

**Cayuga Health System
Cayuga Medical Center / Schuyler Hospital
Personal Protective Equipment Guidelines**

**4/6/2020 Version 3
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Purpose

- To prevent the spread of COVID-19
- To ensure that our staff have access to the necessary supplies to perform patient care safely to achieve our goal of zero health care acquired infections.
- To prevent and manage shortage of personal protective equipment (PPE).

General Considerations

- The most important measure to prevent the spread of COVID-19 is handwashing.
- PPE resources are expected to grow more limited over time. Every effort must be made to limit PPE use while maintaining the highest possible safety for staff.
- The care of suspected or confirmed COVID-19 patients requires a minimum of **standard, contact** and **droplet precautions** with **eye protection** at all times. The minimum PPE to be used is gown, gloves, procedure mask, and goggles or face shield.
 - Though we are continuing to learn more about the epidemiology of COVID-19, it is believed that COVID-19 is primarily spread via direct contact with droplets, greater than 5 microns in diameter, generated from the respiratory tract during coughing or sneezing. These droplets are propelled a short distance of less than 6 feet through the air and deposited on the nasal, oral or conjunctival mucosa of the potential new host or fall onto surfaces where the virus can remain viable for an extended period of time. This is still the position of CDC and WHO in COVID-19.
- Confirmed or suspected COVID-19 patients will require **airborne precautions including an N95 mask or PAPR** in aerosol generating situations, including but not limited to nebulization, use of high flow oxygen, positive pressure ventilation, intubation, extubation, CPR prior to intubation, bag-mask ventilation, tracheostomy or bronchoscopy. Airborne precautions are required during the procedure or use of aerosolizing equipment and for up to one hour afterwards depending on the procedure.
- **Staff involved in the direct care of COVID-19 patients or Person Under Investigation (PUIs) for COVID-19 must wear an N95 mask or PAPR for patient care activities.**

Safe Work Practices

- All healthcare workers should adopt basic sanitary practices in choice and laundering of attire worn at the hospital (shoes, lab coats, etc.). Attire worn in the hospital should not be worn elsewhere until it is laundered. Ideally, attire should be removed and left in the hospital or placed in a separate plastic bag to be laundered before reuse.

- Health care workers who are directly involved in the care of suspected or positive COVID-19 patients will be provided with scrubs that are laundered by the hospital.
- Shoes should be left in the facility or disinfected. You are encouraged to choose shoes that are easily disinfected with bleach or can be washed with detergent.
- Any personal equipment used in the care of patients (stethoscopes, name tags, pens, phones, glasses, watches, etc.) should be disinfected before leaving the hospital.

Disposition of Potential or Confirmed COVID Patients

- Suspected cases of COVID [Person Under Investigation (PUI) or confirmed cases should be placed in a private room on standard, contact, and droplet precautions. Confirmed COVID-19 patients should be cohorted together to preserve PPE.
- Door should remain closed at all times. Appropriate signage must be placed outside the door.
- A clinical log will also be placed outside the door. All persons entering the room of a suspected or confirmed COVID-19 patient must write their name, the date, and the time of entry. This log is not part of the patient's record. The log will be sent to unit leadership upon discharge of the patient.
- No non-essential equipment including charts, pens etc. should be brought into the room.
- Any equipment taken into the room must be disinfected upon removal. Equipment should be disinfected in the UV box when possible.
- A dedicated stethoscope, thermometer, O2 sat, BP cuff etc. are to be kept in the room.

PPE Preservation Strategies

- *Extended use* refers to the practice of wearing the same PPE for repeated encounters with several patients, without removing the PPE between the encounters. Extended use may be implemented when multiple patients are infected and patients are placed together in dedicated areas.
- *Reuse* refers to the practice of using the same PPE for multiple encounters with patients but removing and disinfecting it between at least some of the encounters. The PPE is stored in a paper bag between encounters and reused.
- **At this time, we recommend re-use for goggles, N95s, face shields, and PAPRs (powered air-purifying respirator) hoods. Extended use will be recommended when multiple confirmed COVID-19 patients are cohorted together.**
- Goggles, face shields and PAPR hoods should be disinfected and reused until they are not functional (torn, broken etc.). Goggles will be disinfected using the UV box and used by multiple individuals. Face shields and PAPR hoods are for individual use and should be labeled with the health care worker's name. Face shields and PAPRs should be cleaned, disinfected with bleach, and rinsed.

