

## UVM Medical Center COVID-19: Personal Protective Equipment (PPE) Guidelines

The safety of all members of our healthcare team is a top priority for UVM Medical Center as we navigate the rapidly evolving clinical situation around COVID-19. UVM Medical Center has PPE guidelines that align the use of PPE with the risk of transmission. These guidelines are in alignment with recommendations from the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC).

Who	When	PPE Standard
Staff who do not have close patient contact- <ul style="list-style-type: none"> <li>Staff who are more than 6ft and/or spend less than a few minutes with a patient.</li> <li>Staff who have a physical barrier between themselves and others (i.e. Plexiglas etc.)</li> </ul>	While in facility in shared space and social distancing is not possible.	<b>Personal Mask</b> (if not available use procedure mask) <ul style="list-style-type: none"> <li>May use own cloth mask</li> <li>Mask should be washed daily, by user</li> <li>Perform hand hygiene before and after touching mask</li> </ul>
Staff who will be in close contact (within 6ft for more than a few minutes) with patients	While in facility in shared space and social distancing is not possible.	<b>Procedure Mask</b> <ul style="list-style-type: none"> <li>Use one mask/day (unless damaged or physically soiled)</li> <li>Change following the care of patients on droplet precautions.</li> <li>Perform hand hygiene before &amp; after touching mask.</li> <li>Avoid donning/doffing the mask repeatedly.</li> </ul>
Staff Caring for Patients without symptoms of COVID-19 who require COVID-19 testing for discharge or procedure planning only	When collecting specimen for COVID-19 testing via Nasopharyngeal swab	Procedure Mask Gown Gloves Face Shield or Fluid Shield
Staff Caring for Patients Under Investigation – Patients with symptoms of COVID-19 infection present	When collecting specimen for COVID-19 testing via Nasopharyngeal swab	Universal N95 Gown Gloves Face Shield or Fluid Shield
Staff Caring for Patients Under Investigation (PUI)	When Providing Non-Aerosol Generating patient Care	Procedure Mask or Universal N95 Gown Gloves Face Shield or Fluid Shield
Staff Caring for Patients Under Investigation (PUI)	When Providing Aerosol Generating Procedures  (See Page 2 for Aerosol Generating Procedures)	N95 Respirator/PAPR* Gown Gloves Face Shield or Fluid Shield
Staff Caring for Any Patient Regardless of COVID Status	Only when providing care that involves instrumentation of the airway	N95 Respirator/PAPR* Gown Gloves Face Shield or Fluid Shield
Staff Caring for Patients Who Are COVID Positive	All Care Activities	N95 Respirator/PAPR* Gown Gloves Face Shield

\*PAPRs reserved for those who are unable to be fit tested - Facial hair must be shaved

## COVID-19 Aerosol Generating Procedures (AGP)

Intubation & Assist\*\*  
Extubation\*\*  
Bag/mask Ventilation  
Mechanical Ventilation  
CPR  
All Nebulized Medication Delivery  
All Airway Clearance Modalities  
All NIV (CPAP / BiPAP) including overnight  
HFNC (High Flow Nasal Cannula)  
Non-Closed Suction Techniques\*\*  
Humidified Trach Collars  
Open Surgical Airways  
Percutaneous Trach Procedure\*\*  
Bronchoalveolar Lavage (blind BAL)\*\*  
Bronchoscopy & Assist\*\*  
Pulmonary Function Testing  
Laryngeal / Vocal Cord Visualization\*\*  
Upper Endoscopy\*\*  
TEE Procedure\*\*

