Considerations for Personal Protective Equipment (PPE) During COVID-19 Response in Nursing Homes

Standard Precautions should be followed for every resident all the time and Transmission-Based Precautions followed as indicated. The personal protective equipment (PPE) used by healthcare personnel (HCP) when caring for residents in a nursing home and during a COVID-19 outbreak response is based on multiple factors including, but not limited to, community respiratory viral activity, the COVID-19 status of the resident, their exposure to SARS-CoV-2, and other risk factors. The table below outlines recommended PPE for various scenarios of SARS-CoV-2 exposure to suspect or confirmed cases of COVID-19. 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.

Recommended PPE for HCP during activities when there is no COVID-19 outbreak response[1]	**Hand hygiene**	**Facemask (and/or source control[2])**	**Gloves**	**Gown**	**Eye protection**	**NIOSH-approved N95 or equivalent or higher-level fit-tested respirator[3]**
Splash/spray possible	X	X	X	X	X	
Aerosol-generating procedure[4] (resident not suspected or confirmed to have SARS-CoV-2)	X	NA	X	X	X	May be considered during periods of higher levels of SARS-CoV-2 transmission in the community[5]
When SARS-CoV-2 not suspected but facility is in a county where COVID-19 hospital admission levels are **high**	X	X	As indicated by standard precautions	As indicated by standard precautions	X Facility may consider wearing eye protection during all resident care encounters	NIOSH-approved N95 or equivalent or higher-level respirator should be considered[5] for: ● All aerosol-generating procedures ● Situations where additional risks for infection are present, such as caring for a resident who is not able to wear source control, and the area is poorly ventilated. ● Healthcare-associated transmission of SARS-CoV-2 has been identified and universal respirator use by HCP is not already in place ● Universal use of N95s may be considered during all resident care encounters or in areas of the facility at higher risk for SARS-CoV-2 transmission

Recommended PPE for HCP when providing care to residents with SARS-CoV-2 exposure or infection or other special situations	Hand hygiene	Facemask (and/or source control[2])	Gloves	Gown	Eye protection	NIOSH-approved N95 or equivalent or higher-level fit-tested respirator [3]
When entering room of a resident with suspected/symptomatic or confirmed SARS-CoV-2 (Standard + Full PPE)	X	NA	X	X	X	X
When providing care for an asymptomatic resident who had **close contact** with someone with SARS-CoV-2[6] (Standard)	X	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]	As indicated by standard precautions	As indicated by standard precautions	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]
When providing care for a newly admitted or readmitted[7] asymptomatic resident (Standard)	X	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]	As indicated by standard precautions	As indicated by standard precautions	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]
When providing care for an asymptomatic resident during broad-based approach to outbreak[8] response (no known exposure): (Standard)	X	X	As indicated by standard precautions	As indicated by standard precautions	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]	As indicated by standard precautions and SARS-CoV-2 transmission in the community[5]

[1]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.

[2]Source control:

- Is always recommended for those who:
  - Have suspected or confirmed SARS-CoV-2 infection or other respiratory infection (e.g., those with runny nose, cough, sneeze); or
  - Had close contact (residents and visitors) or a higher-risk exposure (HCP) with someone with SARS-CoV-2 infection for 10 days after their exposure;
- Is recommended more broadly in the following circumstances:
  - By those residing or working on a unit or area of the facility experiencing a SARS-CoV-2 or other outbreak of respiratory infection; universal use of source control could be discontinued as a mitigation measure once the outbreak is over (e.g., no new cases of SARS-CoV-2 infection have been identified for 14 days); or
  - Have otherwise had source control recommended by public health authorities (e.g., in guidance for the community when COVID-19 hospital admission levels are high); or
  - Facility-wide, or based on a facility risk assessment, targeted toward higher risk areas (e.g., emergency departments, urgent care) or higher risk patient populations (e.g., when caring for patients with moderate to severe immunocompromise) during periods of higher levels of community SARS-CoV-2 or other respiratory virus transmission (Considerations for this risk assessment are outlined in the Appendix of the CDC SARS-CoV-2 infection prevention guidance for healthcare facilities).

[3] 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] 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/infection-control-recommendations.html#Infection-Control-FAQ for a description of aerosol-generating procedures)

[5] According to facility risk assessment and available metrics for SARS-CoV-2 virus transmission, when SARS-CoV-2 transmission in the community increases, healthcare facilities may consider requiring universal use of eye protection for all resident care encounters and use of N95 respirators for the following indications: (1) all aerosol-generating procedures; (2) for HCP working in other situations where additional risk factors for transmission are present, such as the resident is unable to use source control and the area is poorly ventilated; and (3) if healthcare-associated SARS-CoV-2 transmission is identified and universal respirator use by HCP working in affected areas is not already in place. To simplify implementation, facilities in counties with higher levels of SARS-CoV-2 transmission may consider implementing universal use of NIOSH-approved particulate respirators with N95 filters or higher for HCP during all resident care encounters or in specific units or areas of the facility at higher risk for SARS-CoV-2 transmission.

[6] Asymptomatic residents generally do not require use of empiric 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 and have a series of three viral tests (unless the resident has recovered from COVID-19 in the past 30 days). Exceptions: Transmission-based precautions may be considered if: (1) Resident is unable to be tested or wear source control for the 10 days following their exposure; (2) Resident is moderately to severely immunocompromised; (3) Resident resides on a unit with others who are moderately to severely immunocompromised; or (4) Resident resides on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventions.

[7] In general, new admissions or readmissions do not require use of empiric transmission-based precautions. Empiric transmission-based precautions may be considered for asymptomatic residents following close contact with someone with SARS-CoV-2 infection if: (1) Resident is unable to be tested or wear source control for the 10 days following their exposure; (2) Resident is moderately to severely immunocompromised; (3) Resident resides on a unit with others who are moderately to severely immunocompromised; or (4) Resident resides on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventions.

[8] 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] *may be considered* for residents who: (1) are unable to be tested or wear source control for the 10 days following their exposure; (2) are moderately to severely immunocompromised; (3) reside on a unit with others who are moderately to severely immunocompromised; or (4) reside on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventions.

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, empiric transmission-based precautions [restricting residents to their rooms, 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] *may be considered* for residents who:
    - Are unable to be tested or wear source control for the 10 days following their exposure;
    - Are moderately to severely immunocompromised;
    - Reside on a unit with others who are moderately to severely immunocompromised; or
    - Reside on a unit experiencing ongoing SARS-CoV-2 transmission that is not controlled with initial interventions
- 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**.**
- For guidance about work restriction and testing for HCP 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.

References:

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html
https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.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