March 26, 2020

Coronavirus 2019 (COVID-19): Recommendations for Conserving the Supply of Personal Protective Equipment in DC

All healthcare facilities should implement plans to conserve personal protective equipment (PPE) for DC's most vulnerable patients, frontline healthcare workers, and first responders. Healthcare facilities should have already implemented other engineering and administrative control measures in conjunction with these recommendations.

Key Reminders:

- **All facilities should prepare to implement contingency and crisis plans for personal protective equipment**
- **Engineering and administrative control measures(**https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/conventional-capacity-strategies.html**) that should already be in place include:**
  - Reducing the number of patients coming to the hospital or outpatient settings
  - Excluding healthcare personnel (HCP) not essential for care of confirmed and suspected COVID-19 patients from entering the patient care area
  - Reducing face-to-face HCP encounters with patients where practical
  - Restricting visitors to patients with confirmed or suspected COVID-19
  - Cohorting patients with confirmed and suspected COVID-19and limiting HCP providing care to these patients
  - Optimizing use of telemedicine
- **Respirators (N95s, PAPRs, etc) should be prioritized for use in the following situations:**
  - Performance of aerosol-generating procedures (AGP) on patients suspected or confirmed to have COVID-19
  - Provision of care to patients with other infections for which respiratory protection is strongly indicated (e.g., tuberculosis, measles, varicella)
- **Healthcare professionals (HCP) should not use a respirator (N95, PAPR, etc.) when collecting an NP or OP swab from a patient undergoing COVID-19 testing**
  - Eye protection (goggles or face shield), mask, gloves and gown are acceptable
- **Prioritize facemasks for selected activities such as:**
  - Provision of essential surgeries and procedures
  - Care activities where splashes and sprays are anticipated
  - Activities where prolonged face-to-face or close contact with a potentially infectious patient is unavoidable
  - Aerosol generating procedures, if respirators are no longer available
- **Cancel all elective and non-urgent procedures and appointments for which a facemask is typically used by HCPs.**
- **During severe resource limitations, exclude HCPs at higher risk for severe illness from contact with known or suspected COVID-19 patients.**
- **Consider designating convalescent HCPs who have clinically recovered from COVID-19 to preferentially provide care to patients known or suspected to have COVID-19.**

The tables below summarizes contingency and crisis options. For additional detailed informational about strategies for optimizing the supply of PPE, please visit the CDC website: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html

Table-1: Recommendations to Optimize PPE Supply (adapted from CDC guidance: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html)

	Prioritize	Extend or Reuse	Seek Alternatives
Respirators	• Restrict respirators to aerosol generating procedures, and also to infections for which respiratory protection is strongly indicated (e.g., tuberculosis, measles, varicella). • Restrict respirator use based upon distance from a patient with suspected or known COVID-19 and use of source control (Table-2). • Use re-useable respirators such as PAPRs/full face elastomeric when available.	• **Consider extended use of N95 respirators** when providing care for cohorted patients with same diagnosis. • **Consider limited re-use of N95 respirators** when caring for patients with tuberculosis. If supply is running low, consider for measles, varicella, and COVID-19 patients. Please be aware of the possibility of contact transmission with this option. • **Consider using N95 respirators beyond the manufacturer-designated shelf life for training or fit testing.** If supply is running low, consider use when caring for patients with tuberculosis, measles, varicella, or COVID-19.	• Consider using respirators approved under standards used in other countries that are similar to NIOSH-approved N95 respirators. **When no respirators are left:** • **Consider engineering controls** (expedient patient isolation room approach; ventilated headboards). • **Exclude HCP at higher risk for severe illness** from COVID-19 from contact with known or suspected COVID-19 patients. • **Designate convalescent HCP for provision of care to known or suspected COVID-19 cases.**
Facemasks	**Prioritize facemasks for selected activities such as:** • For provision of essential surgeries and procedures • During care activities where splashes and sprays are anticipated • During activities where prolonged face-to-face or close contact with a potentially infectious patient is unavoidable • For performing aerosol generating procedures, if respirators are no longer available	• **Consider implementation of extended use of facemasks.** • **Consider implementation of limited re-use of medical and surgical masks.** The facemask should be removed and discarded if soiled, damaged, or hard to breathe through. • **Not all facemasks can be re-used.** Facemasks with elastic ear hooks may be more suitable for re-use. • **Consider using facemasks beyond the manufacturer-designated shelf life** during patient care activities.	• Remove facemasks for visitors in public areas. • Restrict facemask to use by HCP, rather than patients for source control **When no facemasks are available:** • **Exclude HCP at higher risk for severe illness** from COVID-19 from contact with known or suspected COVID-19 patients. • **Designate convalescent HCP for provision of care to known or suspected COVID-19 cases.** • Use face shield that covers the entire front (that extends to the chin or below) and sides of the face with no facemask. • Consider use of expedient patient isolation rooms for risk reduction. • Consider use of a NIOSH ventilated headboards.

