Considerations for Personal Protective Equipment (PPE) and Cohorting During COVID-19 Response in Long-Term Care (LTC) Facilities

Standard Precautions should be followed for every resident all the time and Transmission-Based Precautions followed as indicated. Source control, and physical distancing (when feasible and does not interfere with provision of care) are recommended for everyone in a healthcare setting. The PPE used by healthcare personnel (HCP) when caring for residents in a LTC facility and during a COVID-19 outbreak response is based on multiple factors including, but not limited to, the county COVID-19 transmission rate, the COVID-19 status of the resident(s), their exposure to SARS-CoV-2, and their vaccination status. The table below outlines recommended PPE for various scenarios of SARS-CoV-2 exposure to suspect or confirmed cases of COVID-19. In order to help stop the spread of COVID-19 during an outbreak response, residents may be moved to and housed in designated units or areas based on their COVID-19 status. These designated units or areas may be called Cold, Warm, and Hot based on the COVID-19 status of the residents.

Recommended PPE for HCP during activities when there is no COVID-19 outbreak response*	**Hand hygiene**	**Facemask (and/or source control)**	**Gloves**	**Gown**	**Eye protection[1]**	**NIOSH-approved N95 or equivalent or higher-level fit-tested respirator**
All residents, all the time	X	X **			X when substantial to high transmission rate	
Within resident room or care area	X	X	As indicated by standard precautions	As indicated by standard precautions	X when substantial to high transmission rate	
High contact activity	X	X	X	X	X	
Splash/spray possible	X	X	X	X	X	
Aerosol-generating procedure[2]	X	NA	X	X	X	X[3]
When SARS-CoV-2 not suspected but facility is in a county with substantial or high transmission:	X	X	As indicated by standard precautions	As indicated by standard precautions	X Eye protection should be worn during all patient care encounters	A NIOSH-approved N95 or equivalent or higher-level respirator is also recommended instead of a facemask when caring for patients **not** known or suspected to have SARS-CoV-2 infection in the following higher-risk situations: ● All aerosol-generating procedures ● Higher-risk surgical procedures ● Situations where additional risks for infection are present, such as caring for a patient who is not up to date with all recommended COVID-19 vaccine doses, the patient is not able to wear source control, and the area is poorly ventilated. N95 respirators may also be used if healthcare-associated SARS-CoV-2 transmission is identified.

Recommended PPE[4] for HCP when providing care to residents with SARS-CoV-2 exposure or infection	Hand hygiene	Facemask	Gloves	Gown	Eye protection	Fit-tested respirator
When entering room of a resident with suspected/symptomatic or confirmed SARS-CoV-2: (Standard + Full PPE)	X	NA	X	X	X	X[3]
When providing care for an asymptomatic resident who is up to date with COVID-19 vaccination or resident who has recovered from SARS-CoV-2 in the prior 90 days, following **close contact** with someone with SARS-CoV-2*** (Standard)	X	X	As indicated by standard precautions	As indicated by standard precautions	As indicated by standard precautions and county COVID-19 transmission rate	As indicated by standard precautions
When providing care for an asymptomatic resident who is **not** up to date with COVID-19 vaccination and has had **close contact** to someone with SARS-CoV-2 (7 to 10-day quarantine): (Standard + Full PPE)	X	NA	X	X	X	X[3]
When providing care for a newly admitted or readmitted**** resident who is up to date with COVID-19 vaccination or who has recovered from SARS-CoV-2 in the prior 90 days (Standard)	X	X	As indicated by standard precautions	As indicated by standard precautions	As indicated by standard precautions and county COVID-19 transmission rate	As indicated by standard precautions
When providing care for a newly admitted or readmitted resident who is **not** up to date with COVID-19 vaccination: (Standard + Full PPE)	X	NA	X	X	X	X[3]
When providing care for a resident who is **not** up to date with COVID-19 vaccination, during broad-based approach to outbreak response (no known exposure): (Standard + Full PPE)	X	NA	X	X	X	X[3]

*Per CMS, an outbreak is defined as a new COVID-19 infection in any healthcare personnel (HCP) or any nursing home-onset COVID-19 infection in a resident. A resident who is admitted to the facility with COVID-19 does not constitute a facility outbreak. A new COVID-19 infection in any staff or any nursing home-onset COVID-19 infection in a resident triggers an outbreak investigation.