\*\* Examples of Instrumentation of the Airway

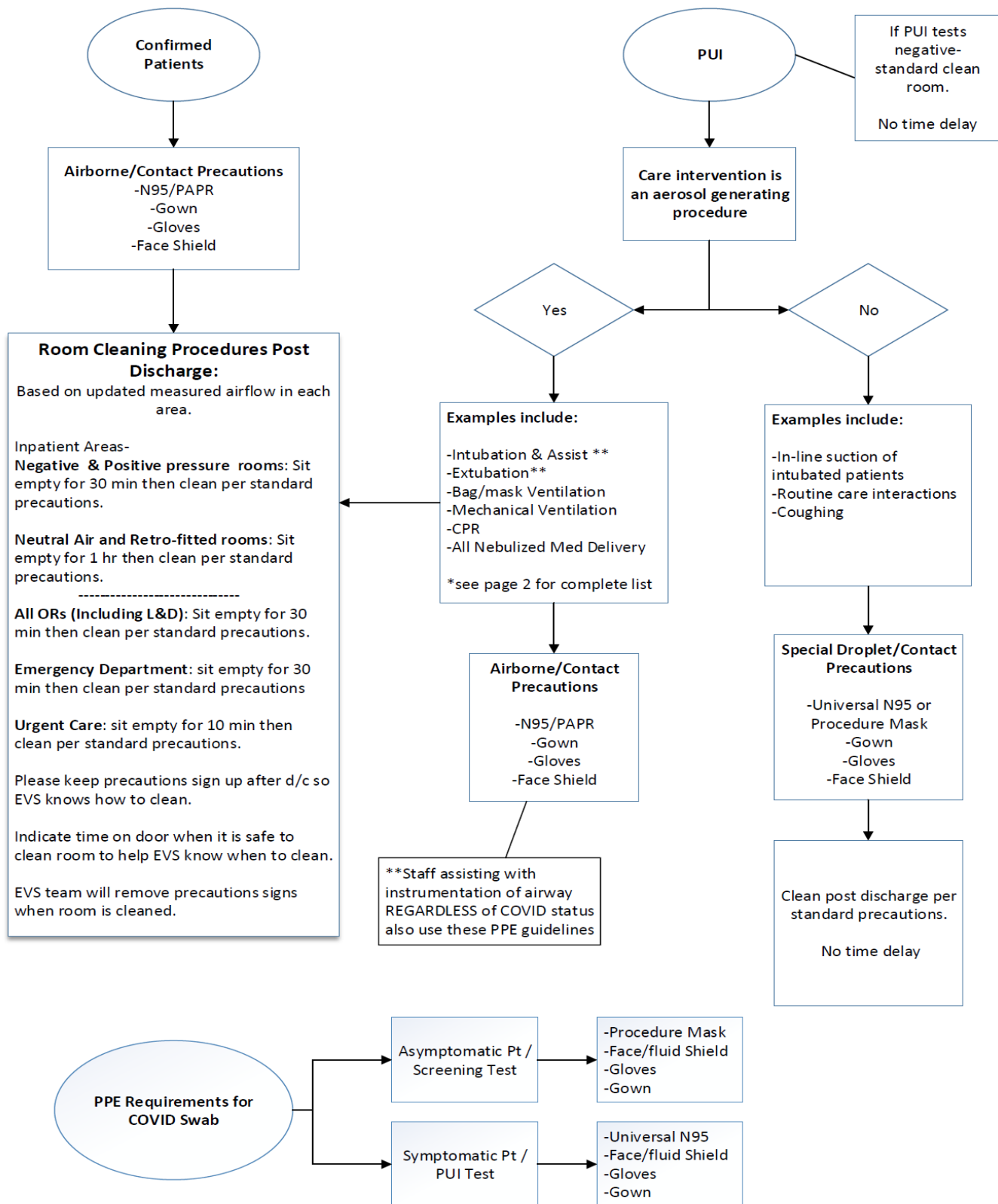
Maintain airborne precautions for 1 hr post (AGP)

This practice will vary in ED/UC/OR/M6

Please adjust workflows to limit the number of times/number of people that must enter a patient room during this time.

## The first line of protection for all is source containment with a mask.

PPE standards per care activity for persons under investigation (PUI) & confirmed cases of COVID-19



\*Guided by the WHO recommendations for the use of PPE in the care of patients with COVID-19

## **Personal Protective Equipment (PPE) Conservation Strategy**

The PPE you are directed to use depends on the patient population, location, environmental factors, and the care you are providing. By design, you will see different PPE in the same areas, and that should be expected. To keep you safe, PPE standards are being matched to the risk of transmission.

