MSHS COVID-19
Personal Protective Equipment (PPE) Practices

Updated: May 11, 2020

This policy is subject to change based upon updated information from the CDC, NYS Department of Health, and other sources.
# PUI and COVID-19 Positive Definitions

<table>
<thead>
<tr>
<th>PUI = Person/Patient under investigation</th>
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<tbody>
<tr>
<td>• Test pending for COVID-19</td>
</tr>
<tr>
<td>• Isolation Room Type = Single Room*</td>
</tr>
<tr>
<td>• Isolation Designation: Special Droplet + Contact Precautions</td>
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</tbody>
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<table>
<thead>
<tr>
<th>COVID-19 Positive</th>
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<tbody>
<tr>
<td>• Positive result for COVID-19</td>
</tr>
<tr>
<td>• Cohorting allowed*</td>
</tr>
<tr>
<td>• Isolation Designation: Special Droplet + Contact Precautions</td>
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</tbody>
</table>

*Does not need to be negative pressure unless requiring frequent aerosolized procedures*
Isolation Precaution Signage

### Special Droplet Precautions

**Visitor Restriction.**
ALL visitors must check in at nursing desk before entering.
Las visitas deben anunciarse en el mostrador de enfermería antes de entrar a esta habitación.

- **Clean hands when entering and exiting the room.**
  Lávese las manos al entrar y salir del cuarto.
- **Put on a surgical mask prior to entering for usual care.**
  Colóquese una máscara quirúrgica antes de entrar.
- **Put on a face shield prior to entering.**
  Colóquese una máscara quirúrgica antes de entrar.
- **Disinfect shared patient equipment.**
  Desinfecte equipo que se comparta entre pacientes.
- **Keep the door closed.**
  Mantenga la puerta cerrada.

### Contact Precautions

**Visitors must report to the nurses’ station before entering this room.**
Las visitas deben anunciarse en el mostrador de enfermería antes de entrar a esta habitación.

- **Clean hands when entering and exiting the room.**
  Lávese las manos al entrar y salir del cuarto.
- **Put on a gown and gloves.**
  Póngase una bata y guantes.
- **Disinfect shared patient equipment.**
  Desinfecte equipo que se comparta entre pacientes.
Criteria to Take Patients Diagnosed with COVID-19 off Special Droplet & Contact Precautions for COVID-19*

**Inpatient Setting**$^\#$

- The patient has been afebrile (< 100.0 °F) for at least 72 hours without use of antipyretics **AND**
- Marked improvement in symptoms (e.g., cough, shortness of breath) **AND**
- Negative results of a molecular assay (PCR) for SARS-CoV2 from at least two consecutive nasopharyngeal swab specimens collected > 24 hours apart

**Outpatient Setting**$^\^$

- At least 10 days have passed since the onset of symptoms OR if asymptomatic, at least 10 days have passed since the date of the first positive COVID-19 diagnostic test **AND**
- The patient has been afebrile (< 100.0 °F) for at least 72 hours without use of antipyretics **AND**
- Marked improvement in symptoms (e.g., cough, shortness of breath)

* Exceptions may be made at the discretion of the hospital Infection Prevention Department
$^S$ Cohorting of COVID-19 patients who meet the criteria may be allowed at the discretion of Infection Prevention
$^\#$ Patients who are discharged before the two consecutive negative PCR tests are performed do not require repeat testing if 4 weeks have passed from the onset of symptoms AND the patient remains free of signs and symptoms of COVID-19
$^\^$ Patients do not require repeat testing for clearance in the outpatient setting except for pre-approved indications in consultation with the hospital Infection Prevention Department (e.g. surgery, chemotherapy)

PPE = Personal Protective Equipment

- **Who Requires PPE?**
  - Staff caring for any PUI or confirmed positive COVID-19 patient will follow Special Droplet Precautions in addition to Contact Precautions

- **What constitutes PPE for PUI, and Positive COVID-19?**
  - Surgical mask, Gown, Gloves, Eye protection (N95-respirator instead of surgical mask for aerosol generating procedures*)
Sequence for Putting on (Donning) PPE

1. GOWN
   - Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
   - Fasten in back of neck and waist

2. MASK OR RESPIRATOR
   - Secure ties or elastic bands at middle of head and neck
   - Fit flexible band to nose bridge
   - Fit snug to face and below chin
   - Fit-check respirator

