



State of California—Health and Human
Services Agency
**California Department of
Public Health**



April 13, 2020

AFL 20-39

TO: All Facilities

SUBJECT: Coronavirus Disease 2019 (COVID-19) Optimizing the Use of Personal Protective Equipment (PPE)

All Facilities Letter (AFL) Summary

This AFL provides updated COVID-19 specific guidance for healthcare facilities on optimizing the use of PPE, including extended use and reuse.

Healthcare facilities continue to report severe shortages of PPE, including respirators, facemasks, gowns, and face shields. Facilities should review the Centers for Disease Control and Prevention's (CDC) PPE optimization strategies, including options for extended use, reprocessing, and reuse of the various PPE components given the current shortages of PPE.

To limit numbers of exposed healthcare personnel (HCP) and conserve PPE supplies, facilities should consider designating:

- Triage areas for evaluation of persons presenting with fever and acute respiratory symptoms
- Entire units within the facility to care for hospitalized persons with suspected or confirmed COVID-19 infection
- Dedicated HCP that practice extended use, reprocessing, and reuse of PPE, including respirators and eye protection

Extended use refers to the practice of wearing the same PPE for repeated close contact encounters with several different patients, without removing the PPE between patient encounters.

- HCPs should adhere to administrative and engineering controls to limit potential PPE surface contamination (such as using face shields to prevent droplet spray contamination to N95 respirators or facemasks)
- HCPs should remove only gloves and gowns and perform hand hygiene between patients with the same diagnosis (confirmed COVID-19) while continuing to wear the same respirator or facemask and eye protection (face shield or goggles)
- Extended use is typically done where multiple patients with the same infectious disease diagnosis are cohorted in the same area of the facility

Contingency capacity and crisis strategies may be needed temporarily during periods of PPE shortages. Attempts should be made to follow contingency strategies prior to resorting to crisis strategies. All attempts to restore supplies to normal levels should continue during periods of PPE shortages.

PPE should be prioritized for procedures with the highest potential exposures, such as splash, spray or aerosol generating procedures, prolonged face-to-face contact with a potentially infectious patient, or high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of HCP.

The CDC has published capacity strategies to help healthcare facilities optimize supplies PPE when there is a limited supply. Contingency and crisis strategies for optimizing PPE include, but are not limited to, the following:

N95 and other Filtering Face Respirators

Contingency Strategies	Crisis Strategies
<ul style="list-style-type: none"> • Temporarily suspend annual fit testing of respirators, per interim guidance from OSHA • Use respirators beyond the manufacturer-designated shelf life for training and fit testing • Implement extended use 	<ul style="list-style-type: none"> • Use beyond the manufacturer-designated shelf life, provided that visual inspection prior to use does not reveal concerns that prompt discarding • Use respirators approved under standards used in different countries that are similar to the CDC's National Institute for Occupational Safety and Health (NIOSH)-approved respirators (PDF) • Limited reuse of respirators • Use of additional respirators beyond the manufacturer-designated shelf life for healthcare delivery that have not been evaluated by NIOSH

Extended use is generally preferred over reuse because it is expected to involve less touching of respirators and therefore less risk of contact transmission. However, extended use might be impractical in settings where COVID-19 patients are not cohorted in the same area of the facility. When patients are cohorted together:

- The maximum recommended extended use period is 8–12 hours
- Respirators should not be worn for multiple work shifts and should not be reused after extended use
- Respirators should be removed (doff) and discarded before activities such as meals and restroom breaks

Strategies for respirator extended use and reuse (without decontamination of the respirator) are currently available from the CDC To safely implement limited reuse of respirators according to CDC guidance, when caring for patients with COVID-19, facilities must:

- Implement protocols to minimize contamination, such as, a cleanable face shield (preferred) or a surgical mask over the respirator
- Minimize unnecessary contact with the respirator surface
- Ensure strict adherence to hand hygiene practices, and proper PPE donning and doffing technique, including physical inspection and performing a user seal check

HCP should hang used respirators in a designated storage area or keep them in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, store respirators so that they do not touch each other and the person using the respirator is clearly identified. Storage containers should be disposed of or cleaned regularly. 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.