### **Fit-Tested N95 and Universal N95 Respirators**

(Use the highest level of protection required by your patient assignment for that day)

- You will be issued one respirator/day (unless contaminated, soiled, or damaged)
  - Wear respirator for as long as possible to reduce number of donning/doffing episodes.
  - Cluster your personal care activities to reduce need for donning/doffing of respirator.
  - Don't touch mask when in place. **Perform hand hygiene if you touch mask.**
  - See Donning/Doffing instructions
- Label mask with your name on a piece of tape secured to an elastic strap
- Your mask must be in place or in a storage option (see below).
  - Not on forehead, elbow, arm, or chin
  - Pull your hair back
- During direct patient care, use face shield or fluid shield
  - If face shield/fluid shield is unavailable, use goggles and cover respirator with procedure mask
- Storage
  - During shift when respirator not in use, it should be hung on a dedicated IV Pole or be stored in non-coated paper bag (item #00634)
    - Paper bag should be labeled on one side with your name, date, and type of respirator (universal N95 or fit tested N95)
    - Place respirator in bag with interior of respirator facing up toward labeled side of bag
    - Only place one respirator per bag
    - If hanging, don't allow respirator to touch anything else
  - At end of shift, respirator should be saved (DO NOT THROW AWAY –unless soiled or damaged)
    - Remove respirator from bag or container and neatly stack in designated respirator collection bin, avoiding crushing or otherwise damaging respirator
    - Refer to unit leadership for designated storage location
- DO NOT DISINFECT/CLEAN RESPIRATORS
- Please shave facial hair
  - This will ensure that PAPRs are reserved for those who require this PPE due to inability to use fit tested N95 due to facial structure
- Please DO NOT wear facial makeup
  - This will ensure that we are able to sterilize N95s for reuse

## **Personal Protective Equipment (PPE) Conservation Strategy (continued)**

### **Face Shields**

- Face Shield must be reused until broken/damaged/unable to see through
  - Wipe with hospital grade disinfectant, allow appropriate dwell time
  - If visibility is an issue, wipe with dry cloth or alcohol wipe
  - Label face shield with name
  - Do not attempt to clean the foam padding on face shield
- Storage
  - Store shield in safe, dry, location where it will not be damaged.

At this time, please DO NOT reuse masks/respirators for more than one day. We are saving respirators in anticipation of needing to reuse in the future.

**On Thursday, April 8, 2020, we are implementing the following guidelines  
For use of masks with all UVM Medical Center staff members.**

Why the change: We want to provide you increased protection at the same time there is an increase in the number of positive people in our community, and exposures are more likely to occur. We were planning this change last week, and deferred when the government put out their guidance for protective masking to integrate those recommendations.

1. Hand hygiene continues to be the MOST important step in preventing transmission.
2. When entering the buildings, all staff must be wearing a personal protective mask. We will assure all staff have ongoing access to an appropriate mask. If you have a cloth mask, you may use it for this purpose. If someone does not have their own mask, they will wear the mask provided at the door.

Once they arrive at their worksite, mask use will be determined by their location and role:

3. All patient-facing caregivers and staff who are NOT working on units caring for COVID 19 patients should don a procedure mask and wear it while on the unit, in contact with patients, or in communal areas where social distancing is challenging.
  - a. This would include team stations, med rooms, kitchens, cafeterias, charting rooms, etc.
  - b. The mask can be removed for eating, drinking, and self-care.
  - c. This does not change guidelines for masking during aerosol generating procedures.
  - d. When going home, the procedure mask can be worn out of the hospital and discarded or change back to a personal protective mask.
4. Staff on units caring for the COVID-19 patient population will continue to use N 95 respirators, face shields, gowns, and gloves as they have been directed.
  - a. If they need to doff their N 95, they can use a procedure mask when on the unit but not caring for patients.
  - b. They should use a personal protective mask to travel in and out of the hospital, but not on the unit.
5. All other staff should wear a personal protective mask (their own or one we provide), especially in communal areas where social distancing is challenging.
  - a. We will provide 1 appropriate mask per person per day or they can wear their own.
  - b. If working in a private space, the mask can be doffed, followed by hand hygiene.
  - c. If wearing a mask is a concern for you, please have a conversation with your leader.

