COVID-19 has had a major impact on 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. When necessary, cohorting should be 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 that 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 COVID-19 related data become available 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 routinely monitor and revise their facility specific cohorting plan. This plan should consider resources including the availability of testing, personal protective equipment (PPE), equipment, and staffing. When testing capacity is available and facility spacing permits, patients/residents may be placed 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, regardless of vaccination status, including any new or re-admitted patients/residents known to be positive who have not met the criteria for discontinuation of Transmission-Based Precautions. 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 (i.e., close contact) to someone who was positive, regardless of vaccination status. This includes new or re-admitted patients/residents who have tested negative and have been identified as a close contact in the past 14 days. Exposed individuals should be quarantined for 14 days from last exposure, regardless of negative test results or vaccination status. 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, facilities should separate symptomatic and asymptomatic patients/residents, ideally having symptomatic 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. Patients/residents who are identified as close contacts should be quarantined for 14 days and initially tested. If testing is negative, the patient/resident should be tested again 5-7 days after exposure. If testing remains negative, patients/residents should complete the remainder of their 14-day quarantine period. Testing at the end of this period could be considered to increase certainty that the person is not infected.
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. This cohort includes all individuals who have clinically recovered from SARS-CoV-2 within 90 days of symptom onset or positive test, and all fully vaccinated individuals who have not been in close contact with a suspected or known COVID-19 case. 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 transmission in a facility, 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. Given facility-wide transmission levels, Cohort 3 may or may not be applicable.

d) Cohort 4 – New or Re-admission Observation:

This cohort consists of all new and re-admitted patients/residents from the community or other healthcare facilities who are not fully vaccinated. This cohort serves as an observation area where persons remain for 14 days to monitor for symptoms that may be clinically compatible with COVID-19. Testing at the end of this period could be considered to increase certainty that the person is not infected.

EXCEPTIONS TO CONSIDER: COVID-19 positive persons who have not met the criteria for discontinuation of Transmission-Based Precautions should be placed in Cohort 1. Individuals who have met the criteria for discontinuation of Transmission-Based Precautions and it has been < 3 months after the date of symptom onset or positive viral test (for asymptomatic) of prior infection generally* require no further restrictions based on their history of COVID-19 and may go to Cohort 3. New or re-admitted patients/residents who are fully vaccinated and have not been in close contact with a suspected or known COVID-19 case can go to Cohort 3.

*Consideration needs to be given to determine whether there is concern that there may have been a false positive viral test, whether the patient/resident is immunocompromised, and whether there is evidence of exposure to a novel SARS-CoV-2 variant. If a patient/resident experiences new symptoms consistent with COVID-19 and an evaluation fails to identify a diagnosis other than SARS-CoV-2 infection (e.g., influenza), then repeat viral diagnostic testing and isolation may be warranted even if they have clinically recovered within 3 months.

Outbreak recommendations

In the event of widespread identified cases, focus should be placed on Cohorts 1 and 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) facilities 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., NIOSH-approved N95 or higher level respirator [or well-fitting 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.

  - These strategies offer a continuum of options for use when PPE supplies are stressed, running low, or exhausted.
  - Optimization strategies are meant to be considered and implemented sequentially (i.e., conventional > contingency > crisis).
  - Healthcare facilities should promptly resume conventional or standard practice as PPE availability returns to normal.

• Consider repurposing unused space such as therapy gyms, activity and dining rooms during this time to cohort patients/residents. Refer to the NJDOH COVID-19 Temporary Operational Waivers and Guidelines at https://www.nj.gov/health/legal/covid19/.

• 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. 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).

• When spacing permits, COVID-19 positive individuals should be relocated to the dedicated COVID-19 positive area (Cohort 1). Otherwise, 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 COVID-19 positive persons or quarantine close contacts based on availability.

