



### CORE PRINCIPLES OF INFECTION CONTROL

It is expected that COVID-19 infection prevention and control core principles be always adhered to and remain in place as long as the virus is present in epidemic levels. This standard operating procedure and Core Principles of Infection Control should be used in conjunction with all existing clinical and regulatory guidance to provide routine prevention measures to help contain and prevent the spread of COVID-19.

All LTC facilities should limit confirmed or presumed COVID-19 positive resident contact to essential direct care providers (nurse, CNA, QMA, hospice, EMS, healthcare providers, dedicated environmental services HCP) who have been trained in proper PPE for transmission-based precautions (TBP).

#### **Screening:**

Screen all persons who enter the facility; (e. g. visitors, vendors and HCP) for signs and symptoms of COVID-19 (e.g., questions about and observations of signs or symptoms) and deny entry to those with COVID-19 diagnosis, signs or symptoms, or those who have had close contact with someone with COVID-19 infection in the prior 14 days (regardless of the visitor's vaccination status).

#### **Hand hygiene** [use of alcohol-based hand rub (ABHR) is preferred]:

- Adherence to strict hand hygiene must continue for all, particularly HCP, including when entering the facility and before and after resident care. ABHR >60% are preferred unless hands are visibly soiled or when handwashing is advocated by CDC guidance.
  - [Guidance for Healthcare Providers about Hand Hygiene and COVID-19 \(CDC 5.17.20\)](#)
- ABHR > 60% should be readily available in resident rooms (ideally both inside and outside of the room) and in other resident and common areas) e.g. dining hall, therapy gym, medication rooms).

#### **Masks** (covering mouth and nose) and **Eye Protection:**

- **Direct and indirect care HCP** should wear a medical procedure mask for the duration of their shifts. N95 respirator mask should be worn in COVID-19 units and with any resident who is symptomatic or in TBP (red or yellow zone) awaiting testing. While supplies are limited, masks should be conserved and only a single mask should be worn by HCP each shift. N95 mask may only be removed (doffed) five times before it should be discarded. Masks should be changed when visibly soiled or wet. When possible, by supply and lower transmission in the facility, mask use can return to conventional usage and NIOSH-approved N95 respirators.
  - **CDC situational update as of May 2021:** The supply and availability of NIOSH-approved respirators have increased significantly over the last several months. Healthcare facilities should not be using crisis capacity strategies at this time and should promptly resume

conventional practices. Check the [NIOSH Certified Equipment List](#) to identify all NIOSH-approved respirators.

- Continue universal source controls with well-fitting face mask use by all HCP (medical grade) and visitors (cloth is acceptable) and eye protection for HCP when delivering care within 6 feet of the resident: [Strategies for Implementing Eye Protection, COVID-19 \(CDC 12.22.20\)](#)
  - All HCP must wear eye protection when caring for residents in TBP due to symptoms of COVID-19, exposure, or positive diagnosis, and during aerosol-generating procedure (AGP).
  - Fully vaccinated HCP must continue to wear a mask while **indoors**.
  - Fully vaccinated HCP may choose to not wear a facemask **outdoors** if that activity is not in medium or large crowds. Masks and social distancing under all circumstances in presence of many people is required.
- **Residents** should wear a mask (cloth is acceptable) when they leave their rooms, and when HCP are delivering care within 6 feet.
  - Fully vaccinated residents must continue to wear a mask while **indoors**.
  - Fully vaccinated residents may choose to not wear a facemask **outdoors** if that activity is not in medium or large crowds. Masks and social distancing under all circumstances in presence of many people is required.
  - ERSD and Immunocompromised residents who are fully vaccinated should consider practicing distancing and use of source controls while inside the facility.

**Social distancing:** Continue to maintain social distancing of at least 6 feet between residents, HCP and visitors as much as possible. Be mindful of the close contact definition and consider fewer than 15 minutes of close contact over the 24-hour period, when possible.

**Instructional signage:** Maintain signage throughout the facility and proper visitor education on COVID-19 signs and symptoms, infection control precautions, other applicable facility practices (e.g., use of face covering or mask, specified entries, exits and routes to designated areas, hand hygiene).

