

Considerations for Cohorting COVID-19 Patients in Post-Acute Care Facilities

COVID-19 has had a major impact in healthcare facilities, especially in the post-acute care setting. COVID-19 has a broad clinical presentation, long incubation period, and is transmissible through asymptomatic or pre-symptomatic people, including patients/residents and healthcare personnel (HCP). Therefore, cohorting using traditional symptom-based screening alone should be avoided if possible but when necessary, done with caution given the risk of asymptomatic or pre-symptomatic infection. Cohorting is most effective when resources permit for rapid identification and isolation and when there are dedicated HCP and equipment per cohort. **Please note this document is intended to help guide decisions in consultation with the clinical team and facility specific resources. This is a rapidly evolving situation and as more data become available related to COVID-19, this information may change. For up-to-date information refer to the “Resources” section at the end of this document.**

Cohorting is only one element of infection prevention and control measures used for outbreak control. The facility should review or develop a cohorting plan **before** the identification of the first case. This plan should consider resources including the availability of testing, personal protective equipment (PPE) and staffing. When testing capacity is available and facility spacing permits, patients/residents should be organized into the following cohorts:

a) Cohort 1 – COVID-19 Positive:

This cohort consists of both symptomatic and asymptomatic patients/residents who test positive for COVID-19, including any new or re-admissions known to be positive, who have not met the discontinuation of Transmission-Based Precautions criteria. **If feasible, care for COVID-19 positive patients/residents on a separate closed unit. Patients/residents who test positive for COVID-19 are known to shed virus, regardless of symptoms; therefore, all positive patients/residents would be placed in this positive cohort.**

b) Cohort 2 – COVID-19 Negative, Exposed:

This cohort consists of symptomatic and asymptomatic patients/residents who test negative for COVID-19 with an identified exposure to someone who was positive. **Exposed individuals should be quarantined for 14 days from last exposure, regardless of test results.** All symptomatic patients/residents in this cohort should be evaluated for causes of their symptoms. Patients/residents who test negative for COVID-19 could be incubating and later test positive. To the best of their ability, long-term care facilities (LTCFs) should separate symptomatic and asymptomatic patients/residents, ideally having one group housed in private rooms. Even though symptomatic COVID-19 negative patients/residents might not be a threat to transmit COVID-19, they still may have another illness, such as influenza. Asymptomatic patients/residents should be closely monitored for symptom development.

c) Cohort 3 – COVID-19 Negative, Not Exposed:

This cohort consists of patients/residents who test **negative for COVID-19 with no COVID-19 like symptoms and are thought to have no known exposures.** The index of suspicion for an exposure should be low, as COVID-19 has been seen to rapidly spread throughout the post-acute care setting. In situations of widespread COVID-19, all negative persons in a facility would be considered exposed. **Cohort 3 should only be created when the facility is relatively certain that patients/residents have been properly isolated from**

all COVID-19 positive and incubating patients/residents and HCP. Facilities may not be able to create this cohort.

d) Cohort 4 – New or Re-admissions:

This cohort consists of all persons from the community or other healthcare facilities who are newly or re-admitted. This cohort serves as an observation area where persons remain for 14 days to monitor for symptoms that may be compatible with COVID-19. **Testing at the end of this period could be considered to increase certainty that the person is not infected.** COVID-19 positive persons who have not met the discontinuation of Transmission-Based Precautions should be placed in Cohort 1 – COVID-19 Positive. Individuals who have cleared Transmission-Based Precautions and it has been <3 months after the date of symptom onset or positive viral test (for asymptomatic) of prior infection can go to cohort 3.

Outbreak crisis recommendations

In the event of widespread identified cases, focus should be placed on cohorts 1-2. New admissions should stop until control measures are effectively instituted. Depending on a variety of factors (e.g., facility layout, private room availability, testing results) LTCFs may not be able to effectively cohort, as described above. In situations where COVID-19 positive persons are located on multiple units/wings, the facility should follow the below recommendations:

- Implement **universal Transmission-Based Precautions using COVID-19 recommended PPE (i.e., N95 respirator or higher [or facemask if unavailable], eye protection, gloves, and isolation gown)** for the care of **all patients/residents**, regardless of presence of symptoms or COVID-19 status.
- Refer to CDC Optimizing Supply of PPE and Other Equipment during Shortages at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>.
- Consider **repurposing unused space** such as therapy gyms, activity and dining rooms during this time to cohort patients/residents.
- **If there are multiple cases on the wing/unit and when movement would otherwise introduce COVID-19 to another occupied wing/unit, do not relocate them.** Limit the movement of all patients/residents and HCP in general.
- Ensure appropriate use of **engineering controls** such as curtains between patients/residents to reduce or eliminate exposures from infected individuals. This is especially important when **semi-private rooms** must be used. Allocate private rooms to maintain separation between patients/residents, based on test results and clinical presentation. For example:
 - COVID-19 positive persons may share a semi-private room to keep them grouped together.
 - Patients/residents who are colonized with or infected with multidrug-resistant organisms (MDROs), including *Clostridium difficile*, should not be placed in a semi-private room or group area when possible, unless their potential roommate(s) is/are colonized or infected with the same organism(s).
 - Private rooms may be allocated to isolate symptomatic persons or quarantine asymptomatic persons, based on availability.

- Shift focus to maintaining **dedicated HCP to a wing/unit** with a heightened focus on **infection prevention and control audits** (e.g., hand hygiene and PPE use) and providing feedback to HCP on performance.

Frequently asked questions

What if space in our facility doesn't allow us to create a "separate wing/unit" for these cohorts?

Facilities should do their best to designate separate wings/units or floors for cohorts when available; however, any general physical separation may be acceptable. This **may include one side of a wing/unit; a group of rooms at the end of a wing/hallway; or a repurposed group area** such as a gym, cafeteria or other large communal space. Patients/residents who are colonized with or infected with MDROs, including *Clostridium difficile*, should not be placed in a semi-private room or group area when possible, unless their potential roommate(s) is/are colonized or infected with the same organism(s).

What does it mean to dedicate HCP to these cohorts?

To the extent possible, the same HCP should be responsible for the care and services provided within individual cohorts. **HCP caring for the COVID-19 Positive (cohort 1), should continue to only care for patients/residents in cohort 1. All efforts should be made to keep HCP working in their assigned cohort.** If staffing resources become strained, every effort should be made to prevent HCP with high- and medium- level exposures to COVID-19 from working with cohort 3 (and cohort 4, if applicable). When crisis level staffing is in place, ensure HCP are prioritizing rounding in a "well to ill" flow to minimize risk of cross-contamination (i.e., beginning with Standard Precaution care areas and working toward Transmission-Based Precaution, then finally outbreak areas).

Can medical equipment be used across cohorts?

Dedicate medical equipment to the COVID-19 Positive (cohort 1) area. Medical equipment **should not be shared across cohorts**. If this is not possible, equipment should be used by rounding in a "well to ill" flow to minimize risk of cross-contamination. All equipment should be **appropriately cleaned and disinfected** according the manufacturer's instructions between patient/resident use.

When can patients/residents be removed from isolation and the COVID-19 Positive (cohort 1) area?

Decisions to extend or remove persons from Transmission-Based Precautions should be made in consultation with a healthcare provider and/or public health professional and is subject to differences in disease course, symptoms, living situation, available resources and clinical management. Refer to the NJDOH *Quick Reference: Discontinuation of Transmission-Based Precautions and Home Isolation for Persons Diagnosed with COVID-19* at https://www.nj.gov/health/cd/topics/covid2019_healthcare.shtml for recommended strategies.

CDC recommends patients/residents diagnosed with COVID-19 who have met criteria for discontinuation of Transmission-Based Precautions can be removed from the COVID-19 Positive (cohort 1) area. If symptoms are still present, and they have been moved off of the COVID-19 Positive (cohort 1) area, they should be placed in a private room until all symptoms resolve or are at their baseline. Once all symptoms have resolved, or returned

to baseline, they do not require further restrictions, based upon their history of COVID-19. **Routine infection prevention and control measures should remain in place, which may include maintaining Transmission-Based Precautions when unit or facility wide precautions are in place despite meeting the discontinuation criteria.**

How do we determine patient/resident exposures?

