

CENTERS FOR DISEASE CONTROL AND PREVENTION GUIDANCE REGARDING LIMITED AVAILABILITY OF PERSONAL PROTECTIVE EQUIPMENT

The Centers for Disease Control and Prevention (CDC) has updated “Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Healthcare Settings:” <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>.

In summary, as of March 11, 2020, CDC advises that based on local and regional situational analysis of Personal Protective Equipment (PPE) supplies, facemasks are an acceptable alternative when the supply chain of respirators cannot meet the demand. During this time, available respirators should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to healthcare providers (HCP).

- Facemasks protect the wearer from splashes and sprays.
- Respirators, which filter inspired air, offer respiratory protection.

When the supply chain is restored, facilities with a respiratory protection program should return to use of respirators for patients with known or suspected COVID-19. Facilities that do not currently have a respiratory protection program, but care for patients infected with pathogens for which a respirator is recommended, should implement a respiratory protection program

CDC has issued “Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings:” <https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html#respreuse>

In summary, MTFs may consider reusing N95 respirators when supplies are low. CDC’s National Institute for Occupational Safety and Health (NIOSH) guidance includes the following recommendations:

- Discard N95 respirators following use during aerosol generating procedures.
- Discard N95 respirators contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.
- Discard N95 respirators following close contact with any patient co-infected with an infectious disease requiring contact precautions.
- Use a cleanable face shield (preferred) or a surgical mask over an N95 respirator and/or other steps (e.g., masking patients, use of engineering controls), when feasible to reduce surface contamination of the respirator.
- Hang used respirators in a designated storage area or keep them in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, store respirators so that they do not touch each other and the person using the respirator is clearly identified. Storage containers should be disposed of or cleaned regularly.
- Clean hands with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the respirator (if necessary for comfort or to maintain fit).
- Avoid touching the inside of the respirator. If inadvertent contact is made with the inside of the respirator, perform hand hygiene as described above.

- Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a user seal check. Discard gloves after the N95 respirator is donned and any adjustments are made to ensure the respirator is sitting comfortably on your face with a good seal.

CDC has issued “Strategies for Optimizing the Supply of N95 Respirators: Conventional Capacity Strategies:” <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/conventional-capacity-strategies.html>.

In summary, even before PPE, best infection prevention and control practices call for engineering and administrative controls as the first line of defense, even before PPE concerns. Doing so can improve preservation of PPE supplies. Follow CDC’s guidance on engineering and administrative controls (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/conventional-capacity-strategies.html>) which includes as engineering controls:

- Isolation in an airborne infection room
- Use of physical barriers
- Properly maintained ventilation systems

It further includes as administrative controls:

- Limit number of patients going to hospital or outpatient settings
- Exclude all HCP not directly involved in patient care
- Limit face-to-face HCP encounters with patient
- Exclude visitors to patients with known or suspected COVID-19
- Source control
- Cohorting patients
- Cohorting HCP
- Telemedicine
- Training on indications for use of N95 respirators
- Just in time fit testing
- Limiting respirators during training
- Qualitative fit testing