**Cleaning and disinfecting:** Perform frequent cleaning and disinfection of high touched surfaces in the facility with approved EPA disinfectants. Assure use of manufacture guidance for disinfection and perform this often, and in designated visitation areas after each visit.

- Use approved cleaning agents from: [EPA List N: Disinfectants for Coronavirus \(COVID-19\)](#)
- Contact Time- EVS and HCP should know wet to dry times for proper disinfection

**Personal Protective Equipment (PPE):** Continue to use appropriate PPE for all HCP according to CDC current guidance and the IDOH Standard Operating procedures.

- [Infection Control Guidance for Healthcare Professionals about Coronavirus \(COVID-19\) \(CDC 6.3.20\)](#)
- **Cohorting of residents:** Continue effective cohorting of residents (e.g., separate areas dedicated to COVID-19 care) that are marked clearly with signage and allow for dedicated HCP according to CDC guidance and the IDOH standard operating procedures: [Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes \(CDC 9.10.21\)](#)



- **Resident and HCP point-of-care (POC) testing** conducted as required by CMS for routine testing and outbreak controls. 42 CFR § 483.80(h) (see QSO-20-38-NH).
  - QSO-20-38-NH REVISED (CMS 9.10.21)
  - Follow Testing algorithm: [Considerations for Interpretation of Antigen Tests in LTC Facilities \(CDC 1.15.21\)](#)

## COVID-19 TRANSMISSION-BASED PRECAUTIONS

- All LTC facilities should have a plan to rapidly implement or implementing how they will cohort confirmed or presumed COVID-19 residents. The location of the COVID-19 care unit should ideally be physically separated from other rooms or units housing residents without confirmed COVID-19 infection. This could be a dedicated floor, unit or wing in the facility or a group of rooms at the end of the unit that will be used to cohort residents with COVID-19 infection. This should be done with expediency. Residents should be cohorted depending on COVID-19 status into zones. Colors can be used on facility maps to help visualize testing results to facilitate moving of residents into these zones: **Red COVID-19 zone, Yellow or Unknown COVID-19 zone, and Green COVID-19 negative or naïve zone.**
  - Cohort confirmed or presumed COVID-19 positive residents.
  - These residents should be placed in TBPs (droplet and contact) and cohorted into a COVID-19 wing, floor or building. If facilities have dedicated COVID-19 memory units, residents may continue to socialize so long as there are no COVID-19 negative residents or residents with unknown COVID-19 status in these units. See IDOH Memory Care guidance: [Strategies for dealing with COVID-19 in memory care \(IDOH 5.16.20\)](#)
  - Dedicate, **if possible**, at minimum nurse and CNA direct care providers to care for residents in the COVID-19 red unit and not work in other units during their shift. HCP who clean (EVS) should be trained and dedicated for the COVID unit.
- In general, while residents are in the red zone, the doors to the residents room should remain closed to reduce transmission when suspected or confirmed COVID-19. If there are safety risks with closing the door, fall risk, dementia or memory care the door may remain open. Work with facilities managers to implement strategies to minimize air flow into the hallway. All LTC facilities should limit confirmed or suspected COVID-19 positive resident contact to essential direct care providers (nurse, CNA, QMA, hospice, EMS, healthcare providers, dedicated environmental services HCP who have been trained in proper PPE for TBP and infection control core principles: [Strategies to Mitigate Healthcare Personnel Staffing Shortages \(CDC 3.10.21\)](#)
- All facilities should monitor PPE for conservation and capacity needs, including HCP compliance with proper donning and doffing practices.
  - Continue to check the CDC website for additional strategies to conserve PPE: [Optimizing Personal Protective Equipment \(PPE\) Supplies \(CDC 6.16.20\)](#)
  - [Personal Protective Equipment \(PPE\) Burn Rate Calculator \(CDC 3.24.21\)](#)
  - Gown capacity strategies: [Strategies for Optimizing the Supply of Isolation Gowns \(CDC 1.21.21\)](#)