Facilities should discard respirators:

- Following use during aerosol generating procedures
- Contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients
- Following close contact with, or exit from, the care area of any patient co-infected with an infectious disease requiring contact precautions

- That is obviously damaged or becomes hard to breathe through

Facemasks, Face Shields, and Eye Protection

Facemasks, face shields, and eye protection should be examined prior to use and discarded if visual inspection reveals concerns or damage. HCP should take care not to touch their face shield or eye protection, and immediately perform hand hygiene if they do. If removal is required, HCP should first leave the patient care area.

Facemasks

Contingency Strategies	Crisis Strategies
<ul style="list-style-type: none"> • Remove facemasks for visitors in public areas • Restrict to use by HCP, rather than patients for source control • Implement extended use 	<ul style="list-style-type: none"> • Use beyond the manufacturer-designated shelf life, provided that visual inspection prior to use does not reveal concerns that prompt discarding • Implement limited reuse when feasible by folding the outer surface inward against itself and storing between uses in a clean sealable paper bag or breathable container • If no facemasks are available, use a face shield that covers the entire front (that extends to the chin or below) and sides of the face • Consider use of homemade masks as a last resort, ideally with a face shield that covers the entire front and sides of the face

Face Shields and Eye Protection

Contingency Strategies	Crisis Strategies
<ul style="list-style-type: none"> • Shift supplies from disposable to reusable devices • Ensure appropriate cleaning and disinfection between users if goggles or reusable face shields are used • Implement extended use • Dedicate a disposable face shield to one HCP if it will be reprocessed 	<ul style="list-style-type: none"> • Use beyond the manufacturer-designated shelf life, provided that visual inspection prior to use does not reveal concerns that prompt discarding • Consider using safety glasses (e.g., trauma glasses) that have extensions to cover the side of the eyes

Perform reprocessing of face shields and eye protection according to recommended manufacturer instructions for cleaning and disinfection. If these are unavailable, such as for disposable face shields, consider the following procedure:

- While wearing 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
- Carefully wipe the *outside* of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution
- Wipe the outside of face shield or goggles with clean water or alcohol to remove residue
- Fully dry (air dry or use clean absorbent towels)
- Remove gloves and perform hand hygiene

Gowns

Contingency Strategies	Crisis Strategies
<ul style="list-style-type: none"> • Shift gown use towards cloth isolation gowns that can be safely laundered, and ensure routine inspection, maintenance, and replacement • Consider the use of coveralls, and provide HCP with proper training and practice prior to their use in patient care • Use expired gowns beyond the manufacturer-designated shelf life for training • Use gowns or coveralls conforming to international standards 	<ul style="list-style-type: none"> • Extended use of isolation gowns, worn by the same HCP when interacting with cohorted patients if there are no additional co-infectious diagnoses transmittable by contact among patients • Reuse cloth isolation gowns to minimize exposures to HCP, but not necessarily to prevent transmission between patients • Consider suspending use of gowns for endemic multidrug resistant organisms (e.g., MRSA, VRE, ESBL-producing organisms) • When no gowns are available, consider using certain gown alternatives, which have not been evaluated as effective, as a last resort (e.g., disposable laboratory coats, washable patient gowns, washable laboratory coats, or disposable aprons). Combinations are optimal: <ul style="list-style-type: none"> ◦ Long sleeve aprons with long sleeve patient gowns or laboratory coats ◦ Open back gowns with long sleeve patient gowns or laboratory coats ◦ Sleeve covers in combination with aprons and long sleeve patient gowns or laboratory coats

For a complete list of strategies, please refer to CDC guidance for PPE optimization strategies.

Facilities currently facing a shortage of respirators, N95 or other supplies, should contact their Medical Health Operational Area Coordinator (MHOAC) and the MHOAC Program Manual (PDF).

For questions about infection prevention and control of COVID-19, please contact the CDPH Healthcare-Associated Infections Program via email at HAIPProgram@cdph.ca.gov or novelvirus@cdph.ca.gov.

Please remember to immediately report suspected and confirmed cases of COVID-19 to your local public health department (PDF) and your district office.

Sincerely,

Original signed by Heidi W. Steinecker

Heidi W. Steinecker
Deputy Director

Resources

- CDC's PPE Optimization Strategies
- CDC Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95

- CDC Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings
- NETEC webinar
- CDC Strategies for Optimizing Supply of N95 Respirators
- CDC Decontamination and Reuse of Respirators
- Respirators during the COVID-19 Response
- OSHA Temporary Enforcement Guidance - Healthcare Respiratory Protection Annual Fit-Testing for N95 Filtering Facepieces During the COVID-19 Outbreak

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