The most important thing for ALL of us, no matter what our role, is to practice frequent hand hygiene. To assure access to PPE for the long-term, we must ALL use conservation methods such as the guidelines the UVMHN sets for the type of masking appropriate based on location, procedure, and role. Not doing so, deciding you can ignore the protocols implemented, could put you and your colleagues at risk now and in the future.

This is a challenging time for all of us. We are concerned for our patients, our colleagues, our families, our community and ourselves. Please do not let fear guide the decisions you make regarding PPE. If you have questions about PPE use, speak with your leader, a PPE Patroller, Infectious Disease providers, or an Infection Preventionist.

## Infection Prevention Guidance on Personal or Procedure Mask Use and Re-Use

### How to put on a face mask

1. Perform Hand Hygiene
2. Follow the instructions below for the type of mask you are using.
  - *Face Mask with Ear loops:* Hold the mask by the ear loops. Place a loop around each ear.
  - *Face Mask with Ties:* Bring the mask to your nose level and place the ties over the crown of your head and secure with a bow.
  - *Face Mask with Bands:* Hold the mask in your hand with the nosepiece or top of the mask at fingertips, allowing the headbands to hang freely below hands. Bring the mask to your nose level and pull the top strap over your head so that it rests over the crown of your head. Pull the bottom strap over your head so that it rests at the nape of your neck.
3. Mold or pinch the stiff edge to the shape of your nose.
4. If using a face mask with ties: Then take the bottom ties, one in each hand, and secure with a bow at the nape of your neck.
5. Pull the bottom of the mask over your mouth and chin.

### How to remove a face mask

1. Perform hand hygiene. Avoid touching the front of the mask. The front of the mask is contaminated. Only touch the ear loops/ties/band.
  - *Face Mask with Ear loops:* Hold both of the ear loops and gently lift and remove the mask.
  - *Face Mask with Ties:* Untie the bottom bow first then untie the top bow and pull the mask away from you as the ties are loosened.
  - *Face Mask with Bands:* Lift the bottom strap over your head first then pull the top strap over your head.
2. Place mask in bag with the interior of the mask facing up toward labeled side of bag if you will be donning it again. Throw mask away if visibly soiled and/or at the end of your shift
3. Perform hand hygiene

### Common questions

1. COVID-19 appears to be transmitted primarily through large respiratory droplets. Procedure masks provide protection against respiratory droplet spread.
2. A single mask can be worn between different patients
3. N-95 Respirators are to be worn when caring for COVID-19 positive patients, PUI's with aerosol generating procedures or any other patient when providing care the involves instrumentation of the airway.



## **Fit-Tested N95 and Universal N95 Respirator Reprocessing Collection**

- Respirators are being collected to allow us to reprocess/sterilize them as backup for our supply of new respirators
- Any respirator that is damaged, soiled or otherwise rendered unusable should be disposed of in the trash and not collected in this location

### **Process:**

- At the end of shift or working day, remove respirator using proper doffing procedures or remove respirator from storage bag or container
- Carefully stack masks in container, separating by size and style if possible, being cautious not to damage your mask or those stored in container



- PERFORM HAND HYGIENE
- CSR will collect regularly. If the container becomes full, please call CSR at 7-2890 for immediate collection



## Don/Doff PPE and Mask/Respirator

### PPE Donning Order:

- Perform hand hygiene
- Don gown, fully cover torso, tie around neck and waist
- Don appropriate mask or respirator
- Don face shield
- Don gloves, covering cuffs of gown

### PPE Doffing Order:

Guideline: If hands or gloves become contaminated during doffing, perform hand hygiene

- Remove gloves using glove to glove, skin to skin technique
- Perform hand hygiene
- Remove gown by untying neck and waist ties. Touch only the inside of the gown. Take care to avoid touching the gown to clothing or clean areas of body. Roll the gown inside out and place into the soiled linen hamper.
- Perform hand hygiene

### Step out of patient's room and close door

- Perform hand hygiene
- Apply clean gloves
- Remove face shield or goggles from the back by lifting head band or ear pieces
- With an hospital grade disinfectant, clean and hang face shield on designated IV pole to dry
- If using a fluid shield mask over respirator, remove mask by the straps and discard
- Remove gloves
- Perform hand hygiene
- Now remove respirator by first grabbing bottom strap up and over head, then remove respirator using remaining top strap.
- Place respirator in bag with interior of respirator facing up toward labeled side of bag or hang on designated IV pole
- Perform hand hygiene