The index of suspicion for an exposure should be low, as COVID-19 has been seen to rapidly progress throughout the post-acute care setting. Exposures may include shared HCP; shared equipment; or being housed on the same wing/unit with a COVID-19 positive person. Facilities should identify patients/residents who were cared for by HCP who are COVID-19 positive and staff suspected of having COVID-19. Exposures should be traced back to 48 hours prior to symptom onset or positive test for asymptomatic positive HCP, as the exposed patient/resident may later develop symptoms of COVID-19 or test positive. Patients/residents who are identified as a close contact (e.g., cared for by these HCP should be restricted to their room and be cared for using all recommended COVID-19 PPE until results of the HCP COVID-19 testing are known. If the HCP is diagnosed with COVID-19, patients/residents should be cared for using all recommended COVID-19 PPE until 14 days after last exposure and prioritized for testing if they develop symptoms. **Lab confirmed COVID-19 positive patients/residents should be relocated to the COVID-19 Positive (cohort 1) area.**

Rapid isolation is key. Once there are multiple cases or exposures on a wing/unit, transition the wing/unit to the appropriate cohort and focus efforts on rapid implementation of control measures for unaffected wings/units (i.e., containment efforts). If there are multiple cases on the wing/unit and when movement would otherwise introduce COVID-19 to another occupied wing/unit, do not relocate them. Ensure appropriate use of engineering controls such as curtains to reduce or eliminate exposures from infected individuals.

Do patients/residents who routinely leave the facility need to be quarantined?

The facility should defer to the established policy and procedures based on their population and assessment of risk to determine if quarantine is indicated (e.g., **spending at least 15 cumulative minutes of exposure at a distance of less than 6 feet to an infected person during a 24-hour period**). Exposure risk may vary based on the local community transmission. The risk assessment should include factors such as community transmission; infection prevention and control compliance from transport personnel, the resident, and receiving facility HCP; and the presence of COVID-19 positive cases(s) at the sending and/or receiving facility. In general, **the focus should be adherence to recommended infection prevention and control measures (e.g., audits of process monitoring) with routine monitoring for any development of symptoms.** If available, these residents may be prioritized for a private room or cohorted with others who frequently leave the facility.

What should we do about roommates of patients/residents who are symptomatic or COVID-19 positive?

Roommates may already be exposed; it is generally not recommended to separate them given spatial limitations. Ensure **appropriate use of engineering controls** such as curtains to reduce or eliminate exposures between roommates.

Roommates of a laboratory confirmed COVID-19 positive case should be considered exposed but may be kept

isolated in their room after **the COVID-19 positive is transitioned to the COVID-19 Positive area (cohort 1).**

Note: When movement would otherwise introduce COVID-19 to another occupied wing/unit, do not relocate them. The exposed roommate should be cared for using all COVID-19 recommended PPE and monitored for 14 days from last exposure to the known COVID-19 case, for development of symptoms. Testing should be performed, if available.

What types of precautions should be used in each cohort?

Regardless of cohort, all HCP should adhere to Standard Precautions and any necessary Transmission-Based Precautions according to clinical presentation and diagnosis, when caring for any patients/residents.¹ **Full Transmission-Based Precautions and all recommended COVID-19 PPE should be used for all patients/residents who are:**

- **COVID-19 positive**
- **Suspected of having COVID-19**
- **New and re-admissions**
- **Exposed to any COVID-19 positive person (e.g., HCP, visitor, roommate)**
- **On a wing/unit (or facility wide), regardless of presence of symptoms, when transmission is suspected or identified²**

Facilities should Implement protocols for extended use of PPE, if resources are limited. **HCP should wear eye protection and an N95 respirator or higher (or facemask if unavailable) at all times while in the COVID-19 Positive (cohort 1) area** with gown and gloves added when entering patient/resident rooms. Facilities should consider this same approach for designated patient/resident care areas of persons who are exposed (and potentially incubating). **As part of source control efforts, staff should wear a facemask at all times while they are in the healthcare facility.** There should be emphasis on patients/residents practicing basic infection prevention and control measures including source control, especially during direct care.

Resources

¹CDC, Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings – Recommendations of the Healthcare Infection Control Practices Advisory Committee
<https://www.cdc.gov/hicpac/pdf/core-practices.pdf>

²CDC, Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>

CDC Strategies to Optimize the Supply of PPE and Equipment
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

CDC Responding to Coronavirus (COVID-19) in Nursing Homes
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursing-homes-responding.html>

NJDOH, COVID-19: Information for Healthcare Professionals
https://www.nj.gov/health/cd/topics/covid2019_healthcare.shtml