth justice facilities, shelters, rooming and boarding houses, and dormitories.

**Cohort**: In this document, we refer to a cohort as a group of people who have or may have COVID-19 or are at similar risk of developing COVID-19.

**Cohorting**: Is the process of grouping residents based on their COVID-19 status or risk of COVID-19 during an outbreak. Cohorting is a way to help prevent the spread of infection within the facility.

**Staff cohorting**: Staff may be cohorted to work the same shift, have the same breaks, use the same break rooms etc. Staff may also be assigned to or take care of only the residents in one cohort and not move from one cohort to another.

**Outbreak and non-outbreak areas**: The outbreak area has active and/or suspect/exposed cases of COVID-19 that are linked. The non-outbreak area is the remainder of the facility. In some outbreaks, the whole facility (or multiple areas of the facility) is considered the outbreak area.

**Personal protective equipment (PPE)**: Equipment that is worn to protect an individual from transmission of infection from residents, chosen based on a risk assessment. For COVID-19, this includes any combination of gloves, gown, mask and eye protection (goggles, face shield, mask with visor).

Given the undetermined impact of the Omicron (B.1.1.529) variant, the [interim recommended PPE](#) when providing direct care for residents with suspect or confirmed COVID-19 includes a fit-tested, seal-checked N95 respirator (or equivalent or greater protection), eye protection, gown, and gloves. Other appropriate PPE includes a well-fitted surgical/procedure (medical) mask, or non-fit tested respirator, eye protection, gown and gloves for direct care of patients with suspect or confirmed COVID-19 based on risk assessment.²

**Universal masking**: When indicated, refers to all staff, visitors and residents when appropriate, wearing a mask at all times within a facility for source control (containing respiratory particles including droplets of the individual) to help prevent transmission of infection to others.

**Vaccination with COVID-19 vaccine**: For the definition of fully vaccinated in Ontario, please refer to the most recent Ministry of Health guidance.
Key Features of Cohorting

Immune status: Due to the potential of breakthrough infection in fully vaccinated residents in an outbreak setting, recommended IPAC measures will apply to all fully vaccinated, partially vaccinated and unvaccinated residents as well as those with a history of prior infection.

Defining the cohorts: Determine with the local public health unit if the whole facility will be considered the outbreak area or if there is also a non-outbreak area. Typically a small facility will be considered a whole facility outbreak. A larger facility with clearly defined units/floors, where infections are only occurring on a specific unit/floor may be able to function with non-outbreak areas. Within each area, a number of cohorts may be defined. See Appendix 1. Cohorting may look different in every outbreak and across different types of facilities. The local public health unit can help determine the cohorts.

Keeping cohorts separate: Residents within each cohort should be separated from residents from other cohorts whenever possible.

The priority in cohorting is to:

- Separate the outbreak area from the non-outbreak area (if there is a non-outbreak area).
- Within the outbreak area, separate the:
  - exposed, well, and not known to have COVID-19 cohort,
  - exposed, ill but not known to have COVID-19 cohort, and
  - COVID-19 positive and infectious cohort.

If possible:

- The exposed, well and not known to have COVID-19 cohort can be further divided into the following sub-cohorts: those who had close contact with someone with COVID-19 and those who did not.
- The exposed, ill but not known to have COVID-19 cohort can be further divided into the following sub-cohorts: those who are COVID-19 negative and those with unknown status.

Keeping residents separate from each other within cohorts: Within most cohorts, it is important for residents to stay as separate from each other as possible (in private rooms with private bathrooms if at all possible). If a private room is not available, residents should stay as far apart as possible (at least 2 metres apart) at all times. Universal masking is recommended in common spaces, used by the cohort, if tolerated. This is because some residents may be infected without having symptoms and therefore can spread infection to others they are near. See Appendix 2 for considerations regarding cohorting.

Staff cohorting: Staff should ideally work only with one cohort of residents on each shift and over the course of the outbreak if possible. If staff are required to work with multiple cohorts on a shift, they should move from the lowest risk to the highest risk cohorts (see Figure 1).

