COVID-19 Infection Control Guidance Update & N95 Optimization Strategies

Summary

CDC has updated the current national COVID-19 infection control guidance for healthcare to include the recommendation that all U.S. healthcare facilities put policies into place requiring everyone entering the facility to practice source control, regardless of symptoms. This recommendation is intended to protect healthcare personnel by reducing their risk for exposure as we continue to learn how COVID-19 spreads, particularly from asymptomatic and pre-symptomatic people.

The CDC has also provided a summary to explain strategies for optimizing the supply of N95 respirators during the COVID-19 response. The strategies are categorized in a continuum of care and further organized according to the hierarchy of controls, as defined below.

Healthcare providers and facilities should continue to educate patients about the importance of prevention activities to reduce transmission. As South Carolina potentially flattens its curve for new cases of COVID-19, it will remain critical for everyone to continue to practice social distancing and limit close contact with others to prevent the spread of the virus from increasing again. Successful re-opening of the state is dependent on everyone continuing to do their part by following recommendations from public health officials.

Key points regarding Infection Control Guidance for Healthcare

- When supplies are available, facemasks are generally preferred for healthcare providers to wear while they are in a healthcare facility as it offers both source control and protection for the wearer against exposure to splashes and sprays of infectious material from others.
- Cloth face coverings should not be considered PPE and should NOT be worn instead of a respirator or facemask if more than source control is required.
- Healthcare providers should consider continuing to wear their respirator or facemask (extended use) while in the healthcare facility instead of intermittently switching back to their cloth face covering, which could cause self-contamination. Healthcare providers should remove their respirator or facemask and put on their cloth face covering when leaving the facility at the end of their shift.
• Visitors and patients should be wearing their own cloth face covering upon arrival to the facility per [CDC recommendations to the general public](https://www.cdc.gov). If they are not, they should be offered a facemask or cloth face covering, as supplies allow, and instructed to wear it while in the facility.
• This recommendation does not change CDC’s guidance to use N-95 or equivalent respirators when providing care for patients with suspected or known COVID-19.
  o Facilities that do not have sufficient supplies of N-95s and equivalent respirators for all patient care should prioritize their use for activities and procedures that pose high risks of generating infectious aerosols, using facemasks for care that does not involve those activities or procedures. Once availability of supplies is reestablished, N-95s and equivalent respirators use should resume for all workers caring for these patients.
  o Facilities should consider utilizing [CDC’s PPE optimization guidance](https://www.cdc.gov) and [PPE Burn Rate Calculator](https://www.cdc.gov) in order to preserve PPE supplies and keep workers safe.

### Strategies for Optimizing the Supply of N95 respirators

#### Conventional Capacity Strategies (should be incorporated into everyday practices)

**Engineering Controls reduce exposures for healthcare personnel (HCP) by placing a barrier between the hazard and the HCP.**
- Place patients with suspected or confirmed COVID-19 in an airborne infection isolation room (AIIR) for aerosol generating procedures.
- Use physical barriers such as glass or plastic windows at reception areas, curtains between patients, etc.
- Properly maintain ventilation systems to provide air movement from a clean to contaminated flow direction.

**Administrative Controls refer to employer-dictated work practices and policies that reduce or prevent hazardous exposures.**
- Limit the number of patients going to hospitals or outpatient settings by screening patients for acute respiratory illness prior to non-urgent care or elective visits.
- Exclude all HCP not directly involved in patient care. (e.g., dietary, housekeeping employees). Reduce face-to-face HCP encounters with patients (e.g., bundling activities, use of video monitoring).
- Exclude visitors to patients with known or suspected COVID-19.
- Implement source control: Identify and assess patients who may be ill with or who may have been exposed to a patient with known COVID-19 and recommend they use facemasks until they can be placed in an AIIR or private room.
- Cohort patients: Group together patients who are infected with the same organism to confine their care to one area.
- Cohort HCP: Assign designated teams of HCP to provide care for all patients with suspected or confirmed COVID-19.
- Use telemedicine to screen and manage patients using technologies and referral networks to reduce the influx of patients to healthcare facilities.
- Train HCP on indications for use of N95 respirators.
- Train HCP on use of N95 respirators (i.e., proper use, fit, donning and doffing, etc).
- Implement just-in-time fit testing: Plan for larger scale evaluation, training, and fit testing of employees when necessary during a pandemic.
- Limit respirators during training: Determine which HCP do and do not need to be in a respiratory protection program and, when possible, allow limited re-use of respirators by individual HCP for training and then fit testing.
• Implement qualitative fit testing to assess adequacy of a respirator fit to minimize destruction of N95 respirator used in fit testing and allow for limited re-use by HCP.

Personal Protective Equipment: Respiratory Protection
• Use surgical N95 respirators only for HCP who need protection from both airborne and fluid hazards (e.g., splashes, sprays). If needed but unavailable, use face shield over standard N95 respirator.
• Use NIOSH approved alternatives to N95 respirators such as other disposable filtering face piece respirators, elastomeric respirators with appropriate filters or cartridges, powered air purifying respirators where feasible.

Contingency Capacity Strategies (during expected shortages)

Administrative Controls
• Decrease length of hospital stay for medically stable patients with COVID-19 who cannot be discharged to home for social reasons by identifying alternative non-hospital housing.
• Temporarily suspend annual fit testing per interim guidance from OSHA.

Personal Protective Equipment and Respiratory Protection
• Use N95 respirators beyond the manufacturer-designated shelf life for training and fit testing.
• Extend the use of N95 respirators by wearing the same N95 for repeated close contact encounters with several different patients, without removing the respirator (i.e., recommended guidance on implementation of extended use).

Crisis Strategies (during known shortages)

When N95 Supplies are Running Low
Personal Protective Equipment and Respiratory Protection
• Use respirators as identified by CDC as performing adequately for healthcare delivery beyond the manufacturer-designated shelf life.
• Use respirators approved under standards used in other countries that are similar to NIOSH-approved N95 respirators but that may not necessarily be NIOSH-approved.
• Implement limited re-use of N95 respirators by one HCP for multiple encounters with different patients but remove it after each encounter.
• Use additional respirators identified by CDC as NOT performing adequately for healthcare delivery beyond the manufacturer-designated shelf life.
• Prioritize the use of N95 respirators and facemasks by activity type with and without masking symptomatic patients.

When No Respirators Are Left
Administrative Controls
• Exclude HCP at higher risk for severe illness from COVID-19 from contact with known or suspected COVID-19 patients (i.e., those of older age, those with chronic medical conditions, or those who may be pregnant).
• Designate convalescent HCP for provision of care to known or suspected COVID-19 patients (those who have clinically recovered from COVID-19 and may have some protective immunity to preferentially provide care).
Engineering Controls

- Use an expedient patient isolation room for risk-reduction.
- Use a ventilated headboard to decrease risk of HCP exposure to a patient-generated aerosol.

DHEC contact information for reportable diseases and reporting requirements

Reporting of **COVID-19** is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2020 List of Reportable Conditions available at: https://www.scdhec.gov/sites/default/files/Library/CR-009025.pdf

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

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**Regional Public Health Offices – 2020**

**Mail or call reports to the Epidemiology Office in each Public Health Region**

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For information on reportable conditions, see [https://www.scdhec.gov/ReportableConditions](https://www.scdhec.gov/ReportableConditions)

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**Categories of Health Alert messages:**

- **Health Alert** Conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory** Provides important information for a specific incident or situation; may not require immediate action.
- **Health Update** Provides updated information regarding an incident or situation; unlikely to require immediate action.
- **Info Service** Provides general information that is not necessarily considered to be of an emergent nature.