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EXTENDED USE AND REUSE OF PERSONAL PROTECTIVE EQUIPMENT

This document supersedes all prior guidance and replaces the guidance entitled Extended Use and Reuse of N95 Respirators, Surgical Masks, and Eye Protection.

Summary of April 20, 2020 changes:
• Addition of gown conservation strategies

Background

Partners has invoked extended use and reuse requirements for personal protective equipment (PPE), including all N95 respirators, surgical masks, and procedural masks in order to conserve these critical items while still protecting healthcare workers from respiratory infections. Additionally, Partners has invoked conservation of isolation gowns through purposeful bundling of patient care, use of extended tubing, telehealth, and minimizing the need for gowns when possible. Purposeful bundling of patient care applies to Enhanced Respiratory Isolation and Strict Isolation patients only and includes an intentional reduction in room entry while preserving patient safety and work flow with the goal of PPE conservation, specifically gown utilization.

N95 Respirator, Surgical Mask, and Procedural Mask Guidance

All healthcare workers using N95 respirators, surgical masks, and procedural masks to care for patients must extend the use of their inventory as follows:

1. Extended use (wearing N95 respirators, surgical, and procedural masks without removal or redonning between patients) is allowed if the N95 respirator, surgical, or procedural mask has not been soiled, contaminated or damaged.
   a. Extended use of N95 respirators is allowed after aerosol generating procedures in patients with suspected viral respiratory syndromes, but the N95 should be discarded after being removed. There is no need to discard the N95 if it was used during aerosol generating procedures in patients without suspected respiratory viral syndromes.

2. Reuse (removal and reuse of N95 respirators, surgical, and procedural masks between patients) is allowed if the N95 respirator, surgical, or procedural mask, has not been soiled, contaminated, or damaged.
   a. If an N95 respirator was used in an aerosol-generating procedure in a patient with a suspected viral respiratory syndrome, the N95 should not be reused.

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b. An N95 respiratory may be reused if it was used in aerosol-generating procedures in patients **without** suspected respiratory viral syndromes.

3. Extended use is preferred over reuse.

4. If an N95 respirator, surgical mask, or procedural mask is touched by the provider while in use, with or without gloves, the provider must change their gloves (if worn) and perform hand hygiene.

5. Prior to removing the N95 respirator, surgical, or procedural mask, perform hand hygiene.

6. The removed N95 respirator, surgical, or procedural mask should be placed in a designated receptacle for reuse (ex: paper tray, paper bag, or emesis basin, labeled with provider’s name).
   a. Perform hand hygiene immediately after putting on or otherwise touching a reused respirator or mask
   b. Keep the N95 respirator, surgical, or procedural mask in a separate receptacle from the eye protection.

7. N95 respirator, surgical, and procedural masks must be worn by a single wearer.

8. Surgical and procedural masks should be used for a maximum of one shift.

9. N95 respirators should be used for a maximum of one shift so long as they have not been soiled, contaminated, or damaged. N95 respirators used during an aerosol-generating procedure in a patient **with** a suspected respiratory viral syndrome should be used under extended use only.

10. At the end of each shift, or after removing the N95 respirator following an aerosol-generating procedure performed on a viral respiratory illness patient, staff will deposit their N95 into a designated receptacle for decontamination.

11. Under conditions of extended use or reuse, a face shield is preferentially worn over the N95 respirator, surgical mask, or procedural mask as the form of eye protection in order to protect the mask. The face-shield must be cleaned and reused per the guidance below.

**Procedure for Donning Reused N95 respirator, surgical, or procedural mask**

1. Perform hand hygiene
2. Put on clean gloves
3. Put on N95 respirator, surgical, or procedural mask, taking care to avoid touching face or eyes
4. Perform seal check (for N95)
5. Discard gloves and perform hand hygiene

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References:
CDC Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings
https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html
CDC Strategies for Optimizing the Supply of Facemasks

Eye Protection Guidance

All healthcare workers using eye protection in the form of face shields or goggles to care for patients must reuse these supplies as follows:

