



HMH COVID-19 Contingency Guidelines for Mask and Respirator Use (Revised 03-31-20)

The following guideline allows HMH to accommodate the increase in patients requiring hospitalization for COVID-19 infection, provide safe clinical care and help balance our resources. Due to ongoing supply chain constraints, it is essential to reserve N95 respirators for high risk procedures or settings. The following sections will be updated as needed:

A. Mask/Respirator Use Areas (revised 03.31.20)

- a. Universal masking of all team members was implemented on 03.20.20.
 - i. Face masks are to be worn continuously by all team members in HMH inpatient, outpatient and long-term care facilities.
 - ii. Exception: N95 or elastomeric respirators may be used continuously in the Emergency Department only. This will be modified as needed.
- b. When entering the room of Confirmed COVID-19 patients or COVID-19 Patients Under Investigation (PUI), team members should don the following:
 - i. N95 or elastomeric respirator for
 1. Critically ill COVID-19 patients requiring ICU care, regardless of location
 2. COVID-19 patients who need:
 - a. Aerosol-generated procedures
 - b. Cardiopulmonary resuscitation
 - ii. Face masks for
 1. Non-critically ill COVID-19 patients
 2. Transporting COVID-19 patients
 - iii. Other personal protective equipment (PPE) must be donned as well
 1. Face shields to protect eye exposures.
 2. Gown and gloves for contact precautions.
 3. Isolation signs posted outside the patient's room will outline proper PPE to wear.
 - iv. Do not touch outside of N95 respirator when wearing.
 1. Always perform hand hygiene after touching the outside of the respirator
- c. Patients should receive a face mask in the following situations:
 - i. COVID-19 positive or PUI patients when being transported.
 - ii. Patients exhibiting any respiratory symptoms, GI symptoms, or fever and not in droplet or airborne precautions
 - iii. Immunocompromised patients (e.g. transplant patients, oncology patients)
 - iv. Pregnant patients

B. Contingency Policy for Use of Personal Face Masks or Respirators (revised 03.31.20)

- a. Overview: HMH recognizes the concerns Team Members have about the availability of Personal Protective Equipment (PPE). Requests to use one's own face mask, N95 or elastomeric respirators have been received. In order to help conserve supplies, on a temporary basis these will be allowed based on the following rules:

HMH COVID-19 Mask and Respirator Use Guidelines (03.31.20)

Jerry M. Zuckerman, MD

VP, Infection Prevention





- i. Face masks
 - a. Must be made of stretch material
 - b. Must be 3-ply
 - c. Must be disposable
 - d. Cannot be made of fabric or cloth
 - e. Must be discarded at end of day
2. N95 or Elastomeric Respirators
 - a. Must be approved by hospital command center for use
 - b. Must meet the NIOSH requirement that the respirator blocks at least 95 percent of very small (0.3 micron) particles (N95 or >) Please see NIOSH approved list at <https://www.cdc.gov/niosh/npptl/topics/respirators/cel/default.html>
 - c. Use of personal N95 or elastomeric respirators must follow mask/respirator use areas as outlined above (*Section A.b.*)
 - i. In Emergency Department, follow extended use protocol for N95 (see section xx) or reuse protocol for elastomeric respirator (see *Section D*)
 - ii. In Inpatient settings following reuse protocol (see *section C*)
 - iii. Respirators are not to be taken home after use.
 - d. HMM respiratory program does not offer fit testing or use training for elastomeric respirators.
 - i. Team members are advised to follow specific manufacturer's instructions for use
3. When the supply of either or both items is restored, HMM will have the right to rescind the use of personal masks, N95 or elastomeric respirators.

C. **Reuse of N95 Respirators Protocol** (Revised 03.31.20)

- a. Donning
 - i. Label N95 respirator prior to first use with name and date.
 - ii. Don the N95 respirator and perform a fit and seal check:
 1. Place both hands completely over donned respirator and exhale.
 2. If air leaks around nose, use both hands to mold the nose piece to the shape of your nose
 3. If air leaks at the edges, adjust straps alongside of your head.
 4. Repeat fit check.
 5. If air still leaks, then discard N95
 - iii. Cover the N95 respirator
 1. Place a procedure mask over the N95 respirator
 - iv. Put on eye protection – reusable face shield or goggles
- b. During patient care, DO NOT TOUCH your masks or eye protection.
- c. Doffing
 - i. In the patient's room, ONLY remove gown then gloves.
 - ii. Perform hand hygiene and then exit patient room.
 - iii. Put on a clean pair of gloves



- iv. Place a clean chux or blue pad on a surface top
- v. Remove face shield or goggles and disinfect with a PDI Super Sani (Purple Top) and then place on clean pad.
 - 1. Do not use bleach wipes. They may leave a cloudy film on the face shield or goggle and may irritate the eyes.
- vi. Remove the procedure mask covering the N95 and discard.
 - 1. Front is potentially contaminated, remove by holding the ear loops.
- vii. Do not use a disinfectant wipe on the N95
- viii. Remove gloves and perform hand hygiene
- ix. Remove N95 respirator
- x. Visually inspect for contamination, distortion in shape/form. If contaminated/wet, creased or bent, N95 should be discarded.
- xi. Store N95 in paper bag with the user name and date
 - 1. Discard paper bag at the same time the N95 is discarded
- d. To re-use:
 - i. Remove N95 mask from paper storage bag and visually inspect for distortion. If creased or bent do not re-use
 - ii. Perform hand hygiene and follow donning instructions above.