- Proper donning and doffing practices job aides should be readily available to all HCP performing direct resident care. [Using Personal Protective Equipment \(PPE\) \(CDC 8.19.20\)](#)
- IDOH recommends using CDC Respiratory Surveillance line list to track their infection control activities and to track employees and residents with respiratory illness.
  - [Long Term Care Respiratory Surveillance Line List \(CDC 3.12.19\)](#)

## ZONES

Infection Control Basics	Green Zone	Yellow Zone	Red Zone
Precautions	Standard precautions	Add Contact-Droplet	Add Contact-Droplet
Mask	*Medical procedure (loop mask) or KN95	N95 Mask (NIOSH-approved N95 respirators)	N95 Mask (NIOSH-approved N95 respirators)
Eye Protection	**All HCP: Eye Protection for resident care when community transmission is substantial or high.	*** All HCP: Eye protection for resident care TBP	+ ** All HCP: Eye protection for resident care TBP
Gown	Standard precautions	°Gown	°Gown
Gloves	Standard precautions	Gloves	Gloves
Signage	Not required	Post signage on residents' doors	Post signage on resident's door

\* HCP should not wear cloth masks

\*\***Preservation of protective eyewear/goggles or face shield:** Do not touch eye or face protection during use. Hand Hygiene must be performed after any touching. Eye protection should be close to face with no gaps at top, bottom, or sides of eyes. Hand hygiene must be performed before and after donning and doffing eye or face protection.

†**All HCP must keep on eye protection for any symptomatic or positive COVID-19 resident in TBP.**

**Extended Wear Gowns: reuse of gowns is different by zone (See guidance below)**

- **Resident Mobility in TBP**
  - Limit movement throughout facility during TBP
    - Minimize resident's movement around the building, confined to room or as in memory care consider placement in single room with dedicated HCP to care for this resident.
  - Essential movement (therapy, showers, restroom, etc.)
    - Mask always when out of room
    - Perform hand hygiene before leaving and upon returning to room
    - Social distance

**COVID-19 Positive (Red Zone):** These are residents who are confirmed COVID-19 positive and who, based on [CDC criteria](#), still warrant standard contact droplet TBPs.

- HCP will wear single gown with each resident, glove, N95 respirator masks mask and eye protection (face shield/or goggles that covers top, bottom, sides of the eye, with no gaps).



Gowns and gloves should be changed after every resident encounter followed by hand hygiene:

- Masks and eye protection may be used for the entire shift if not wet or visibly soiled.
  - Residents should be wearing masks when within 6 feet of the HCP unless medically contraindicated.
  - Gowns and gloves should be changed after every resident encounter followed by hand hygiene.
  - It is expected that facilities will follow conventional use (new gown for every encounter) unless absolutely necessary to do gown conservation. HCP should batch tasks (medication and food delivery, cleaning, vital checks) to maximize single gown use.
  - In [areas of substantial to high transmission](#) in which HCP are using eye protection for all patient encounters, extended use of eye protection may be considered as a conventional capacity strategy.
- **Mask and Gown Conservation**
    - If extending the use of the N95 respirator, they should be limited to no more than five uses (five donnings) per device by the same HCP to ensure an adequate respirator performance.
      - [Strategies for Optimizing the Supply of N95 Respirators \(CDC 4.9.21\)](#)
    - If gown conservation is necessary; then extended gown use may be used in the COVID (RED) zone for all resident's care as part of crisis capacity gown use.
    - Single gown use is prioritized during gown conservation times for aerosol-generating procedures, care activities where splashes and sprays are anticipated, and high-contact resident care activities that provide opportunities for transfer of pathogens to the hands and clothing of the HCP.
    - Gowns should always be doffed prior to leaving unit/or resident room, when working in the nurse's stations and break rooms. Hand Hygiene and a new clean gown is required when returning to the COVID unit from these areas.
    - When supply and lower transmission in the facility allow, gown use can return to conventional usage. Conventional use of a single gown for each resident encounter is preferred.
      - [Strategies for Optimizing the Supply of Isolation Gowns \(CDC 1.21.21\)](#)

**Unknown COVID-19 status (Yellow Zone):** These are residents who are suspected to have been exposed or have unknown status COVID-19 and warrant standard, contact droplet TBPs.