## DON/DOFF PPE AND PAPR

**“Check the flow with the flow meter device before donning as well as the battery life.”**

### Donning Order

- Perform hand hygiene
- Don PAPR by attaching waistband. Turn on unit and place hood over head
- Don gown, fully cover torso, tie around neck and waist, make sure that hose is not impeded
- Ensure the gown does not occlude the air inlet. Tuck around PAPR unit or waistband.
- Don gloves, covering cuffs of gown

### Doffing Order: PPE & PAPR

Guideline: If hands or gloves become contaminated during doffing, perform hand hygiene

- Remove gloves using glove to glove, skin to skin technique
- Perform hand hygiene
- Remove gown by untying neck and waist ties. Touch only the inside of the gown. Take care to avoid touching the gown to clothing or clean areas of body. Roll the gown inside out and place into the laundry bin
- Perform hand hygiene

### Step out of patient's room and close door

- Perform hand hygiene
- Apply clean gloves
- Reach back and unclip or unscrew hose from PAPR hood.
- Turn off PAPR.
- Unclip belt and carefully remove PAPR with attached hose and hang on IV pole.
- To remove hood, grasp the back of the hood and pull gently over and away from the front of your head. Hang on IV pole.
- Take Gloves off,
- Perform hand hygiene.
- Apply new gloves.
- With a hospital grade disinfectant, clean outside of hood and thoroughly clean and saturate PAPR body, belt & hose.
- Take gloves off, perform hand hygiene. Apply new gloves.
- With a new wipe, thoroughly clean inside of hood with hospital grade disinfectant.
- Remove gloves
- Perform hand hygiene

## Universal N95 Respirator Masks



**MASK RESPIRATOR N-95**

Mfg. Item No: 8000

Premier Connect Item No: 71652



**MASK RESPIRATOR N-95**

**46827S**

Mfg. Item No: 46827

Premier Connect Item No: 71653



**MASK RESPIRATOR TYPE N95**

**(3M) 1870**

Mfg. Item No: 1870+

Premier Connect Item No: 126569



**RESPIRATOR N95 GERSHON YELLOW**

**DISP**

Mfg. Item No: 082130K

Premier Connect Item No: 66808









**RESPIRATOR N95 ALPHA PROTEC**

**DUCK BILL UNIVERSAL SIZE**

Mfg. Item No: 695

Premier Connect Item No: 70820

## COVID19 – Positive and PUI Transport Guidelines

	Airborne and Contact (COVID-19 <b>positive</b> )	Special Droplet and Contact (PUI)
<b>Patient –</b> when taken out of room	Procedure Mask 	Procedure Mask 
<b>Designated driver</b> (reflective of our increased masking of UVMHC employees)	Procedure Mask 	Procedure Mask 
<b>In transit – Care Provider (not a driver)</b>	Fitted N-95 or PAPR, Gown, Gloves and Face Shield 	Universal N95/surgical mask, Gown, Gloves and Face Shield 
<b>HCW – in the hospital room with the patient (prep for transport or receiving unit)</b>	Fitted N-95 or PAPR, Gown, Gloves, Face Shield 	Universal N95/surgical mask, Gown, Gloves and Face Shield 

## COVID19 – Positive and PUI Transport Guidelines Continued

1. Prepare the patient for transport with all of the appropriate PPE.
2. After transferring patient to stretcher, clean and disinfect the surfaces of the stretcher that will be touched during transfer of the patient. Wipe surfaces of the side rails, headboard with a disinfectant wipe. Patient is ready for transport.
3. Designated driver wears procedure mask during transport. Designated driver is clean and should touch only the disinfected surfaces of the stretcher and the public surfaces such as elevator buttons.
4. In transit care provider should don **clean** appropriate PPE in case patient care is needed during transport. In transit care provider should not touch public surfaces such as elevator buttons, door knobs/handles.
5. Perform hand hygiene