Personal protective equipment (PPE): Until there is further evidence on the Omicron (B.1.1.529) variant transmission, the current recommended PPE when providing direct care for residents with suspect or confirmed COVID-19 includes a fit-tested, seal-checked N95 respirator (or equivalent or greater protection), eye protection, gown, and gloves. Other appropriate PPE includes a well-fitted surgical/procedure (medical) mask, or non-fit tested respirator, eye protection, gown and gloves for direct care of patients with suspect or confirmed COVID-19 based on risk assessment. All PPE should be changed in between care of residents during an outbreak. Extended use of PPE is not recommended outside of supply shortages.
Resident Cohorting

Outbreak and Non-outbreak Areas

The local public health unit will help define the outbreak area and non-outbreak area. The outbreak area could be the whole facility or only certain parts of the facility depending on: the number of COVID-19 cases and where they are located in the facility; the movement of staff and residents within the facility; and the layout of the facility. It is best to define the outbreak area broadly to ensure maximum protection of residents and staff. Non-outbreak areas should only be those areas which have clearly had no linked cases of COVID-19, and no exposed staff or residents, and no mixing of residents or staff with floors/units that have confirmed cases or exposed staff or residents (e.g., the non-outbreak area is a completely separate building or wing with no mixing of residents or staff with the outbreak area).

When in doubt, it is best to declare the whole facility in outbreak. If there is a non-outbreak area, residents and staff in that area should be monitored closely for signs and symptoms of COVID-19.

Separating Cohorts

Residents from one cohort should not mix with residents from other cohorts. Residents may need to be moved into a different cohort should there be a change in their status e.g., develop symptoms or newly test positive. See Appendix 1 for a list of possible cohorts. Only those who have clear their COVID-19 infection can move from the outbreak area to the non-outbreak area.

When residents are cohorted, it is important for each cohort to be as far apart as possible, such as in separate wings, floors, units or sections of the facility or using an offsite space (e.g., motel, separate building). The appropriate staffing and supports must be available for residents in each cohort.

Spacing Resident Sleeping Areas within Cohorts

In most cohorts it is not known who has or does not have the infection and residents can be infectious without having symptoms, therefore residents within cohorts need to stay as far apart as possible from each other (in private rooms with private bathrooms if at all possible). If a private room is not available, residents should be kept as far apart as possible (at least 2 metres apart) at all times. See Appendix 2.

For residents who should stay as far apart as possible (at least two meters apart), but cannot be in a private room, consider solid or cloth partitions (that do not significantly hinder airflow), pylons, stanchions or markings on the floor to support separation. Beds can be arranged head to foot or foot to head to increase the distance between residents’ heads. Bunk beds should be avoided. See below for considerations regarding meals and bathrooms.

Moving Residents

Prior to moving residents, discussion should occur with the local public health unit to help determine the safest move strategy. It is important to recognize that a resident who may have been exposed to COVID-19 and not identified could potentially be incubating infection which could result in transmission of infections in the new area.

Relocation of residents may be traumatic or disconcerting and consideration should be given to providing additional mental health or emotional supports for residents, as required. Consider opportunities to maintain social interactions between cohorts and between residents and others outside of the facility while maintaining physical distancing (e.g., telephone, video chat).
Meals
If at all possible, all residents should have their meals in their rooms. If residents must eat in a group, it should only be with their cohort if possible. Using more than one dining room space can be considered. The scheduled order of using a shared dining room should be from the lowest risk cohort to the highest risk cohort, if possible. See Figure 1.

Residents in the dining room should remain as far apart as possible and at least two metres apart. Physical distancing may be achieved via re-arrangement of furniture so that chairs are two metres apart and residents are not facing each other. Tables, arm rests on chairs and other frequently touched surfaces should be cleaned and disinfected between cohorts. Shared items like salt and pepper shakers and food containers (e.g., condiment bottles, water pitchers, coffee and cream dispensers) should be removed and replaced with single use items.

Bathrooms
Private bathrooms for each resident are preferred if at all possible particularly for the cohorts not known to have confirmed COVID-19. If bathrooms must be shared, each cohort should have their own bathroom if possible. If different cohorts must share a bathroom, consider each cohort using it at different times for activities that require longer time in the bathroom, such as personal hygiene (e.g., for washing, showering, shaving). If the bathrooms must be shared between cohorts, the order of using the bathroom should be from the lowest risk cohort to the highest risk cohort, if possible. See Figure 1. If possible, clean and disinfect the bathroom in between cohorts. Limit capacity in the bathroom based on ability to physically distance; residents should remain as far apart as possible at all times and at least two metres apart and remain masked when possible; consider only having one individual use the bathroom at a time, if possible and particularly if the bathroom is small.

Figure 1: Risk Levels
Staff Cohorting

Some principles of staff cohorting are as follows:

- All staff should be fully vaccinated against COVID-19 including any recommended booster doses if eligible. Avoid partially vaccinated or unvaccinated staff working in the outbreak area.

- Staff should be assigned to care for only one cohort of residents during each shift (and subsequent shifts) if at all possible.

- Over the course of the outbreak, staff should work with only one cohort, and not switch between cohorts if possible.
  