Table-1: Recommendations to Optimize PPE Supply (adapted from CDC guidance: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html)

	Prioritize	Extend or Reuse	Seek Alternatives
Eye Protection	**Prioritize eye protection for selected activities such as:** • Care activities where splashes/sprays are anticipated, which typically includes aerosol generating procedures. • Activities where prolonged face-to-face contact with a potentially infectious patient is unavoidable. • Consider use of PAPRs or full face elastomeric respirators which have built-in eye protection. Ensure there is appropriate cleaning and disinfection after use.	• Consider implementation of extended use of eye protection. • Shift eye protection supplies from disposable to re-usable devices (i.e., goggles and reusable face shields). • Consider using eye protection devices beyond the manufacturer-designated shelf life during patient care activities.	• Consider using industrial or laboratory safety glasses (must have extensions to cover the side of the eyes). • **Exclude HCP at higher risk for severe illness** from COVID-19 from contact with known or suspected COVID-19 patients. • **Designate convalescent HCP for provision of care to known or suspected COVID-19 cases.**
Isolation Gowns	**Prioritize gowns for high-risk activities:** • During care activities where splashes and sprays are anticipated, which typically includes aerosol generating procedures. • During high-contact patient care activities, such as dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, and wound care. • Surgical gowns should be prioritized for surgical and other sterile procedures.	• Consider shifting gown use towards cloth isolation gowns (i.e., reusable, washable gowns). • Consider the use of coveralls. • Use expired gowns beyond manufacturer-designated shelf life for training. • Use gowns or coveralls conforming to international standards. • **Consider extended use of isolation gowns (cloth or disposable).** The same gown can be worn by the same HCP when interacting with more than one patient known to be infected with the same infectious disease when these patients are housed in the same location (i.e., isolation cohort or isolation wing). o This should only be done if there are no additional co-infectious diagnoses transmitted by contact (such as Clostridioides difficile) among patients. o If the gown becomes visibly soiled, it must be removed and discarded. • **Consider reuse of cloth (not disposable) isolation gowns.** Any gown that becomes visibly soiled during patient care should be disposed of and cleaned.	• Consider suspending use of gowns for endemic multidrug resistant organisms (e.g., MRSA, ESBL-producing organisms). Consult with DC Health if this option is needing to be considered. **When no gowns are available, consider using gown alternatives that have not been evaluated as effective.** Preferable features should include long sleeves and closures (snaps, buttons) that can be fastened and secured. Examples include: • Disposable laboratory coats • Reusable (washable) patient gowns • Reusable (washable) laboratory coats • Disposable aprons • Combinations of clothing: Combinations of pieces of clothing can be considered for activities that may involve body fluids and when there are no gowns available: o Long sleeve aprons in combination with long sleeve patient gowns or laboratory coats o Open back gowns with long sleeve patient gowns or laboratory coats o Sleeve covers in combination with aprons and long sleeve patient gowns or laboratory coats

Table-2 Suggested facemask or respirator use, based upon distance from a patient with suspected or known COVID-19 and use of source control (adapted from CDC guidance: https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/crisis-alternate-strategies.html)

HCP planned proximity to the case patient during encounter	Facemask or respirator determination	
	Patient masked for entire encounter (i.e., with source control)	Unmasked patient or mask needs to be removed for any period of time during the patient encounter
HCP will remain at greater than 6 feet from symptomatic patient	HCP remaining at this distance from the patient should not need to enter the patient care area; if entry required: no facemask or respirator	HCP remaining at this distance from the patient should not need to enter the patient care area; if entry required: no facemask or respirator
HCP will be within 3 to 6 feet of symptomatic patient	HCP remaining at this distance from the patient should not need to enter the patient care area; if entry required: facemask	HCP remaining at this distance from the patient should not need to enter the patient care area; if entry required: facemask
HCP will be within 3 feet of symptomatic patient, including providing direct patient care	Facemask	N95 respirator/ elastomeric /PAPR, based on availability
HCP will be present in the room during aerosol generating procedures performed on symptomatic persons	N95 respirator/ elastomeric /PAPR, based on availability	N95 respirator/ elastomeric /PAPR, based on availability