Chicago Department of Public Health

Health Alert

City of Chicago
Lori E. Lightfoot, Mayor

www.chicagohan.org

Chicago Department of Public Health
Allison Arwady MD MPH, Commissioner

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

COVID-19 PPE Conservation Guidance for Hospitals
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- **WE MUST PRESERVE PERSONAL PROTECTIVE EQUIPMENT SUPPLIES**
    - Given anticipated burden on the healthcare system, surge capacity should be prioritized to crisis capacity standards.
    - Use standard, contact, droplet precautions, and appropriate eye protection when caring for patients who are confirmed or suspected to have COVID-19. Add airborne isolation for aerosol generating procedures, which should be performed in an airborne infection isolation room.
    - Cancel elective surgeries
    - Consider exclusion or reassignment of immunocompromised staff from caring for patient diagnosed with COVID-19
    - Designate convalescent HCP for provision of care to known or suspected COVID-19 patients.
    - Use PPE beyond the manufacturer-designated shelf life during patient care activities.
    - Material in this alert is derived from CDC guidance available here

- **HEALTHCARE FACILITIES SHOULD PLAN NOW FOR ENHANCED SURGE CAPACITY**
    - Hospitals should minimize, postpone, or cancel electively scheduled operations, endoscopies, or other invasive procedures and minimize use of essential items needed to care for patients, including but not limited to, ICU beds, personal protective equipment, terminal cleaning supplies, and ventilators.

BACKGROUND
Given the anticipation of crisis capacity needs, below highlights the crisis capacity recommendations.

GENERAL CONSERVATION MESSAGES:

1) **Selectively cancel elective and non-urgent procedures** and appointments for which PPE is typically used by HCP.

2) **Exclude HCP at higher risk for severe illness from COVID-19 from contact with known or suspected COVID-19 patients.**
    - During severe resource limitations, consider excluding HCP who may be at higher risk for severe illness from COVID-19, such as those of older age, those with chronic medical conditions, or those who may be pregnant, from caring for patients with confirmed or suspected COVID-19 infection.

3) **Designate convalescent HCP for provision of care to known or suspected COVID-19 patients.**
    - It may be possible to designate HCP who have clinically recovered from COVID-19 to preferentially provide care for additional patients with COVID-19. Individuals who have recovered from COVID-19 infection may have developed some protective immunity, but this has not yet been confirmed.

4) Use PPE beyond the manufacturer-designated shelf life during patient care activities.

- If there is not date available on the PPE label or packaging, facilities should contact the manufacturer. The user should visibly inspect the product prior to use and, if there are concerns (such as degraded materials or tears), discard the product.

OPTIMIZING THE SUPPLY OF PPE

Eye Protection
Prioritize eye protection for selected activities such as:
- During care activities where splashes and sprays are anticipated, which typically includes aerosol generating procedures.
- During activities where prolonged face-to-face or close contact with a potentially infectious patient is unavoidable.

Consider using safety glasses (e.g., trauma glasses) that have extensions to cover the side of the eyes.

Selected Options for Reprocessing Eye Protection
Adhere to recommended manufacturer instructions for cleaning and disinfection. When manufacturer instructions for cleaning and disinfection are unavailable, such as for single use disposable face shields, consider:

1. While wearing fresh gloves, carefully wipe the *inside, followed by the outside* of the face shield or goggles using a clean cloth saturated with neutral detergent solution or cleaner wipe.
2. Carefully wipe the *outside* of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
3. Wipe the outside of face shield or goggles with clean water or alcohol to remove residue.
4. Fully dry (air dry or use clean absorbent towels).
5. Remove gloves and perform hand hygiene.

Isolation Gowns
Extended use of isolation gowns.
Consideration can be made to extend the use of isolation gowns (disposable or cloth) such that the same gown is worn by the same HCP when interacting with more than one patient known to be infected with the same infectious disease when these patients housed in the same location (i.e., COVID-19 patients residing in an isolation cohort). This can be considered only if there are no additional co-infectious diagnoses transmitted by contact (such as *Clostridioides difficile*) among patients. If the gown becomes visibly soiled, it must be removed and discarded as per usual practices.

Prioritize gowns.
Gowns should be prioritized for the following activities:
- During care activities where splashes and sprays are anticipated, which typically includes aerosol generating procedures
- During the following high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of healthcare providers, such as: Dressing, bathing/showering, transferring, providing hygiene, changing linens, changing briefs or assisting with toileting, device care or use, wound care

Surgical gowns should be prioritized for surgical and other sterile procedures. Facilities may consider suspending use of gowns for endemic multidrug resistant organisms (e.g., MRSA, VRE, ESBL-producing organisms).

Facemasks

Implement limited re-use of facemasks: Limited re-use of facemasks is the practice of using the same facemask by one HCP for multiple encounters with different patients but removing it after each encounter. As it is unknown what the potential contribution of contact transmission is for SARS-CoV-2, **care should be taken to ensure that HCP do not touch outer surfaces of the mask during care**, and that mask removal and replacement be done in a careful and deliberate manner.

- The facemask should be removed and discarded if soiled, damaged, or hard to breathe through.
- Not all facemasks can be re-used.
  - Facemasks that fasten to the provider via ties may not be able to be undone without tearing and should be considered only for extended use, rather than re-use.
  - Facemasks with elastic ear hooks may be more suitable for re-use.
- HCP should leave patient care area if they need to remove the facemask. Facemasks should be carefully folded so that the outer surface is held inward and against itself to reduce contact with the outer surface during storage. The folded mask can be stored between uses in a clean sealable paper bag or breathable container.

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

N95 Respirators

When N95 Supplies are running low: Use respirators as identified by CDC as performing adequately for healthcare delivery beyond the manufacturer-designated shelf life
- Use respirators approved under standards used in other countries that are similar to NIOSH-approved N95 respirators but that may not necessarily be NIOSH-approved
- Implement limited re-use of N95 respirators for patients with COVID-19, measles, and varicella. See attached IDPH Respirator Reuse Guidance.
- To reduce the chances of decreased protection caused by a loss of respirator functionality, respiratory protection program managers should consult with the respirator manufacturer regarding the maximum number of donnings or uses they recommend for the N95 respirator model(s) used in that facility. If no manufacturer guidance is available, preliminary data **suggests limiting the number of reuses to no more than five uses per device** to ensure an adequate safety margin.