D. N95 Respirator Extended Use Guideline (Revised 03.31.20)

- a. Don the N95 respirator and perform a fit and seal check:
 - i. Place both hands completely over donned respirator and exhale.
 - ii. If air leaks around nose, use both hands to mold the nose piece to the shape of your nose
 - iii. If air leaks at the edges, adjust straps alongside of your head.
 - iv. Repeat fit check.
 - v. If air still leaks, then discard N95
- b. Cover the N95 respirator
 - i. Place a procedure mask over the N95 respirator
- c. Put on eye protection – reusable face shield or goggles
- d. During patient care, DO NOT TOUCH your masks or eye protection.
- e. Doffing
 - i. In the patient's room, ONLY remove gown then gloves.
 - ii. Perform hand hygiene and then exit patient room.
 - iii. Put on a clean pair of gloves
 - iv. Place a clean chux or blue pad on a surface top
 - v. Remove face shield or goggles and disinfect with a PDI Super Sani (Purple Top) and then place on clean pad.
 - 1. Do not use bleach wipes. They may leave a cloudy film on the face shield or goggle and may irritate the eyes.
 - vi. Remove the procedure mask covering the N95 and discard.
 - 1. Front is potentially contaminated, remove by holding the ear loops.
 - vii. Remove gloves and perform hand hygiene
- f. During extended use, N95 respirators are to be *discarded*:



- i. When potentially contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.
- ii. When obviously damaged, wet or difficult to breathe through.
- iii. When the team members shift ends.
- iv. Note – if during an intubation, the N95 respirator was not covered by a surgical mask it should be discarded.
- v. N95 respirators for extended use are not to be reused on subsequent days/shifts.

E. Reuse of Personal Elastomeric Respirators Protocol (Effective 03.31.20)

- a. Elastomeric masks must be disinfected between patient care
 - i. Exception, If TM is providing sequential care to COVID-19 + patients in either the same room or in adjacent rooms. TM must go directly from one patient to the other.
- b. Doffing PPE including elastomeric respirator
 - i. In the patient's room, ONLY remove gown then gloves.
 - ii. Perform hand hygiene then exit patient room.
 - iii. Put on a clean pair of gloves.
 - iv. Place a clean chux or blue pad on a surface top.
 - v. Remove face shield or goggles and disinfect with a PDI Super Sani (Purple Top) and then place on clean pad.
 - vi. Remove gloves and perform hand hygiene
 - vii. Don clean gloves
 - viii. Remove elastomeric respirator using the harness straps
 - ix. Visually inspect for contamination and wash with detergent and water as needed
 - x. Clean **outside** of elastomeric respirator face piece, cartridge cover, rubber seals and head straps using a PDI Super Sani (Purple Top) wipe with a two-minute contact/dwell time.
 - xi. Place device face down on clean pad.
 - xii. Perform hand hygiene and don new gloves
 - xiii. Clean **inside** of the respirator using a PDI Super Sani (Purple Top) wipe with a two-minute contact/dwell time.
 - xiv. Remove gloves and perform hand hygiene.
 - xv. At end of shift, follow manufacturer's instructions on cleaning or see <https://www.youtube.com/watch?v=yWzHlknMQDY&feature=youtu.be>
 - 1. Remove filter cartridges and use disinfectant wipe
 - 2. Place rest of mask in bucket with soap and water
 - 3. Use soft brush to clean inside and outside of mask
 - 4. Rinse with water
 - 5. Allow to dry
 - xvi. Store in a brown paper or breathable bag



- F. The filters and cartridges may be used until they become contaminated with blood or other bodily fluids, become uncomfortable to breathe through, or become obviously damaged or wet.

Half face respirator with cartridge-type filter	Half face respirator with filter
	
Full face respirator with cartridge-type filter	Example of gas/vapor cartridge NOT to be used
	

Reusable elastomeric respirators in healthcare

References:

- <https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>
(accessed 03/28/20)
- <https://www.cdc.gov/niosh/topics/hcwcontrols/pandemic-planning.html> (accessed 03/28/20)
- <https://www.ncbi.nlm.nih.gov/books/NBK540078/> (accessed 03/29/20)
- <https://jamanetwork.com/journals/jama/fullarticle/2763841> (accessed 03/29/20)