• Prioritize 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

Do patients/residents who are fully vaccinated require quarantine?
Currently, there are no changes in infection prevention and control recommendations for fully vaccinated patients/residents who are identified as a close contact to a suspected or confirmed case. Regardless of vaccination status, patients/residents should continue to follow quarantine guidelines following an exposure to someone suspected or confirmed with COVID-19. New or re-admitted patients/residents who are fully vaccinated and have not had an exposure to a suspected or confirmed COVID-19 case do not require a 14-day quarantine for observation. Continue to follow all CDC and NJDOH recommended public health measures until more information becomes available.

Can a fully vaccinated patient/resident be roomed with an unvaccinated or partially vaccinated roommate?
Fully vaccinated refers to a person who is ≥2 weeks following receipt of the second dose in a 2-dose series, or ≥2 weeks following receipt of one dose of a single-dose vaccine, per the CDC’s Public Health Recommendations for Vaccinated Persons. A fully vaccinated patient/resident could be placed with an unvaccinated or partially vaccinated roommate if both the patients/residents have not had prolonged close contact with someone who is suspected or confirmed with SARS-CoV-2 infection or traveled in the prior 14 days to the admission or room placement. Other routine infection prevention and control practices would also apply, including:

- If either patient/resident has symptoms consistent with COVID-19 then they should be placed in a single room, if available, and isolated pending results of SARS-CoV-2 testing
- Continue to monitor all patients/residents at least daily for signs and symptoms clinically compatible with COVID-19
- Patients/residents should be reminded to practice social distancing (remain 6 ft apart) and use well-fitting source control when outside of their room

Do the CDC options to reduce quarantine apply to healthcare settings?
Individuals cared for in an inpatient healthcare setting should not test out of COVID-19 quarantine. Given the need for often extensive and close contact between patients/residents and HCP, a 14-day quarantine period continues to be recommended for patients/residents who are close contacts to a suspected or confirmed COVID-19 case. Shortening quarantine time may increase the risk of COVID-19 transmission when compared to the currently recommended 14-day quarantine. The variability of SARS-CoV-2 transmission observed to-date indicates that there may be settings (e.g., with high contact rates) where even a small risk of post-quarantine transmission could still result in substantial spread.

Asymptomatic fully vaccinated HCP (who are not immunocompromised) do not need to be restricted from work for 14 days following an exposure. For more information on HCP work restriction recommendations see the NJDOH Healthcare Personnel (HCP) EXPOSURE to Confirmed COVID-19 Case Risk Algorithm at https://www.nj.gov/health/cd/documents/topics/NCOV/Healthcare%20Personnel%20(HCP)%20Exposure%20to%20Confirmed%20COVID-19%20Case%20Risk%20Algorithm.pdf.

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. However, 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 and CDC staffing mitigation strategies are used to return HCP to work, every effort should be made to prevent exposed HCP from working with Cohort 3 (and Cohort 4, if applicable). 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. Refer to the Environmental Protection Agency website for more information on List N: Disinfectants for Coronavirus (COVID-19) at https://www.epa.gov/pesticide-registration/list-n-disinfectants-coronavirus-covid-19.

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 change based on 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.

**Asymptomatic individuals who have clinically recovered from confirmed SARS-CoV-2 infection in the last 90 days** (from either symptom onset or first positive viral test) AND have remained asymptomatic, generally*:

- Do not need to be quarantined due to a potential exposure or identified close contact
- Do not need to be retested for SARS-CoV-2 during this time frame.

*Consideration needs to be given to determine whether there is concern that there may have been a false positive viral test, whether the patient/resident is immunocompromised, and whether there is evidence of
exposure to a novel SARS-CoV-2 variant. If a patient/resident experiences new symptoms consistent with COVID-19 and an evaluation fails to identify a diagnosis other than SARS-CoV-2 infection (e.g., influenza), then repeat viral diagnostic testing and isolation may be warranted even if they have clinically recovered within 3 months.

**How do we determine if a patient/resident is a close contact?**

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. Potential exposures may include shared HCP 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. Close contacts should be traced back 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 should be restricted to their room and 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 tested initially. If testing is negative, the patient/resident should be tested again 5-7 days after exposure. If testing remains negative, patients/residents should continue quarantine for 14 days, regardless of vaccination status. Testing at the end of this period could be considered to increase certainty that the person is not infected. Lab confirmed COVID-19 positive patients/residents should be relocated to the COVID-19 Positive (Cohort 1) area. Asymptomatic individuals who have clinically recovered from confirmed SARS-CoV-2 infection in the last 90 days* would not need to be quarantined due to a potential exposure or identified as a close contact or tested during this time frame.