- [Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes \(CDC 9.10.21\)](#)
- The CDC recommends managing the unknown status COVID-19 for all new admissions or re-admissions to the facility that are unvaccinated. The CDC allows for options that may include placing the resident in a single-person room in the general population area or in a separate observation area but must be kept in TBPs for the full 14 days.
- Residents who have had COVID-19 in the past 90 days to not warrant placement in the yellow zone upon admission and re-admission, as allowed by CDC guidelines.



- For any resident who tests negative for COVID-19 but has had a roommate who is positive, it is **not** recommended to place them with another roommate until 14 days after their exposure, assuming they have not developed symptoms or had a positive test. They should be placed in contact droplet TBPs and the positive resident moved to the COVID unit.
- HCP will wear single gown per resident, gloves, N95 respirator mask and eye protection (face shield/or goggles). Gowns and gloves should be changed after every resident encounter with hand hygiene performed.
  - Masks and eye protection may be used for the entire shift if not wet or visibly soiled.
  - Residents should be wearing masks when within 6 feet of the HCP unless medically contraindicated.
  - Gowns and gloves should be changed after every resident encounter followed by hand hygiene.
  - Gowns and gloves should be changed after every resident encounter.
  - In [areas of substantial to high transmission](#) in which HCP are using eye protection for all patient encounters, extended use of eye protection may be considered as a conventional capacity strategy.
- **Mask and Gown Conservation**
  - When supply and lower transmission in the facility allow, facemask use can return to conventional usage.
  - If extending the use of the N95 respirator, they should be limited to no more than five uses (five donning's) per device by the same HCP to ensure an adequate respirator performance.
    - [Strategies for Optimizing the Supply of N95 Respirators \(CDC 4.9.21\)](#)
  - When residents are sheltering in place and awaiting test results and become symptomatic then single use gowns should be used in this zone.
  - IF gown conservation is necessary; then gowns may be hung on the inside of the resident's door and used for 1 shift by the same HCP, for the same resident.
    - It is suggested to use a cloth re-washable gown for this type of extended wear when possible. If gown is contaminated, visible soiled or wet it must be changed for a new gown.

### **COVID-19 Negative (Green Zone)**

These include residents who are not suspected to have COVID-19, are asymptomatic residents who have had a negative test, and residents who have recovered from COVID-19 who meet CDC criteria for removing TBPs.

If symptomatic and testing is positive for COVID-19 then this resident should move to the COVID unit. If the resident has a roommate, the roommate should be moved to the yellow zone during testing if symptomatic, and if the roommate asymptomatic they may shelter in place in TBP during the 14-day quarantine period due to exposure. HCP should follow PPE for TBPs when caring for resident in green zone.