  - Any partially vaccinated or unvaccinated staff who were exposed to the outbreak area, particularly without the use of appropriate PPE (e.g., worked in the outbreak area before the outbreak was recognized) and have subsequently been approved to return to work during their isolation period, should not work in the non-outbreak area. Vaccinated staff who were exposed and cleared to continue work should self-monitor for symptoms of COVID-19.

- Based on Ministry’s guidance COVID-19 Integrated Testing & Case, Contact and Outbreak Management Interim Guidance: Omicron Surge staff who are previously positive (i.e., have had COVID-19 infection within the previous 90 days) and no longer require isolation may work with the COVID-19 positive cohort.\(^3\)

- Staff working with one cohort should remain separate from each other and from staff members working with other cohorts. It is very important for staff to stay at least two metres from each other at all times, including during breaks and meals and remain masked outside of when eating and drinking. Each staff cohort should use the staff room at separate times if possible. Frequently-touched staff room surfaces like table tops and chair arm rests should be cleaned between cohorts.

- Work flow should be organized so care to the cohort is grouped together, to minimize repeated visits to the same cohort. Work flow for individual residents should also consider bundling tasks to minimize multiple visits to the resident (e.g., organize bathing, bed linen change and medication into one visit).

- When unavoidable, if staff must move between the cohorts, they should go from the lowest risk cohort to the highest risk cohorts if at all possible. See Figure 1.
PPE and Masking for Source Control

In the Non-Outbreak Area

Staff should wear a medical (surgical/procedure) mask at all times (except when eating or drinking – when they should stay two metres away from others – or when alone in a private space). At the discretion of the public health unit, the need for eye protection can be determined.

Other PPE will be dependent on the type of care being provided to the resident and the resident’s health status, as per usual practice (Routine and Additional Precautions).  

In the Outbreak Area

- Staff members should wear a medical mask and eye protection (e.g., face shield, goggles) in resident areas and in addition wear a gown in areas where unanticipated direct resident interactions may be possible.

- Given the undetermined impact of the Omicron (B.1.1.529) variant, the interim recommended PPE when providing direct care for residents with suspect or confirmed COVID-19 includes a fit-tested, seal-checked N95 respirator (or equivalent or greater protection), eye protection, gown, and gloves. Other appropriate PPE includes a well-fitted surgical/procedure (medical) mask, or non-fit tested respirator, eye protection, gown and gloves for direct care of patients with suspect or confirmed COVID-19 based on risk assessment.

- Masks should be worn in non-resident areas, such as staff-only areas or break rooms.

- Gloves should be worn for direct care (e.g., assisting with feeding, washing, bathing, shaving, toileting, turning and managing wounds) as per Routine Practices.

- Gloves must always be changed between residents and hands cleaned (i.e., washed with liquid soap and water or use of an alcohol-based hand rub) before putting on and after taking off gloves.

- Gloves must be removed and hands cleaned before removing any facial protection and then hands should be cleaned again. See information on putting on and taking off PPE.

- If staff must move between cohorts, they should go from a lower risk to a higher risk cohort (see Figure 1) and should change their PPE when moving between these cohorts.

- All PPE should be changed when moving from resident care to non-resident care activities using appropriate technique for removing PPE.

- PPE must always be changed if it becomes wet or dirty.
Appendix 1: Possible Cohorts of Residents in Congregate Living Settings Outbreaks of COVID-19

Non-outbreak Area (If There Is One)

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Close contact with COVID-19 case(s)</th>
<th>COVID-19 Symptoms</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolved COVID-19</td>
<td>Not applicable (no new high risk exposure)</td>
<td>Now absent/improving</td>
<td>Initially positive; cleared as per Ministry Guidance on testing and clearance³</td>
</tr>
<tr>
<td>Never exposed and well</td>
<td>No</td>
<td>Absent</td>
<td>No test results or negative</td>
</tr>
</tbody>
</table>

Outbreak Area

Exposed and Well Cohort

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Close contact with COVID-19 case(s)</th>
<th>COVID-19 Symptoms</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not close contact of a case*</td>
<td>No</td>
<td>Absent</td>
<td>No test result or negative</td>
</tr>
<tr>
<td>Close contact of a case*</td>
<td>Yes</td>
<td>Absent</td>
<td>No test result or negative</td>
</tr>
</tbody>
</table>

Exposed, Ill but Not Known to Have COVID-19 Cohort

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Close contact with COVID-19 case(s)</th>
<th>COVID-19 Symptoms</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposed, ill and COVID-19 negative</td>
<td>Yes or no</td>
<td>Present</td>
<td>Negative</td>
</tr>
<tr>
<td>Exposed, ill and COVID-19 status unknown</td>
<td>Yes or no</td>
<td>Present</td>
<td>No test result or results pending</td>
</tr>
</tbody>
</table>
## COVID-19 Positive and Infectious Cohort