3. GOGGLES OR FACE SHIELD
   - Place over face and eyes and adjust to fit

4. GLOVES
   - Extend to cover wrist of isolation gown

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

Sequence for Taking off (Doffing) PPE

1. GLOVES
   - Outside of gloves are contaminated!
   - If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Using a gloved hand, grasp the palm area of the other gloved hand and pull off first glove
   - Hold removed glove in gloved hand
   - Slide fingers of ungloved hand under remaining glove at wrist and pull off second glove over first glove
   - Discard gloves in a waste container

2. GOGGLES OR FACE SHIELD
   - Outside of goggles or face shield are contaminated!
   - If your hands get contaminated during goggles or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Remove goggles or face shield from the back by lifting head band or ear pieces
   - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

3. GOWN
   - Gown front and sleeves are contaminated!
   - If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Unfasten gown ties, taking care that sleeves don’t contact your body when reaching for bag
   - Pull gown away from neck and shoulders, touching inside of gown only
   - Turn gown inside out
   - Fold or roll into a bundle and discard in a waste container

4. MASK OR RESPIRATOR
   - Front of mask/respirator is contaminated — DO NOT TOUCH!
   - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Grasp bottom ties or elastic of the mask/respirator, then the ones at the top, and remove without touching the front
   - Discard in a waste container

5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE

Perform hand hygiene between steps if hands become contaminated and immediately after removing all PPE

*Note, Example 2 for doffing which is commonly used in the OR can be found at this website: https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf
PPE Recommendations for Entire Unit of COVID+ or Patient Room with Multiple COVID+s

- PPE according to Special Droplet Precautions for the usual care of COVID+ patients: N95/surgical mask, eye protection, gloves and gown

- Gloves **must** be changed between patients

- Hand hygiene **must** be performed when changing gloves

- The rest of the PPE does **NOT** have to be changed between patient encounters
Recommendations for Gown Use in the Setting of COVID-19 Pandemic

- COVID-19 patients and patients under investigation (PUIs) are on Special Droplet and Contact Precautions; gowns should be worn to protect from droplets.

- The gowns currently available in our hospitals for care of a COVID-19 patient are adequate to protect the healthcare worker from contamination even during aerosol generating procedures.

- The same gown can be worn when caring for COVID-19 patients cohorted in the same room or on an entire COVID unit. This allows the healthcare worker to complete their tasks efficiently and avoid the risk of contamination by doffing less frequently.
  - If a COVID-19 patient is not cohorted in a COVID-19 unit, gowns and gloves must be discarded before leaving the room.

- Gloves need to be removed (doffed) and hand hygiene performed in between COVID-19 patients.

- If the gown becomes visibly soiled or torn, please plan on exiting the room or the unit and remove and discard as per usual practices.
N-95 Respirator General Practices

- N-95 respirators should be worn for the routine care of COVID-19 patients or Persons Under Investigation (PUI) when the unit/treatment area is endemic and has regularly occurring aerosolizing procedures (Surgical masks can be worn in other situations)

- MSHS supports both extended use (wearing the same N95 respirator for repeated close contact encounters with several different patients without removing between patient encounters) and limited reuse (using the same N95 respirators for multiple encounters with patients but doffing after each encounter)

- MSHS has a reprocessing program that decontaminates used N95 respirators that are not misshapen, heavily soiled or wet
What procedures require an N95 Respirator to prevent a high risk exposure?

▶ An N95 respirator is needed for the following aerosolizing procedures:
  – BIPAP, CPAP, and high flow (for the duration of therapy)
  – Intubation and bronchoscopy
  – Sputum induction or endotracheal aspirate collection
  – Nebulizers
  – Tracheostomy
  – Chest physiotherapy
  – Trach and airway suctioning
  – Bronchoalveolar lavage

*Please note that collecting nasopharyngeal (NP) and oropharyngeal (OP) swabs for testing for respiratory viruses including COVID-19 testing and TEE/EGD procedures are not considered aerosolizing and do not require an N95 Respirator*
Limited Reuse and Extended Use of N95 Respirators and Face Shields

▶ LIMITED REUSE

– **Limited reuse** refers to the practice of using the same N95 respirators for multiple encounters with patients, but doffing after each encounter.

– The respirator is stored in between encounters and is donned prior to the next encounter with a patient.

▶ EXTENDED USE

– **Extended use** refers to the practice of wearing the same N95 respirators for repeated close contact encounters with several different patients, *without removing* between patient encounters.

– Extended use is well suited to situations wherein multiple patients with the same infectious disease diagnosis, whose care requires use of a respirator, are cohorted (e.g., housed on the same hospital unit or same room).

