

## N95 Respirators and Face Shields: Instructions for Extended Use and Reuse

*Note: The instructions below for the reuse of N95 respirators with contact precaution isolation may be a deviation from our regular practices. These measures are being taken to conserve PPE as part of our COVID-19 response.*

**Please follow instructions below.**

### Definitions:

- **Extended use** refers to the practice of wearing the same N95 respirator or face shield for repeated close-contact encounters with individual or multiple patients **without** removing the respirator between patient encounters.
- **Reuse** refers to the practice of removing N95 respirators or face shields and reusing them for individual and multiple patients.

### When is extended use of N95 respirators or face shields appropriate?

These instructions are for all healthcare workers providing care to multiple suspected or confirmed COVID-19 patients in the following designated areas:

- Inpatient Dedicated Respiratory Care Units
- Emergency Department Respiratory Evaluation Centers
- Urgent Care and Primary Care Clinics evaluating large volume of respiratory patients
- Designated testing sites (includes clinic sub-stations and drive-up testing sites)

### Instructions for extended use:

1. Don PPE according to existing instructions.\*
2. After each patient encounter, follow existing doffing procedures UNLESS you are immediately returning to patient room or entering another patient room. In those cases, leave face shield and N95 respirator in place.\*\*
3. Perform hand hygiene.
4. Leave face shield and N95 respirator in place. Do not touch face shield or respirator. If N95 respirator or face shield is accidentally touched, perform hand hygiene with soap and water or hand sanitizer.
5. Prior to the next patient encounter, don new gown, gloves and shoe covers (if applicable).

\*NOTE: To safely re-don gowns while practicing extended use of face shield, gowns that loop overhead should be torn at the back of the neck and taped close. Gowns should not be put overhead while wearing a face shield, given the risk of accidental contamination of the inside of the gown.

\*\*Healthcare workers obtaining samples at drive-up testing sites may change gloves and perform hand hygiene ONLY between patient encounters and should keep on the other required PPE.

**N95 RESPIRATORS AND FACE SHIELDS MAY BE REUSED BY INDIVIDUAL PROVIDERS FOR THE CARE OF INDIVIDUAL OR MULTIPLE PATIENTS WITH SUSPECTED OR CONFIRMED COVID-19 INFECTION IN DESIGNATED UNITS WHEN THE FOLLOWING CRITERIA ARE MET:**

- N95 respirator is worn with face shield
- N95 respirator is NOT worn during aerosol-generating procedures\*\*\*\*
- N95 respirator is NOT contaminated with blood or bodily fluids, is NOT obviously damaged and is still functioning

**N95 RESPIRATORS MAY ALSO BE REUSED BY INDIVIDUAL PROVIDERS FOR THE CARE OF PATIENTS ON AIRBORNE ISOLATION FOR OTHER REASONS (e.g., Tuberculosis)**

**Remove face shield and N95 respirator for reuse at these times:**

- Prior to taking breaks, using restroom, eat, drink or for comfort

**PLEASE FOLLOW THESE INSTRUCTIONS TO SAFELY REUSE YOUR N95 RESPIRATOR AND FACE SHIELD**

*Note: This document replaces prior versions of the “DUHS Guidelines for N95 Respirator Conservation for Inpatient Care”*

1. Before entering patient room, label a paper bag for N95 respirator (provided on PPE cart or designated supply area) and the face shield strap with:
  - Date
  - Full name of user
2. After completing patient care, doff gown, gloves, and shoe covers (if applicable) per doffing procedures.
3. Perform hand hygiene and don clean gloves.
4. Remove then disinfect face shield using Oxivir TB or other EPA registered/hospital-approved disinfectant against SARS-CoV2 (COVID-19).\*\*\*
5. Place face shield in labeled bag, such as hanging from handle of paper bag with handles or a patient belonging bag.
6. While gloves are still on, perform hand hygiene using hospital-approved hand sanitizer.
7. Remove N95 respirator.
  - Place in appropriate receptacle at these times:
    - **Used N95 bin** - After performing high-risk aerosol-generating procedures\*\*\*\*
    - **Used N95 bin** - At end of shift for low-risk aerosol-generating procedures\*\*\*\*
    - **Used N95 bin** - If contamination occurs during patient care
    - **Trash bin** - If respirator becomes visibly soiled with blood or bodily fluids
    - **Trash bin** - If respirator becomes obviously damaged or hard to breathe through
  - At all other times, place in labeled bag and save for reuse.

\*\*\* Note: Let disinfectant dry prior to reuse of face shield

- If streaking has occurred after the face shield is dry, use paper towels to remove any residue. First use a damp paper towel and then follow it with a dry paper towel.

\*\*\*\* See table below for additional guidance regarding what to do with your N95 mask following high-risk and low-risk aerosol-generating procedures.

High-Risk and Low-Risk Aerosol-Generating Procedures		
Risk Category	Procedures	N95 Mask Reuse Protocol
<b>High Risk</b>	<ul style="list-style-type: none"> <li>• Bronchoscopy</li> <li>• Cardiopulmonary resuscitation (CPR)</li> <li>• Electrical cardioversion</li> <li>• Electrophysiology procedures requiring general anesthesia</li> <li>• Electroconvulsive therapy</li> <li>• Endotracheal intubation and extubation</li> <li>• ET tube adjustment with cuff deflated</li> <li>• Fluoroscopically guided enteric tube placements</li> <li>• Interventional radiology procedures requiring anesthesia or in patients with a tracheostomy</li> <li>• Manual ventilation</li> <li>• Open suctioning of airways</li> <li>• Sputum Induction (excludes in-line suctioning)</li> <li>• Transesophageal echocardiography</li> <li>• Upper and lower endoscopy</li> </ul>	<p>N95 mask should be recycled after each procedure.</p> <p>However, if N95 mask becomes visibly soiled with blood or bodily fluids, or if N95 mask becomes obviously damaged or hard to breathe through, place the N95 mask in the trash bin.</p>
<b>Low Risk</b>	<ul style="list-style-type: none"> <li>• Chest vest therapy</li> <li>• ET tube adjustment with cuff inflated</li> <li>• High flow oxygen (&gt; 6L)</li> <li>• High-frequency oscillating ventilators</li> <li>• Hyperinflation therapy (IS/Flutter)</li> <li>• Manual chest pathophysiology</li> <li>• Nebulization</li> <li>• Non-invasive ventilation (BiPAP or CPAP)</li> <li>• Peak flow measurements</li> <li>• Pulmonary function tests (PFTs)</li> <li>• Swallow study/evaluation</li> </ul>	<p>N95 mask can be used throughout the day on these low-risk procedures and then recycled at the end of the shift.</p> <p>However, if N95 mask becomes visibly soiled with blood or bodily fluids, or if N95 mask becomes obviously damaged or hard to breathe through, place the N95 mask in the trash bin.</p>