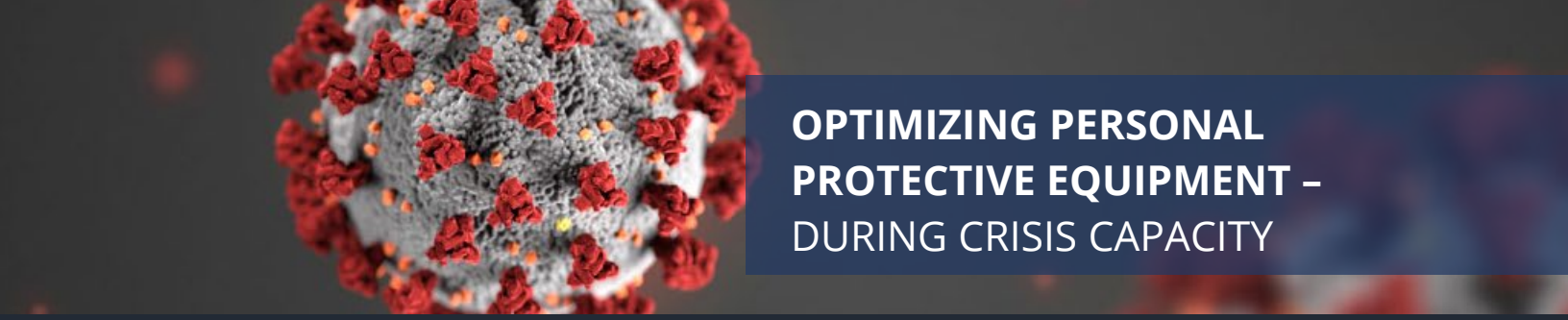

OPTIMIZING PERSONAL PROTECTIVE EQUIPMENT – DURING CRISIS CAPACITY

Michigan.gov/Coronavirus

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The Centers for Disease Control and Prevention (CDC) provides strategies that can be utilized by healthcare workers to optimize use of PPE during periods of known shortages. These strategies should only be used when there is limited supply that has exceeded the ability to provide conventional standards.

During severe resource limitations, consider excluding healthcare providers (HCP) at higher risk for severe illness from COVID-19 from contact with known or suspected COVID-19 patients (e.g., those of older age, those with chronic medical conditions, or those who may be pregnant).

N-95 Respirators:

- Consider use of respirators beyond the manufacturer-designated shelf life for healthcare delivery.
- Consider use of respirators approved under standards used in other countries similar to NIOSH-approved N-95 respirators.
- Consider limited re-use of N-95 respirators for COVID-19 patients according to CDC guidance.
- Decontamination and reuse of N-95 respirators according to CDC guidance may be considered. Only respirator manufactures can reliably provide guidance on how to decontaminate their specific models of respirators. However, if absent, third parties may also provide guidance or procedures on how to decontaminate respirators without impacting respirator performance. Vaporous hydrogen peroxide, ultraviolet germicidal irradiation, and moist heat are the most promising decontamination methods. **No current data exists supporting the effectiveness of these decontamination methods specifically against SARS-CoV-2.** Therefore, even after decontamination, these N-95 respirators should be handled carefully.
- In settings where N-95 respirators are so limited that routinely practiced standards of care for wearing **N-95 respirators and equivalent or higher level of protection respirators are no longer possible, and surgical masks are not available**, as a last resort, it may be necessary for HCP to use masks that have never been evaluated or approved by NIOSH.
- Any respirator that becomes obviously damaged, soiled, or difficult to breathe through should be discarded.

- Powered Air Purifying Respirators (PAPRs) and elastomeric respirators may also be used. Follow CDC guidance on the use of these respirators: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html.

Eye Protection:

- **Healthcare personnel working in facilities located in areas of moderate to substantial community transmission should wear eye protection during all patient care encounters.**
- Consider extending use of eye protection without removing between patient contacts. This can be done with disposable and reusable devices.
- Eye protection should be removed and reprocessed if it becomes visibly soiled or difficult to see through.
- Face shields that are reprocessed should be dedicated to one healthcare provider and reprocessed whenever it is visibly soiled or removed prior to putting it back on.
- Eye protection should be discarded if damaged (e.g., face shield can no longer fasten securely to the provider, if visibility is obscured and reprocessing does not restore visibility).
- Note: Avoid touching eye protection. If touched, immediately perform hand hygiene. If there is a need to remove eye protection, leave the patient care area.
- During extreme shortages (crisis standards of care) consider using eye protection devices beyond the manufacturer-designated shelf life (visually inspect the product prior to use and if there are concerns such as degraded materials discard the product).
- Prioritize eye protection for selected activities such as where splashes and sprays are anticipated-includes aerosol generating procedures; during activities where prolonged face to face or close contact with a potentially infectious patient is unavoidable.
- Protective eyewear (e.g., safety glasses, trauma glasses) with gaps between glasses and the face likely do not protect eyes from all splashes and sprays.

Isolation Gowns:

- Consider shifting disposable gowns to cloth isolation gowns (this may require augmenting laundry operations personnel).
- Gowns must be routinely inspected and maintained and discarded when thin or ripped.
- Consider use of coveralls (requires training and practice prior to use)
- Consideration can be made to extend the use of isolation gowns (disposable or cloth) so that it is worn by the same healthcare provider when interacting with more than one patient known to be infected with the same infectious disease when the patients are cohorted in the same location. Only to be considered when there are no additional co-infectious diagnoses transmitted by contact.

- Any disposable gown that becomes visibly soiled should be disposed of. Cloth gowns that are visibly soiled should be removed and cleaned.
- During extreme shortages (crisis standards of care) gowns should be prioritized for activities where splashes and sprays are anticipated including aerosol generating procedures and during high-contact patient care activities such as dressing, bathing/showering, transferring, linen changes, assisting with toileting, device care or use and wound care.

Facemasks

- Cancel all elective and non-urgent procedures and appointments for which a facemask is typically used by HCP.
- Use facemasks beyond the manufacturer-designated shelf life during patient care activities.
- Implement limited re-use of 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