

YNHHS/YM Guidelines regarding use of respiratory protection for COVID-19 prevention

NOTE: THIS POLICY SUPERCEDES OTHER COVID-19 RESPIRATORY PROTECTION POLICIES AND GUIDANCE.

This policy is active as of March 24, 2020 and updated on March 27, 2020.

Background: SARS-CoV-2 is the virus responsible for COVID-19 and it is readily transmissible from person to person. While the mechanism of SARS-CoV-2 transmission is not fully understood, it is believed that respiratory droplets play a significant role in transmission. This document reflects the current understanding of the prevention of transmission of SARS-CoV-2. It also considers our current supply of PPEs, its current and projected use rate, and the likelihood of maintaining a steady state supply. Conservative estimates indicate that we may run out of personal protective equipment (PPE) in 14 to 21 days, unless we enhance efforts to conserve PPE and/or identify additional sources of PPE.

We recognize that our understanding of effective preventive measures is constantly improving, and the supply chain landscape will remain fluid, and anticipate that this guidance will change. Be certain that our utmost priority is the protection of our staff and of our patients, and we remain committed to act quickly.

Given these considerations and with input and advice from YNHHS, YM, clinical, Infection Prevention and Supply Chain leaders, we issue the following guidelines.

We have defined 3 use cases:

1. Initial Patient Encounter Staff: defined as ED & Urgent Visit (including related Diagnostic Imaging areas), Labor and Delivery, Smilow Extended Care Clinic, and the operating rooms and procedural areas (e.g. urgent GI, IR, and cardiac cath lab procedures).
2. COVID-19 positive/pending patients (ICU and Ward)
3. Routine in-hospital and ambulatory patient care (low risk patients including those who have screened negative for symptoms)

Policy:

1. Initial Patient Encounter staff are recommended to wear surgical masks for all patient care. If the patient is COVID-19 positive/pending a respirator is the preferred respiratory protection.
2. For patients suspected or known to be COVID-19 positive, a respirator, eye protection (face shield or goggles), gloves and a gown are to be worn for patient care. If a respirator is unavailable, a surgical mask may be used.
 - Patients suspected or known to have COVID-19 will don a surgical mask when outside of an airborne infection isolation or private room.
 - Staff working on units dedicated to COVID-19 patients are to maintain the use of a respirator at all times.
 - Staff performing aerosol-generating procedures (see below) are to don a respirator, eye protection, gloves and gown regardless of patients' COVID-19 status. This includes the operating room, L and D, and ICU. Note: The number of staff involved in the performance of aerosol generating procedures and patient care, in general, must be kept to a minimum to prevent potential exposures and to conserve PPE.

- Staff caring for patients with Leukemia/BMT on NP11 (adult) and WP7 (pediatrics) are required to wear surgical masks while in a patient room.
 - We are asking that staff use a single respirator/mask for their entire shift and only discard respirators/masks in the designated bins.
3. The use of surgical masks in routine clinical care is of unclear benefit. However, we are offering all staff involved in direct patient care who cannot socially distance from patients a single mask for use every shift. Rotating support services unable to socially distance will be offered one mask per week. The weekly distribution of masks will be managed at each hospital. There will be a future communication to provide the details of the distribution of masks. The use of outside PPE is discouraged.

Aerosol Generating Procedures:

- Intubation, extubation, endoscopy or suctioning of the respiratory tract
- Non-invasive ventilation (e.g., BiPAP)
- Use of inhaled nebulized or metered dose medications
- Upper aerodigestive tract surgeries (e.g., tracheostomy, oral or sinus surgeries)

HOSPITAL COVID-19 PPE REQUIREMENTS BY LOCATION / PATIENT STATUS

(as of 3/27/20)

<u>Location / Group</u>	<u>Patient Status and PPE Level (defined below)</u>				
	<u>Not Person Under Investigation (PUI)</u>	<u>PUI</u>	<u>COVID Positive</u>	<u>Aerosol Generating Procedure, not PUI / COVID</u>	
Emergency Room / Urgent Care	B	A	A	A	
Procedural Areas	B	A	A	A	
Diagnostic Imaging	B	A	A	A	
Labor and birth	B	A	A	A	
Intensive Care Units	B	A	A	A	
Inpatient Units	B	A	A	A	
Support Services <u>unable to social distance (Note 1)</u>	C	A	A	A	
Rotating Services (Respiratory Therapy, EVS, Patient Transport*, etc.) <u>unable to social distance (Note 1)</u>	Follow same protocol as treatment location				
Employees and staff <u>able to social distance</u>	D	D	D	D	

Note 1 – Clustered teams to be identified to limit PPE utilization
*while in the patient room.

PPE LEVELS DEFINED						
PPE PRECAUTIONS	PPE REQUIREMENTS					
	Gloves	Isolation gown	Surgical/Procedure Mask (ASTM 1-3)	Face shield or Goggles	Respirator (N95 or equivalent)	Head or shoe covering
A COVID-19 [^]	✓	✓	✗	✓	✓*	✗
B Standard with Mask (one per day)	✗	✗	✓	✗	✗	✗
C Standard with Mask (one per week)	✗	✗	✓	✗	✗	✗
D Standard	Per YNHHS standard precautions policy					

* If high splash risk (e.g., surgeon doing major case), then an N95 that is rated to be used during surgery. If wearing a respirator that is not rated to be used during surgery wear the respirator covered by a mask.

[^] If respirator is unavailable, surgical mask should be used

Guidance for Optimizing Use of PPE

Infection Prevention has reviewed our current isolation policies and practices. Due to supply shortages during this pandemic the following modifications have been made to preserve our supply while keeping our patients and staff safe. We understand that these may not be our best practices under normal circumstances but are in alignment with the current CDC recommendations.