– **Instructions:** The Limited Reuse instructions on the next slide applies when patient care is complete or at the end of shift.
Instructions for the Limited Reuse of N95 Respirators and Face Shields

After completing care of a known or suspected COVID-19 patient:

1. Doff all PPE except mask and face shield before leaving a contaminated area (patient room or a completely cohort ed COVID unit)
2. Perform hand hygiene while in the patient room
3. Exit room while wearing face shield and mask
4. Apply a clean pair of gloves
5. Remove face shield from the back of the head
6. Use a hospital-approved, non-bleach germicidal wipe (e.g. hydrogen peroxide) to disinfect face shield (wipe inside to outside) and allow to dry for recommended time on the germicidal wipe canister
7. Place clean face shield in dedicated paper bag to that individual employee (and patient if applicable) & place in designated area/hang outside of patient room
8. Remove gloves
9. Perform hand hygiene
10. Remove N95 respirator from back of head
11. Place N95 respirator in dedicated paper bag to that individual employee (and patient if applicable) and place in designated area
12. Prior to reuse, wipe the face shield with alcohol to remove any residue

NOTE: Use N-95 until it no longer maintains its fit or function (no longer than the duration of shift) then discard.
Process for the Limited Reuse and Extended Use of N95 respirators

**LIMITED REUSE**

**Limited reuse** refers to the practice of using the same N95 respirator for multiple encounters with patients, but doffing after each encounter.

**EXTENDED USE**

**Extended use** refers to the practice of wearing the same N95 respirators for repeated close contact encounters with several different patients, without removing between patient encounters.

### INSTRUCTIONS FOR REUSE - DOFFING

1. **Doff all PPE except mask & face shield in patient room**
2. **Perform hand hygiene**
3. **Exit patient room**
4. **Apply a clean pair of gloves**
5. **Remove face shield from back of head**
6. **Clean face shield with disinfectant wipe from inside to outside**
7. **Place face shield in clean paper bag, write name & date**
8. **Remove gloves**

**Check Condition of Mask:**
- Does not hold its form or wet?
  - **YES:** Discard
  - **NO:** Continue to next step

**Cleanliness Check:**
- Heavily soiled?
  - **Yes:** Discard
  - **No:** Reuse & continue to next step

### INSTRUCTIONS TO REUSE - DONNING

1. **Remove N95 respirator from storage bag (do NOT touch inside of mask)**
2. **Perform hand hygiene**
3. **Do visual check**
   - Does not hold its form?
     - **YES:** Discard
     - **NO:** Continue with process
4. **Put on N95 respirator**
5. **Does mask fit tight?**
   - **NO:** Discard
   - **YES:** Continue with process
6. **Perform hand hygiene**
7. **Continue Donning Rest of PPE**

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Paper bags should be dry and intact. Reuse of paper bags is fine unless torn, wet, or soiled. If torn, wet or soiled, please discard paper bag in regular trash can.
Prevention of Skin Breakdown with Extended Use of N-95 Respirators

1. Apply skin prep product (example: 3M Cavilon No Sting Barrier Wipe). Let dry for 30 seconds (this step is optional but should be done first).

2. Cut a 1 inch strip of Mepilex Lite #284190 dressing and place on the bridge of nose; use one package and cut into multiple strips for each shift; Do not use Mepilex Lite # 294199 as this product is too thick.

3. Always perform a seal test when donning the N-95 respirator.

4. Relieve pressure from PPE at least every 4 hours. If dressing material or PPE is wet or damaged, please change immediately.

5. Skin care before/after use of PPE is recommended if prone to skin sensitivity or acne.
   a. Apply moisturizing cream/barrier protector (example: Baza Clear Moisture Barrier Ointment) to sensitive areas of face (ears, forehead, nose and cheek area) 1 hour before donning PPE.
   b. At end of shift, perform hand hygiene and clean face and neck with saline or soap and water.
N95 Respirators and Facial Hair

- Close fitting respirators need to seal tightly to the face. Gaps in the face-seal let the dirty air leak inside the N95 respirator.
- Face seal leakage reduces the wearer’s protection. Even a day or two’s growth of stubble can be enough to give significant leak paths for contaminants.
- Facial hair must be trimmed consistent with the chart below.
- Staff with religious or other concerns should discuss with their manager, who may consult with Labor Relations.

![Facial Hairstyles and Filtering Facepiece Respirators](image-url)
Eye Protection in the Setting of COVID-19

▶ Acceptable eye protection: a surgical mask with an attached face shield, a full face shield, or goggles

▶ According to the CDC, goggles are an effective alternative to face shields and will protect the eyes from splashes, sprays and droplets.

▶ The benefit of a full face shield is that it helps with the conservation of surgical masks or N-95 respirators as they are less likely to be contaminated during any encounters with COVID-19 patients and PUIs.