N95 masks

- N95s will be reused. When performing procedures at risk for splatters, a procedural mask with face shield or a full length face shield can be worn over the N95 mask. N95s are to be disinfected using the UV box as described on “Doffing PPE” guidelines below. **N95s can be reprocessed up to 20 times if they do not become visibly soiled or damaged.**
- **N95s will be visibly inspected for gross debris at the end of each shift. If they are not soiled or damaged, they will be placed in a paper bag with the name and unit of the staff member. This bag will be placed in a designated N95 collection box on a clinical unit. Sterile processing will collect N-95 masks from each unit to be processed twice a day. Sterile processing will return the processed masks to the unit.**
- **For staff members that utilize duck bill masks for airborne precautions, a procedural mask or a surgical mask should be utilized over the duck bill mask during the course of a day. The duck bill mask cannot be disinfected in the UV box. The duck bill mask can be sterilized by sterile processing as delineated for N95 above.**

Procedure masks (masks with ear loops)

- Cayuga Health System has adopted universal masking.
- All providers, staff, outpatients and visitors must be wearing a procedural mask at all times in public and clinical areas unless they are utilizing a surgical mask, N95 or PAPR as defined above. Public areas are defined as areas in which two or more individuals are working in the same space or in which there are other people entering the space. Staff may discontinue the use of a mask in a closed, single person office.
- Clinical staff will wear procedure masks during a shift. Those will be discarded when exposed to a patient on droplet precautions (e.g. Influenza, PUI/COVID), if they become visibly soiled, wet, and/or the mask is noted to have an issue with integrity. The masks will be disposed of at the end of the shift.
- Non-clinical staff will wear a mask until it becomes visibly soiled and/or it is noted to have an issue with integrity. Non-clinical staff will not need to dispose of their masks daily.
- Within the hospital, patients and visitors will wear a mask until it becomes visibly soiled and/or is noted to have an issue with integrity. Providers may discontinue masks for patients based upon clinical factors at their discretion. Patients may discontinue the use of masks in single patient rooms.
- Within the outpatient physician office setting, procedure masks will be given to patients or visitors based upon symptoms. If a patient or visitor is asymptomatic, they will be offered ,but not required, to utilize a mask.

Surgical masks

- Employees may wear a surgical mask as described below:
 - Clinical staff can wear surgical masks during each case or procedure that occurs in a sterile environment such as the OR. The masks will be disposed of at the end of the case.
 - Staff, patients, or visitors may wear surgical masks in place of a procedure mask when a procedure mask is not available.

Additional PPE equipment i.e. hair covers, shoe covers, are not recommended at this time.

Cloth Masks

- At this time, due to the transition to universal masking, we will not be permitting the use of cloth masks.

Donning PPE

A. General Considerations

- The detailed instructions of donning, doffing, and re-use are listed below.
- The use of personal protective equipment (PPE) is only indicated for persons who will be providing direct patient care in the room, during transport, or during room cleaning. Every effort should be made to minimize the number of persons in the room by limiting entrance to essential services only, clustering care, using telemedicine etc.
- The use of an N95 respirator requires that providers undergo testing to ensure proper fit. If you need fit testing, contact Employee Health (274-4129) immediately. Those who cannot use N95s may use PAPRs. However, the use of N95s is strongly preferred as the supply of PAPRs is very limited. Men must remove all facial hair to allow for proper N95 fit.
- PPE that is anticipated to become scarce (N95, goggles, face shields, PAPR hoods) will be allocated by designated personnel on each unit. Please see the unit charge nurse, nursing director or medical team leader for equipment as needed.