Type of PPE	Modified Use
N95 Respirator and Surgical Mask	<ul style="list-style-type: none"> • Can be reused for multiple patients • Can be worn for extended use of time while providing patient care (i.e., not removed between patients) when appropriate as caring for multiple patients • Avoid touching the front of the N95/mask and your face • Dispose of in designated bin at end of day
Face Shield and Goggles	<ul style="list-style-type: none"> • Face shield to be worn by direct patient care providers only • Can be reused for multiple patients • Can be worn for extended use of time while providing patient care (i.e., not removed between patients) when appropriate as caring for multiple patients • Avoid touching the front of the face shield and your face • Dispose of in designated bin at end of day
Gown	<ul style="list-style-type: none"> • Gowns are no longer required for every entry into a contact isolation room • They are to be worn when direct patient care is being provided or when there will be contact with the patient environment • For example, a gown is not needed if only talking to the patient or drop off a cup of coffee • Note that if the isolation requires a mask or N95 respirator to be worn, that must be worn to enter.
Disinfectant Wipes	<ul style="list-style-type: none"> • Tubs of wipes are to be stored in a secured location, similar to N95 process. • Do not dispose of tubs of wipes in the patient room upon discharge. Wipe the outside of the tub with a disinfectant wipe • Consider placing 5-10 wipes in a plastic bag to take into the patient room.
COVID cluster care	<ul style="list-style-type: none"> • When caring for multiple patients sequentially between patients: <ul style="list-style-type: none"> ○ Wear same gown, mask/respirator, face shield ○ Remove gloves, perform hand hygiene and don clean gloves • Gowns and gloves are to be removed when in common areas (i.e., med rooms, supply rooms, nursing stations, computer work stations)
PAPR	<ul style="list-style-type: none"> • Per the Delivery Network specific protocol

Process for Reuse and Extended Use of Respirators, Masks and Face Shields

This document outlines the practice for reuse and extended use of NIOSH-certified N95 respirators, surgical masks and face shields which will be effective immediately following CDC criteria.

Please review the video for donning and doffing PPE process located on the intranet under COVID Resources-Other Resources.

Definitions

Reuse

- The practice of using the same item of PPE for multiple encounters with patients but removing it ('doffing') after each encounter.
- The PPE is to be stored in a paper bag between encounters to be put on again ('donned') prior to the next encounter with a patient. See process below.
- These can be reused on multiple patients and across multiple shifts.

Extended Use

The practice of wearing the same PPE for repeated close contact encounters with several patients, without removing it IN BETWEEN patient encounters. Extended use may be implemented when multiple patients are infected with the same pathogen and patients are placed together in dedicated waiting rooms or hospital wards.

Guidelines

- Staff entering an isolation room are to be minimized and limited to those essential for care only. Minimize entrance into rooms by clustering care.
- Students should not be entering isolation rooms.
- Visitors should also be limited per visitation policy.
- N95, mask and face shield may be reused by one healthcare provide only.
- The healthcare provider is to be provided with one N95/mask and face shield prior to caring for a patient on airborne or droplet isolation.
- Replace the N95 respirator, mask and/or face shield :
 - If contaminated with patient's blood, respiratory or nasal secretions, or other bodily fluids.
 - If damaged.
 - **Dispose of in the designated recycle bin. DO NOT dispose of in trash.**
- Avoid touching the front of the respirator, mask and face shields and also your face.
- Perform **hand hygiene**
 - Before and after touching or adjusting the PPE (if necessary for comfort or to maintain fit).
- **Storage:**
 - Place in a paper bag labeled with the user's name in a manner to ensure they do not become damaged or deformed.

Process for removal of PPE, storage and reuse:

- **For removal** after a patient encounter:
 - Inside the patient room, doff your gown and gloves by grasping the front of the gown and pulling it away from your body, breaking the ties. Ensure touching only the front of the gown with gloved hands. Roll into a ball. Remove gloves and discard both.
 - Perform hand hygiene upon exiting the patient room.
 - Outside the room, don a new pair of gloves
 - Doff your face shield, ensuring you do not touch the front of the shield. Wipe surfaces using a disinfectant wipe.
 - Place face shield in a labeled paper bag.
 - Remove gloves and perform hand hygiene.
 - If wearing an N95-Grasp the bottom strap of the N95 and pull it over your head, then the top strap and lift the respirator forward and away from your face.
 - If wearing a surgical mask-Grasp the ear straps of the mask and lift it forward and away from your face. Carefully fold so the outer surface is folded against itself.
 - Place N95/mask and face shield can be placed in the same paper bag

- **Prior to reuse,**
 - If entering a room also requiring contact, don a gown and gloves. If just airborne or droplet precautions, don a clean pair of gloves to inspect for damage.
 - For respirator or mask-ensure intact and shape maintained, not stretched out, nosepiece intact.
 - Don respirator or mask and conduct a seal check.
 - Don face shield
 - Remove gloves and perform hand hygiene before entering patient room. Don a new pair of gloves if entering contact precautions room.

Process for extended or intermittent use:

- Respirator, mask and/or face shield to be donned at the beginning of care.
- All the above PPE **CAN** be worn throughout shift while caring for multiple patients as long as it maintains it fit and function.
- If need to doff during shift (for example breaks, toileting) follow process for reuse.

COVID-19 cluster care:

- Gown, respirator or mask and face shield can continue to be worn between patients.
- Change gloves between patients, perform hand hygiene and don clean gloves.
- Gowns and gloves are to be removed when in common areas (i.e., med rooms, supply rooms, nursing stations, computer work stations)

Thank you for your attention to practice detail so that we may keep our staff and patients safe.

We will keep you informed as the situation changes. Please refer to the COVID Resources site on the intranet for most current documents.