- **Face mask and Eye Protection Based on Vaccination Status**



- HCP must wear face mask (medical) and eye protection, face shield /or goggles that cover top, bottom, sides of eyes with no gaps) as a standard safety measure to protect LTC HCP (SNF/AL) who provide essential direct care within 6 feet of the resident, regardless of COVID-19 status according to community transmission as follows:
  - [Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes \(CDC 9.10.21\)](#)
  - For low to moderate community transmission and the facility is not in outbreak testing, then eye protection will not be required for both unvaccinated and vaccinated HCP when providing essential direct care within 6 feet to residents.
  - For substantial or high community transmission, then eye protection should be used by all HCP for all residents within 6 feet when delivering essential direct care regardless of COVID-19 status.
  - All HCP wear eye protection when caring for residents in TBP red and yellow zone for COVID 19 suspected or confirmed diagnosis.
  - In [areas of substantial to high transmission](#) in which healthcare personnel (HCP) are using eye protection for all resident encounters, extended use of eye protection may be considered as a conventional capacity strategy.
- **PPE includes:**
  - Masks and face shield may be used for the entire shift if not wet or visibly soiled.
  - Residents should be wearing masks when within 6 feet of the HCP.
  - HCP may only remove mask to eat or drink. It is expected that they are more than 6 feet away from other HCP and residents while the mask is removed.
  - Standard precautions (wearing of gown and other PPE as needed per individual resident needs) should be followed: [Standard Precautions for All Patient Care \(CDC 1.26.16\)](#)
  - For gown crisis capacity they should be prioritized for care activities where splashes and sprays are anticipated, which typically includes aerosol generating procedures.
    - These may also include standard precautions and other infections and conditions that warrant TBP within the green zone: [Type and Duration of Precautions Recommended for Selected Infections and Conditions \(CDC Sept 2007\)](#)
    - These may also include use of Enhanced Barrier precautions (EBP) for residents with novel MDROs or emerging pathogens when high-contact resident care activities occur that provide opportunities for transfer of pathogens to the hands and clothing of HCP: dressing bathing/showering, transferring, providing hygiene, changing linens, changing briefs, or assisting with toileting, device care or use, wound care.
      - [Implementation of Personal Protective Equipment \(PPE\) in Nursing Homes to Prevent Spread of Novel or Targeted Multidrug-resistant Organisms \(MDROs\) \(CDC 7.29.19\)](#)
      - When supply and lower transmission in the facility allow, mask and gown use can return to conventional usage.

## Aerosol Generating Procedures (AGPs)

- **AGP Basic Infection Prevention:**



- Limit performance of AGPs on confirmed or presumed COVID-19 positive residents unless medically necessary.
  - When possible, a private room is preferred with AGPs with the door shut for the duration of the procedure including 1 hour after the procedure ends.
  - When possible, with semi-private rooms, cohort green zone residents who use CPAP/BIPAP or nebulizers.
    - Roommates in the same zone can continue to stay in the same room
    - Curtains pulled
    - Doors closed
  - Staff providing direct care within six feet of the resident while AGP is in progress should wear full PPE including N95 mask and eye protection for all types of scenarios.
- **AGPs in Red/ Yellow Zones:**
  - For any AGP that is performed on a resident with COVID-19 or suspected COVID-19 they should be performed in a **private room** with full TBPs and the door closed for duration of procedure until one hour after the procedure ends.
  - HCP should disinfect all surfaces following the procedure.
- **AGPs in Green Zones:**
  - Make every effort to not place an unvaccinated resident in the same room when a resident is expected to need AGP in semi- private rooms.
  - During low community positivity (under 5%), and when the facility is not in outbreak testing: While **fully vaccinated resident is receiving AGP, room door may be left open if the roommate also is fully vaccinated.** If the roommate is unvaccinated, curtain must be closed.
  - IDOH AGP signage may be used: [Aerosol Generating Procedure IDOH sign](#)

## Outbreak IP Guidance

- **Unvaccinated residents** should generally be restricted to their rooms, (may shelter in place) even if testing is negative following the new contact tracing guidance and cared for by HCP wearing full PPE= gown, glove, respirator (N 95) eye protection regardless of HCP vaccination status ( TBP). They should not be participating in group activities.
- **Unvaccinated HCP** who have higher risk exposure may have work restrictions. (see [clinical guidance](#))
- **If ongoing transmission**, and outbreak continues past 14day testing, strongly consider quarantine for fully vaccinated residents and work restrictions of fully vaccinated HCP with higher risk exposures.
- **Residents who leave the facility:** Regularly screen upon return to the facility to assure proper IP precautions have been observed, risk for potential exposure, or any symptoms. Follow clinical guidance for > 24 hours and treat as re-admission.
- For [healthcare providers](#) collecting specimens or working within 6 feet of patients suspected to be infected with SARS-CoV-2, maintain [proper infection control](#) and use recommended personal





protective equipment (PPE), which includes an N95 or higher-level respirator (or facemask if a respirator is not available), eye protection, gloves, and a gown.