A VIDEO TO REVIEW DONNING AND DOFFING OF PPE CAN BE FOUND AT:

[Insert link to CMC donning and doffing video here](#)

B. Process for Donning PPE and Reusable Goggles with Procedural Mask

1. Visual inspection of PPE for functional integrity must be performed prior to each use.
2. Perform hand hygiene.
3. Don the disposable isolation gown.
4. Put on procedure mask. Ear loop masks are placed over the ears. Surgical masks with strings should have the top strings tied at the crown of the head and at the nape of the neck below the ears.
5. Don goggles or face shield. Face shields should only be used if goggles are not available or do not fit properly.
6. Don gloves and pull up over cuffs of gown. Ensure that there is no skin exposed between the gloves and the gown.

C. Process for Donning PPE and Reusable Goggles with N95 Respirator

1. Visual inspection of PPE for functional integrity must be performed prior to each use.

2. If not already performed, the N95 respirator hood should be labeled with your name and the date on the mask or the paper bag used for storage.
3. Perform hand hygiene.
4. Don the disposable isolation gown.
5. Put on the N95 respirator. The straps should be placed at the crown of the head and the nape of the neck.
 - Mold the nose piece gently.
 - Check seal on N95s by inhaling and exhaling quickly while using fingers to check for air leaks around the edges of the mask. Adjust mask as needed.
6. Don goggles or face shield. Face shields should only be used if goggles are not available or do not fit properly.
7. Don gloves and pull up over cuffs of gown. Ensure that there is no skin exposed between the gloves and the gown.

D. Process for Donning PPE with PAPR

1. Visual inspection of PPE for functional integrity must be performed prior to each use.
2. One PAPR hood is assigned per appropriate individual and should not be replaced until the hood has lost functional integrity.
3. PAPR should be donned with a trained observer to ensure proper fit.
4. Test the PAPR to make sure it is charged and operational. Apply float that is dispensed with the PAPR to the end of PAPR hose before attaching to hood. Turn PAPR motor on and ensure that flow is sufficient to suspend the float. Do not use PAPR if air flow is not adequate.
5. Perform hand hygiene.
6. Don the clean PAPR motor; place PAPR motor on mid back and adjust belt in the front.
7. Attach the PAPR hood to the PAPR tubing.
8. Turn on the PAPR.
9. Place PAPR hood over your head, ensure there is an adequate seal (no gaps that are wide enough that you can see through or large amounts of air leakage).
10. Apply gown over the PAPR, ensure PAPR motor is not-covered.
11. Don gloves and pull up over cuffs of gown. Ensure that there is no skin exposed between the gloves and the gown.

Doffing PPE

A. General Considerations

- Removing PPE to prevent contamination is critical to using PPE effectively.
- When removing PPE, ensure that your gloves are not visibly soiled, if so remove gloves first separately.
- It is expected that goggles will be used for eye protection unless they do not fit or are unavailable. A face shield is to be re-used by the same health care

worker until it is damaged or broken. The face shield should be disinfected as follows:

- Clean If visibly soiled, clean with soft cloth, soap and water.
- Disinfect with bleach wipe, dry for 3 minutes.
- Rinse off bleach residue with a new soft cloth dampened with water

B. Process for Doffing PPE and Reusable Goggles and Procedural Mask

1. Remove gown and gloves in patient room.
2. Open door, exit, and close door.
3. Perform hand hygiene (*with anteroom, repeat steps 2 & 3 to exit*)
4. Walk to the (open) UV box.
5. Remove goggles by grasping side pieces. Inspect for visible soiling, use bleach wipe to clean if needed and rinse off bleach residue with a new soft cloth dampened with water.
6. Place goggles in UV box.
7. Perform hand hygiene
8. Close lid and turn on UV box.
9. Remove procedural mask and discard in a covered trash receptacle with foot pedal.
10. Perform hand hygiene.
11. Wipe down outside of UV box with bleach after each use. Remove goggles and place in designated area. Leave UV Box lid open.

