

Reuse and Uninterrupted Use of Full Face Shields, N95 Respirators

Updated 11.11.2020

In order to maintain a sufficient supply of N95 respirators for the duration of the COVID pandemic, all staff and providers need to reliably follow Allina Health's reuse and uninterrupted use guidance below:

Definitions:

Uninterrupted Use - mask worn continuously without removing between patients

Reuse - same mask removed from face, stored appropriately, and used again during the current shift or a future shift

N95 respirator – a **respiratory** protective device designed to achieve a very close facial fit and very efficient filtration of airborne particles that may be present due to aerosol generating procedures (AGPs)

Full Face Shield – a clear plastic shield that fully covers the eyes and N95 respirator. A full face shield serves two purposes, providing eye protection and keeping the respirator protected so that **reuse** can occur. In order to provide adequate coverage of eyes and the respirator, position face shield “low” on the forehead to cover entire N95 respirator.

N95 Rotation - Staff will use one respirator per working day, then store the respirator for a minimum of five calendar days before reusing. Each respirator should be used for a total of three shifts. This is called the 1/3/5 plan. You do not need five respirators in a rotation if you do not work five days in a row.

Doffing and storing N95 respirator and face shield:

1. Remove gown, gloves and perform hand hygiene
2. Remove full face shield by the strap and do not touch the front of the full face shield
3. Place the full face shield face down on a clean paper towel for disinfection
 - a. Disinfect and store for reuse
4. Handling carefully by the straps only:
 - a. Remove the N95
 - b. Place in a paper bag or storage container labeled with your name and date
 - c. Perform hand hygiene
5. Discard respirators when wet, soiled or damaged and after the third re-use

Doffing and storing N95 respirator without a face shield (Note: a face shield should be worn over an N95. In limited situations a face shield may not be able to be worn if it interferes with patient care [examples include: visualization of the airway during intubation, concern over contamination of the sterile field, interference with microscope use in surgery]):

N95 should be discarded if not covered with full face shield if it becomes visibly contaminated. N95 may continue to be worn following uninterrupted and re-use procedure if not visibly contaminated in the limited circumstances where full face shield cannot be worn.

1. Remove gown, gloves and perform hand hygiene
2. Handling carefully by the straps only:
 - a. Remove the N95
 - b. Place in a paper bag or storage container labeled with your name and date
 - c. Perform hand hygiene

Donning and reuse of used N95 respirator:

1. Inspect the N95.
 - a. Ensure components such as the straps, nose bridge, and nose foam material did not degrade which can affect the quality of the fit and seal, and therefore the effectiveness of the protection.
 - b. Discard N95 respirator if it is visibly soiled, wet, or damaged.
2. Don N95 respirator
 - a. Perform fit check.
3. Perform hand hygiene

Uninterrupted full face shield with N95 respirator:

- Wear an N95 respirator and full face shield during all patient care encounters. Continue to wear N95 respirator outside of patient room for source control.
 - Avoid touching N95 respirator
 - Perform hand hygiene if N95 is touched
- Follow normal process for changing gown and gloves between patient rooms

Donning and reuse of contaminated N95 respirator AFTER 5 days of storage:

1. Follow the Donning and reuse of used N95 respirator procedure above.

References:

1. Minnesota Department of Health. Strategies for Optimizing the Supply of Personal Protective Equipment; Guidance as of April 2, 2020. Retrieved from: <https://www.health.state.mn.us/diseases/coronavirus/hcp/optimizingppe.pdf>.
2. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of N95 Respirators. Updated April 2, 2020. Retrieved from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>
3. Doremalen, N.V., Morris, D.H., Holbrook, M. G., Gamble, A., Williamson, B. N., Tamin, A., Lloyd-Smith, J. O., Wit, E. D. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. *New England Journal of Medicine*. DOI: 10.1056/NEJMc2004973