*Consideration needs to be given to determine whether there is concern that there may have been a false positive viral test, whether the patient/resident is immunocompromised, and whether there is evidence of exposure to a novel SARS-CoV-2 variant. If a patient/resident experiences new symptoms consistent with COVID-19 and an evaluation fails to identify a diagnosis other than SARS-CoV-2 infection (e.g., influenza), then repeat viral diagnostic testing and isolation may be warranted even if they have clinically recovered within 3 months.

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

In situations where patients/residents need to routinely leave the facility (e.g., to attend doctor’s appointments, dialysis treatments, out-patient procedures) 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 patient/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 on 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. Refer to the NJDOH COVID-19 Exposure Risk Assessment Template for Patients in Post-acute Care Settings for additional guidance.
Do all admissions or re-admissions need to be quarantined?

All new or re-admitted patients/residents who are not fully vaccinated and have not been identified as a close contact to a suspected or confirmed COVID-19 positive person should be observed for 14 days upon admission (Cohort 4). This includes admissions that test negative upon transfer or admission. Admissions who are COVID-19 positive and have not met the criteria for discontinuation of Transmission-Based Precautions should be placed in the COVID-19 Positive area (Cohort 1). Admissions who have tested negative and been identified as a close contact in the past 14 days should be placed in the COVID-19 Negative, Exposed area (Cohort 2), regardless of vaccination status.

Considerations for placement of new or re-admitted patients/residents should also be based upon the COVID-19 history of the admitted person(s) as discussed in the “EXCEPTIONS TO CONSIDER” section of Cohort 4 – New or Re-admission Observation on page 1.

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 patient/resident 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 recommended COVID-19 PPE until 14 days after last exposure and tested initially. If testing is negative, the patient/resident should be tested again 5-7 days after exposure. If testing remains negative, patients/residents should continue quarantine for 14 days. Testing at the end of this period could be considered to increase certainty that the person is not infected. If testing is positive, the patient/resident should be isolated and placed in the COVID-19 Positive area (Cohort 1).

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-admitted patients/residents from the community or other healthcare facilities who are not fully vaccinated
- Close contacts to a suspected or confirmed 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 refer to CDC Optimizing PPE Supplies at https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html when PPE supplies are stressed, running low, or absent. HCP should wear eye protection.
and an N95 respirator or higher (or well-fitting 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) and when there is moderate to substantial community transmission (e.g., when the NJDOH COVID-19 Activity Level Index\textsuperscript{3} or CALI score is Very High/High or Moderate). As part of source control efforts, staff should wear a well-fitting 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**

\textsuperscript{1}CDC, 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](https://www.cdc.gov/hicpac/pdf/core-practices.pdf)


CDC, Optimizing PPE Supplies  

CDC, Responding to Coronavirus (COVID-19) in Nursing Homes  

CDC, Updated Healthcare Infection Prevention and Control Recommendations in Response to COVID-19 Vaccination  

Environmental Protection Agency, List N: Disinfectants for Coronavirus (COVID-19)  
[https://www.epa.gov/pesticide-registration/list-n-disinfectants-coronavirus-covid-19](https://www.epa.gov/pesticide-registration/list-n-disinfectants-coronavirus-covid-19)

\textsuperscript{3}NJDOH, COVID-19 Activity Level Index  

NJDOH Healthcare Personnel (HCP) EXPOSURE to Confirmed COVID-19 Case Risk Algorithm  

NJDOH COVID-19 Temporary Operational Waivers and Guidelines  
[https://www.nj.gov/health/legal/covid19/](https://www.nj.gov/health/legal/covid19/)

NJDOH Quick Reference: Discontinuation of Transmission-Based Precautions and Home Isolation for Persons Diagnosed with COVID-19  