Source control is recommended for everyone in the healthcare setting. This is particularly important for individuals, regardless of their vaccination status, who live or work in counties with substantial to high community transmission **OR who:

- Are not up to date with all recommended COVID-19 vaccine doses; or
- Have suspected or confirmed SARS-CoV-2 infection or other respiratory infection (e.g., those with runny nose, cough, sneeze); or
- Had close contact (patients and visitors) or a higher-risk exposure (HCP) with someone with SARS-CoV-2 infection for 10 days after their exposure, including those residing or working in areas of a healthcare facility experiencing SARS-CoV-2 transmission (i.e., outbreak); or
- Have moderate to severe immunocompromise; or
- Otherwise had source control and physical distancing recommended by public health authorities

Note: allowances for source control could be considered for up to date individuals (who do not meet the above criteria) in healthcare facilities located in counties with low to moderate community transmission. These individuals might choose to continue using source control if they or someone in their household is immunocompromised or at increased risk for severe disease, or if someone in their household is not up to date with all recommended COVID-19 vaccine doses.

[1] In areas of substantial to high transmission in which healthcare personnel (HCP) are using eye protection for all patient encounters, extended use of eye protection may be considered as a conventional capacity strategy.

[2] Such as endotracheal intubation and extubation, open suctioning of airways, non-invasive ventilation, CPR, sputum induction, etc. (See https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html#infection-Control for a description of aerosol-generating procedures)

[3] If available and fit-tested; otherwise, wear a well-fitted facemask. Resources on fit-testing are available on the VDH website. Facilities are encouraged to contact their local health department or healthcare coalition if assistance is needed with fit-testing.

[4] If PPE shortages exist, implement strategies to optimize PPE supply on the unit:

- Bundle care activities to minimize the number of staff entries into a room.
- Consider extended use of respirators (or facemasks if respirators are not available) and eye protection. Extended use of respirators, facemasks, and eye protection, which refers to the practice of wearing the same respirator or facemask and eye protection for the care of more than one resident (e.g., for an entire shift).
- Care must be taken to **avoid touching the respirator, facemask, or eye protection**. If this must occur (e.g., to adjust or reposition PPE), staff should perform hand hygiene immediately after touching PPE to prevent contaminating themselves or others.
- Consider prioritizing gowns for high-contact resident care activities and activities where splash or spray exposures are anticipated. If extended use of gowns is implemented as part of crisis strategies, the same gown should not be worn when caring for different residents unless it is for the care of residents with confirmed COVID-19 who are cohorted in the same area of the facility and these residents are not known to have any co-infections (e.g., ***Clostridioides difficile***).

***Asymptomatic residents who are up to date with COVID-19 vaccination or who have recovered from SARS-CoV-2 infection in the prior 90 days generally do not require use of transmission-based precautions (quarantine) following close contact with someone with SARS-CoV-2 infection unless they develop symptoms of COVID-19, OR are diagnosed with SARS-CoV-2 infection. The exposed resident should wear source control for 10 days. Exceptions: (1) Resident who is moderately to severely immunocompromised; (2) When there is uncontrolled, ongoing transmission within a facility, strong consideration for use of quarantine for up to date patients/residents on affected unit(s) and work restrictions for up-to-date HCP with higher-risk exposure; or (3) When recommended by the local health department.

****In general, residents who are up to date with all recommended COVID-19 vaccine doses and residents who have recovered from SARS-CoV-2 infection in the prior 90 days do not need to be placed in quarantine when admitted or readmitted. Quarantine (Standard + Full PPE) might be considered if the resident is moderately to severely immunocompromised.

General guidance for managing residents, close contacts, and healthcare personnel during a COVID-19 outbreak:

- During a COVID-19 outbreak response, symptomatic residents, regardless of vaccination status, should be restricted to their rooms and cared for by HCP using a NIOSH-approved N95 or equivalent or higher-level respirator, eye protection (goggles or a face shield) that covers the front and sides of the face) gloves, and a gown pending evaluation for SARS-CoV-2 infection.
- During a COVID-19 outbreak response, residents who are not up to date on COVID-19 vaccination should generally be restricted to their rooms, even if testing is negative, and cared for by HCP using an N95 or higher-level respirator, eye protection (goggles or a face shield) that covers the front and sides of the face), gloves and gown. They should **not** participate in group activities.
- Close contacts, if known, should be managed as described in Section: Manage Residents who had Close Contact with Someone with SARS-CoV-2 Infection, from CDC's Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes**.**
- In areas of substantial to high transmission in which healthcare personnel (HCP) are using eye protection for all patient encounters, extended use of eye protection may be considered as a conventional capacity strategy.
- For guidance about work restriction for HCP who are not up to date on COVID-19 vaccination who are identified to have had higher-risk exposures, refer to Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2.

Important steps to consider when designating a COVID-19 care or "hot" unit during a COVID-19 outbreak:

COVID-19 Care Unit (Hot Unit): During a COVID-19 outbreak, a separate unit/area for the care of residents with confirmed COVID-19 (those who test positive), who have not met criteria for discontinuation of transmission-based precautions.