1. Extended use (wearing eye protection without removal or redonning between patients) and reuse (removal and reuse of eye protection between patients) are required if the face shield or goggles have not been soiled, contaminated or damaged.
2. Extended use is preferred over reuse.
3. Eye protection should be cleaned when visibly soiled and after removal.
4. Eye protection must be worn by a single wearer
   a. Label the face shield or goggles with name of the user with a marker (not a sticker).
5. The removed and cleaned eye protection should be placed in a designated receptacle for reuse (e.g.: paper tray, paper bag, emesis basin, labeled with provider’s name).
   a. Perform hand hygiene immediately after putting on or otherwise touching reused eye protection
   b. Keep the eye protection in a separate receptacle from the N95 respirator, surgical, or procedural mask
6. All eye protection, including disposable face-shields, goggles, and personal reusable goggles must be used without time limit and cleaned and stored according to the procedure below as long as they are not damaged and retain their structural integrity.
7. Personal glasses are never suitable for eye protection.

Procedure for Cleaning Eye Protection

1. Perform hand hygiene
2. Don a clean pair of gloves
3. Carefully wipe the outside of the eye protection using hospital-approved alcohol-based wipes and allow to dry (e.g. WIPES ALCOHOL #CSWA004, PS#540464).
4. Allow to air dry
5. Remove gloves and perform hand hygiene.

References:
CDC Strategies for Optimizing the Supply of Eye Protection

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**Gown Conservation Best Practices**

1. **Coordination of care activities between interdisciplinary team members and a shift in some traditional role responsibilities.** Tasks requiring room entry are bundled so that the minimum necessary number of staff to enter and don an isolation gown is met across all patient care settings and shifts. Specific examples include:
   - Couple vital sign assessments with medication administration
   - Deliver meal trays with other patient care activities
   - Only attending and 1 other provider, if necessary, to enter room during rounds
   - When provider is assessing a patient, provider to assist with other patient care needed when in the room, e.g. assist patient with getting out of bed to chair rather than calling another staff member in
   - Reduce the number of staff needed to perform clinical care; trainees may be asked to abstain from participation in procedure if care team can manage with 3 sets of hands versus 4
   - COVID-19 patients cohorted in double rooms should be assigned the same Nursing (RN, PCA, ORA) staff whenever possible so that staff can wear a single gown between these two patients (see Procedure section)

2. **Use of telehealth and tubing to minimize the number of room entries.** Telehealth should serve as an alternative to physical room entry or enable pre-prep room entry whenever clinically safe and operationally possible. Examples include:
   - Virtual assessment of patient needs prior to room entry to enhance bundled care. Specific example: Nurse assesses need for pain medication or refreshment prior to entering room for antibiotic administration
   - Consult services should use telehealth in place of entering room
   - Physicals: assessment to be done virtually by trainee; only attending enters room for the portions of physical exam required to be done in person

3. **Tubing** (MRI extension tubing), when available, will be used to move IV pumps outside of room when patient is on multiple medications to allow for titration of medications or hanging of intermittent infusions without needing to don an isolation gown. This will be done in all ICU settings for patients on Enhanced Respiratory Isolation and Strict Isolation and considered in other patient care settings when possible.

4. **Gown conservation for COVID-19-cohorted patients in semi-private rooms.** Staff will follow the following procedure when donning and doffing PPE in the care of COVID-19 patients who are cohorted in semi-private rooms.
   - Staff can wear a single isolation gown between patients. Assignments (nursing, PCA, provider) will be made accordingly.
   - Isolation gowns will be donned with each room entry and doffed at each room exit.

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Gloves will be changed, and hand hygiene performed between care of patients in the semi-private room.

Staff will doff their gloves, remove the thumb loops of the gown, perform hand hygiene, replace thumb loops and don clean gloves before moving to the other patient.

Staff will change their gown if it is soiled or wet.

5. **Gown conservation for ambulatory test sites, including Respiratory Illness Clinics (RICs).** Gown conservation strategies are contingent upon availability of Hexapod / B-Protected booths/Oasis booths.

- RICS with Hexapod / B-protected booths/Oasis booths. Staff collecting NP swabs within a Hexapod do not need to wear a gown
- RICS without Hexapod / B-protected booths/Oasis booths. Staff will only change their gowns between patients if:
  - performing an NP/OP swab
  - examining the oropharynx
  - gown becomes soiled or wet