- For healthcare providers who are handling specimens, but are not directly involved in collection (e.g. handling self-collected specimens) and not working within 6 feet of the patient, follow [Standard Precautions](#). Healthcare providers should wear a form of [source control](#) (face mask) at all times while in the healthcare facility.
  - Healthcare providers can minimize PPE use if patients collect their own specimens while maintaining at least 6 feet of separation. [Collecting and Handling Specimens Safely](#) (CDC 2/26/21)

## ISOLATION (TRANSMISSION-BASED PRECAUTIONS) REMOVAL RECOMMENDATIONS

**Long-term care facility residents with COVID-19 should remain on standard contact and droplet precaution until at least 10 days and up to 20 days (residents with severe to critical illness or who are severely immunocompromised) after symptom onset and 24 hours after resolution of fever, without use of antipyretic medication, and improvement in symptoms (e.g., cough, shortness of breath), whichever is longer.**

Shedding may persist after symptom resolution, but it is unclear what transmission risks this presents, and prolonged isolation based on negative PCR testing as described below may not be feasible based on access to laboratory testing, availability of appropriate PPE, staffing shortages, and concern for resident quality of life. Consideration should be given to discontinuing standard contact and droplet precaution when respiratory symptoms are resolving, oxygen saturation has stabilized or improved and they have had no measured fever without use of antipyretic medication for 24 hours, and it has been at least 10 days **and up to 20 days (residents with severe to critical illness or who are severely immunocompromised)** since illness onset:

**Removal from TBP for COVID-positive residents will be based on following CDC COVID-19 Healthcare IPC guidance: Discontinuation of TBP: [Interim Infection Prevention and Control Recommendations for Healthcare Personnel During COVID-19 Pandemic 9.10.21](#)**

- **Residents with [mild to moderate](#) illness who are *not* severely immunocompromised:**
  - At least 10 days have passed *since symptoms first appeared and*
  - At least 24 hours have passed *since last* fever without the use of fever-reducing medications **and**
  - Symptoms (e.g., cough, shortness of breath) have improved
- **Residents who were asymptomatic throughout their infection and are *not* severely immunocompromised:**
  - At least 10 days have passed since the date of the first positive viral diagnostic test.
- **Residents with [severe to critical illness](#) or who are severely immunocompromised:**
  - At least 10 days and up to 20 days have passed *since symptoms first appeared and*
  - At least 24 hours have passed *since last* fever without the use of fever-reducing medications **and**
  - Symptoms (e.g., cough, shortness of breath) have improved
  - Consider consultation with infection control experts



- As described in the [Interim Guidance on Ending Isolation and Precautions for Adults with COVID-19](#), an estimated 95% of severely or critically ill patients, including some with severe immunocompromise, no longer had replication-competent virus 15 days after onset of symptoms; no patients had replication-competent virus more than 20 days after onset of symptoms. Recovery of replication-competent virus has been reported in severely immunocompromised patients beyond 20 days, and as long as 143 days after a positive SARS-CoV-2 test result.

## KEY INFECTION CONTROL RESOURCES

Review current COVID-19 Infection Preventionist (IP) toolkit for all IDOH standard work and job aides, including the LTC Infection Preventionist Checklist for Facility Outbreaks.

- [Interim Infection Prevention and Control Recommendations for Healthcare Personnel During COVID-19 Pandemic 9.10.21](#))
- [Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 \(CDC 9.10.21\)](#)
- [Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes \(CDC 9.10.21\)](#)
- [Strategies to Mitigate Healthcare Personnel HCP Shortages \(CDC 3.10.21\)](#)
- [Personal Protective Equipment \(PPE\) Burn Rate Calculator \(CDC 3.24.21\)](#)
- [Guidance for SARS-CoV-2 Point-of-Care and Rapid Testing \(CDC 3.11.21\)](#)
- [Collecting and Handling Specimens Safely \(CDC 2/26/21\)](#)
- [CDC COVID-19 print materials \(posters and fact sheets in English, Spanish, and Chinese\)](#)
- [QSO-20-39-NH REVISED \(CMS 4.27.21\)](#)
- [QSO-20-38-NH REVISED \(CMS 9.10.21\)](#)