- The unit should be physically separated from other rooms or units housing residents without suspected or confirmed COVID-19.
- Depending on facility capacity (e.g., staffing, supplies) to care for affected residents, the COVID-19 care unit (Hot Unit) can be a separate floor, unit, or wing in the facility or a group of rooms at the end of a unit. A plastic partition, a temporary wall with a door, or another means of physical separation at the entry to the unit may be utilized. The physical barrier provides awareness to anyone entering the area.
- Limit points of entry and exit. Ideally there should be a separate exit for staff to leave the area to avoid reentering the main facility.
- Place clear signage at the entrance to the COVID-19 care unit (Hot Unit) that instructs staff they must wear eye protection and an N95 or higher-level respirator (or facemask if a respirator is not available) at all times while on the unit. Gowns and gloves should be added when entering resident rooms.
- Assign dedicated staff (cohort) to work only on the COVID-19 care unit. Dedicated means that staff are assigned to care only for these patients/residents during their shifts. Staff should not cross to other areas to the extent possible during their shift.
- Staff working on the COVID-19 care unit should ideally have a restroom, break room, and work area that are separate from staff working in other areas of the facility.
- When personnel such as occupational therapy, physical therapy, wound care specialists, nurse practitioners, or other providers, cannot be dedicated to the hot unit and services cannot be delayed, consider scheduling these resident visits to the hot unit at the end of the day.
- Ensure staff practice source control measures and social distancing where appropriate. See ** above.
- Develop a schedule to ensure that high-touch surfaces in staff break rooms and work areas are frequently cleaned and disinfected (e.g., each shift).
- Perform hand hygiene by using alcohol-based hand rub (ABHR) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. Use ABHR for hand hygiene in most clinical situations. If hands are visibly soiled, use soap and water before returning to ABHR. Perform hand hygiene at appropriate times before and after all patient/resident contact, contact with potentially infectious material, and before putting on and after removing PPE.
- Educate residents about COVID-19, how it is spread, and the importance of hand hygiene, wearing face coverings/masks, and social distancing.
- Encourage residents to restrict themselves to their rooms to the extent possible.
- Encourage residents to wear face coverings or masks (if possible) when they must leave their rooms, and to perform hand hygiene when leaving and returning to their rooms.
- To the extent possible, restrict access of ancillary personnel (e.g., dietary) to the unit. To help conserve PPE and prevent transmission of COVID-19, you may consider having dietary trays delivered to the unit (nurse station/central location) and dispersed to resident rooms by staff dedicated to the unit.
- Assign environmental services (EVS) staff to work only on the unit.
    - If there are not a sufficient number of EVS staff to dedicate to this unit despite efforts to mitigate staffing shortages, restrict their access to the unit. Also, assign staff dedicated to the COVID-19 care unit to perform cleaning and disinfection of high-touch surfaces and shared equipment when in the room for resident care activities. Staff should bring an Environmental Protection Agency (EPA)-registered disinfectant (e.g., wipe) from List N into the room and wipe down high touch surfaces (e.g., light switch, doorknob, bedside table). If this responsibility is assigned to EVS personnel, they should wear all recommended PPE when in the room. PPE should be removed upon leaving the room, immediately followed by performance of hand hygiene.
- After discharge, terminal cleaning can be performed by EVS personnel. They should delay entry into the room until time has elapsed for enough air changes to remove potentially infectious particles. After this time has elapsed, EVS personnel can enter the room and should wear well-fitting source control along with a gown and gloves when performing terminal cleaning. Eye protection should be added if splashes or sprays during cleaning and

disinfection activities are anticipated or otherwise required based on the selected cleaning products. Shoe covers are not recommended at this time for SARS-CoV-2.

- Assign dedicated resident care equipment (e.g., vitals machine, blood pressure cuff, weighing scales) to the Hot Unit. Cleaning and disinfection of shared equipment should be performed between residents and the equipment should not leave the Hot Unit.
- Ensure staff have been trained on when to perform hand hygiene and the steps of proper donning and doffing of PPE. Post signage with steps of proper donning and doffing.
- Consider assigning a person to observe staff for proper PPE donning and doffing, and provide just in time education.
- If staff PPE supply is limited, implement strategies to optimize PPE supply, which might include extended use of respirators, facemasks, and eye protection and limiting gown use to high-contact care activities and those where splashes and sprays are anticipated.
- When considering when to transfer a recovered resident out of the Hot Unit, follow CDC guidelines for discontinuation of isolation and consult with the medical director.

References:

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html
https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html
https://www.cms.gov/files/document/qso-20-39-nh-revised.pdf
https://www.cms.gov/files/document/qso-20-38-nh-revised.pdf