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Close contact with COVID-19 case(s)</th>
<th>COVID-19 Symptoms</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 positive and infectious</td>
<td>Yes or no</td>
<td>Present or absent</td>
<td>Positive</td>
</tr>
</tbody>
</table>

* Close contacts include roommates, dining table mates and others who have spent time within two metres of someone who has COVID-19 if the contact was not wearing appropriate PPE. See [Public Health Management of Cases and Contacts of COVID-19 in Ontario](http://www.publichealthontario.ca) for details on contact exposure assessment.\(^9,10\)
Appendix 2: Cohort Considerations (Including Resident Bed Placement and Movement with the Cohort Area)

Non-outbreak Area (If There Is One)

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Considerations</th>
<th>Resident bed placement and movement within the cohort area</th>
</tr>
</thead>
</table>
| Resolved COVID-19    | Once a resident is cleared by public health, remove from COVID-19 positive cohort and place in the non-outbreak area, if possible.³ | • May share rooms if needed, safe and appropriate, including with residents in the never exposed and well sub-cohort.  
• Should remain two metres apart, as recommended for all residents.  
• May use common areas, but should remain two metres apart from other residents. |
| Never exposed and well | Keep outbreak and non-outbreak areas totally separate, including staff | • May share rooms if needed and appropriate, including with resident with resolved COVID-19.  
• Should remain two metres apart, as recommended for all residents.  
• May use common areas, but should remain two metres apart from other residents. |
## Outbreak Area

### Exposed and Well Cohort

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Considerations</th>
<th>Resident bed placement and movement within the cohort area</th>
</tr>
</thead>
</table>
| Not close contact of a case* | May not be able to identify these individuals or everyone in the cohort may have had close contact | • Private rooms with private bathrooms if at all possible. If not possible, as far apart as possible (at least 2 metres apart at all times).  
• If possible, should not leave their rooms, except for essential care.  
• May be placed with a resolved COVID-19 resident. |
| Close contacts of a case* | May not be able to identify these individuals | • Private rooms with private bathrooms if at all possible. If not possible, as far apart as possible (at least 2 metres apart at all times).  
• If possible, should not leave their rooms, except for essential care.  
• May be placed with a resolved COVID-19 resident. |

### Exposed, Ill but Not Known to Have COVID-19 Cohort

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Considerations</th>
<th>Resident bed placement and movement within the cohort area</th>
</tr>
</thead>
</table>
| Exposed, ill and COVID-19 negative | If symptoms persist or worsen, consider [re-testing for COVID-19](#). Consider testing for other causes of their illness | • Private rooms with private bathrooms if at all possible. If not possible, as far apart as possible (at least 2 metres apart at all times).  
• If possible, should not leave their rooms, except for essential care |
| Exposed, ill and COVID-19 status unknown | Offer testing if not already offered | • Remain in current room pending test results, with bed as far apart as possible and at least two metres from others  
• Move to appropriate cohort based on test results and in consultation with local PHU  
• Should not leave their rooms, except for essential care. |
## Resolved COVID-19 Positive (no longer infectious) Cohort

<table>
<thead>
<tr>
<th>Possible sub-cohorts</th>
<th>Considerations</th>
<th>Resident bed placement and movement within the cohort area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolved COVID-19</td>
<td>Consult with public health.</td>
<td>• May share rooms if needed with the following sub-cohorts:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Resolved COVID-19 resident</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not close contact of a case</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Close contacts of a case</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• COVID-19 positive and infectious</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Should remain two metres apart, as recommended for all residents.</td>
</tr>
</tbody>
</table>

## COVID-19 Positive and Infectious Cohort

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Considerations</th>
<th>Resident bed placement and movement within the cohort area</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 positive and infectious</td>
<td>Infectious until cleared as per Ministry guidance&lt;sup&gt;3&lt;/sup&gt;</td>
<td>• May share rooms if needed, safe and appropriate; maintain 2 metre separation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• May be placed with a previously positive and recovered COVID-19 resident</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Should not leave their rooms, except for essential care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Activities within the cohort may be considered in consultation with the local public health unit.</td>
</tr>
</tbody>
</table>

* Close contacts include roommates, dining table mates and others who have spent time within two metres of someone who has COVID-19 if the contact was not wearing appropriate PPE. See Public Health Management of Cases and Contacts of COVID-19 in Ontario for details on contact exposure assessment.<sup>9,10</sup>
References


Resources


Citation

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