C. Process for Doffing PPE and Reusable Goggles with N95 Mask

1. Remove gown and gloves in patient room.
2. Open door, exit, and close door.
3. Perform hand hygiene (*with anteroom, repeat steps 2 & 3 to exit.*)
4. Walk to the (open) UV box.
5. Remove goggles by grasping side pieces. Inspect for visible soiling, use bleach wipe to clean if needed and rinse off bleach residue with a new soft cloth dampened with water.
6. Place goggles in UV box.
7. Perform hand hygiene
8. Remove N95 mask touching only the elastic straps.
9. Place N95 mask in UV box next to (not on top of) goggles.
10. Perform hand hygiene
11. Close lid and turn on UV box.
12. Remove N95 mask from UV box and place in a safe location, identified with your name and date. Paper bags are available and recommended for storage between uses. Goggles are stored per unit protocol.
13. N95s should be discarded after 12 hours of cumulative use or if they become visibly soiled, wet, or no longer retain their shape.
14. Wipe down the outside of the UV box with bleach after each use. Leave UV box lid open.

D. Process for Doffing of PPE with PAPR System

1. Reminder - gown should be worn over PAPR.
2. Remove gown and gloves in patient room.
3. Open door, exit, and close door.
4. Perform hand hygiene.
5. Remove hood and place on designated surface.
6. Disconnect PAPR tubing from hood and place tubing on designated surface.
7. Remove blower assembly and place on designated surface.
8. Perform hand hygiene.
9. Don clean gloves .
10. Clean, disinfect, and rinse hood and PAPR blower
 - i. **Clean** If visibly soiled, clean with soft cloth, soap and water.
 - ii. **Disinfect** with bleach wipe, dry for 3 minutes.
 - iii. **Rinse** off bleach residue with a new soft cloth dampened with water
11. When dry, place PAPR blower and tubing in bin
12. Place PAPR hood in a safe location, identified with your name. Paper bags are available and recommended for storage between uses.
13. PAPR hood may be used indefinitely by one user, for multiple patients, unless visibly soiled, wet, or damaged

Patient Transport

- Every effort must be made to avoid patient transport unless essential to patient care. When possible, procedures should be done in patient isolation room.
- Before leaving room, patient should be changed into a clean gown and be covered with a clean sheet.
- Patient must wear a procedure mask at all times when out of the room.
- The transporting staff and relevant procedural or radiology staff should wear a procedure mask, gloves and eye protection.
- Transporting staff have the option of wearing an N95 mask or a PAPR at their discretion.
- Patients requiring transport in their bed will have their bed wiped down with bleach before leaving room.

PPE During Administration of Nebulized Medications

- Nebulized medications should be avoided. Use MDIs whenever possible. If nebulized treatment is needed, nursing should try to batch care before treatment.
- Airborne precautions should be used during and after nebulizer treatments.
- If treatment was given in a negative pressure or standard room, 60 minutes of airborne precautions will be required after treatment.
- For intubated patients, nebulizer treatment will be given through Aerogen (closed circuit).

ABC Alerts and CAT Calls

- Goals are to decrease the risk of exposure of staff while providing maximal emergency and resuscitative measures.
- CAT calls for suspected or confirmed COVID-19 patients should follow PPE procedures for airborne precautions (N95 masks or PAPR).

- Any cardiac or respiratory arrest of unknown pathology will be treated as a positive COVID-19 case and airborne precautions will be utilized.
- All ABC alerts will be attended by essential personnel only (one provider, two BLS trained compressor, respiratory therapist, ICU RN, ED RN, 4S RN [recorder]). House supervisor and pharmacist will attend but not enter room. House supervisor will call additional resources if needed.

Discharge of Potential or Confirmed COVID Patients

- Place procedure mask on patient.
- Transporter should wear procedure mask, gloves and eye protection. Patient to exit directly to outside.
- Patient and family members must be provided with home care guidance regarding isolation and contact information for their local health department
 - Tompkins County Health Department 607-274-6600
 - Schuyler County Health Department 607-535-8140
 - Cortland County Health Department 607-753-5036

Post-mortem Care

- Place deceased in standard body bag .
- Secure zipper pull tab with tape to prevent accidental unzipping.
- Clean exterior of bag with bleach wipes.
- Write PUI (Person of Interest) or airborne precautions on bag in black marker.

Exposed Personnel

- All health care workers who have participated in the care of a patient with COVID-19 should be vigilant for the development of a fever or respiratory symptoms during the 14 days following contact. Anyone with fever or concerning symptoms should contact their direct supervisor or Infection Control (274-4301).
- [Insert CHS HCP Exposure guidelines here](#)

References

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