**COVID-19**

**Optimizing the Supply of Eye Protection, Face Shields During COVID-19 Pandemic - Policy**

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**Policy**

It is the policy of this facility to optimize the use of Eye Protection and Face Shields consistent with current CDC guidance.

**Purpose**

To provide strategies or options for the facility to optimize supplies of eye protection when the facility is experiencing limited supply.

“**Surge capacity** refers to the ability to manage a sudden increase in patient volume that would severely challenge or exceed the present capacity of a facility. While there are no widely accepted measurements or triggers to distinguish surge capacity from daily patient care capacity, surge capacity is a useful framework to approach a decreased supply of eye protection during the COVID-19 response. To help healthcare facilities plan and optimize the use of eye protection in response to COVID-19, CDC has developed a [Personal Protective Equipment (PPE) Burn Rate Calculator](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html). Three general strata have been used to describe surge capacity and can be used to prioritize measures to conserve eye protection supplies along the continuum of care.

* [**Conventional capacity**](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html#conventional-capacity)**:** measures consisting of engineering, administrative, and personal protective equipment (PPE) controls that should already be implemented in general infection prevention and control plans in healthcare settings.
* [**Contingency capacity**](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html#contingency-capacity)**:** measures that may be used temporarily during periods of expected eye protection shortages. Contingency capacity strategies should only be implemented after considering and implementing conventional capacity strategies. While current supply may meet the facility’s current or anticipated [utilization rate](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html), there may be uncertainty if future supply will be adequate and, therefore, contingency capacity strategies may be needed.
* [**Crisis capacity**](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html#crisis-capacity)**:** strategies that are not commensurate with U.S. standards of care but may need to be considered during periods of known eye protection shortages. Crisis capacity strategies should only be implemented after considering and implementing conventional and contingency capacity strategies. Facilities can consider crisis capacity strategies when the supply is not able to meet the facility’s current or anticipated [utilization rate](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html).”1

The intent of the optimization strategies is to use these options sequentially as PPE becomes stressed, running low or if facility is out. As the supply of PPE returns to normal, conventional practices should be resumed.

“The following contingency and crisis strategies are based upon these assumptions:

1. Facilities understand their eye protection inventory and supply chain
2. Facilities understand their eye protection [utilization rate](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html)
3. Facilities are in communication with local healthcare coalitions and federal, state, and local public health partners (e.g., public health emergency preparedness and response staff) to identify additional supplies
4. Facilities have already implemented other [engineering and administrative control measures](https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Frespirators-strategy%2Fconventional-capacity-strategies.html) including:
   * Use physical barriers and other engineering controls
   * Limit number of patients going to hospital or outpatient settings
   * Use telemedicine whenever possible
   * Limit HCP not directly involved in patient care
   * Limit face-to-face HCP encounters with patients
   * Limit visitors to the facility to those essential for the patient’s physical or emotional well-being and care (e.g., care partner, parent)
   * Cohort patients and/or HCP
5. Facilities have provided HCP with required education and training, including having them demonstrate competency with [donning](https://www.youtube.com/watch?v=H4jQUBAlBrI) and [doffing](https://www.youtube.com/watch?v=PQxOc13DxvQ), with any PPE ensemble that is used to perform job responsibilities, such as provision of patient care”1

**Protocol for Optimizing the Supply of Eye Protection:**

Complete a review of current and future needs for PPE’s. Utilize a process to determine PPE Burn Rate.

* [PPE Burn Rate Calculator](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html) – This is a sample spreadsheet-based model that provides information for healthcare facilities to plan and optimize the use of PPE for response to coronavirus disease 2019 (COVID-19).

Conventional Capacity: Use eye protection and face shields in accordance with the manufacturer’s recommendation (labeling) and State, Local or Federal requirements to protect eyes from exposure to splashes, sprays, splatters and respiratory secretions.

* Remove and discard disposable eye protection after each resident encounter
* Clean and disinfect reusable eye protection after each resident encounter

Contingency Capacity:

* Implement the extended use of eye protection (Extended use includes wearing the same eye protection for repeated close contact encounters with multiple different patients without removing). “Extended use of eye protection can be applied to disposable and reusable devices.
  + Eye protection should be removed, cleaned, and disinfected if it becomes visibly soiled or difficult to see through.
    - If a disposable face shield or goggles is cleaned and disinfected, it should be dedicated to one HCP and cleaned and disinfected whenever it is visibly soiled or removed (e.g., when leaving the isolation area) prior to putting it back on. See protocol for removing and cleaning and disinfecting eye protection below.
  + Eye protection should be discarded if damaged (e.g., face shield or goggles can no longer fasten securely to the provider, if visibility is obscured and cleaning and disinfecting does not restore visibility).
  + HCP should take care not to touch their eye protection. If they touch or adjust their eye protection, they must immediately perform hand hygiene.
  + HCP should leave patient care area if they need to remove their eye protection.”1
  + **“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:
  + 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”1
  + Discard eye protection if damaged
  + Make every attempt to avoid touching eye protection. If touched or adjusted, perform hand hygiene immediately
  + If employee must leave the resident care area, remove eye protection

Crisis Capacity:

* Use eye protection devices beyond the manufacturer-designated shelf life during resident care
  + Inspect eye protection prior to use and discard if damaged or degraded.
* Prioritize eye protection for resident care activities:
  + When splashes and sprays are anticipated (i.e. aerosol generating procedures)
  + When prolonged contact (i.e. close or face-to-face) with a potentially infected resident is unavoidable
* If eye protection is not available, may use safety glasses with side extensions that have no gap in order to protect the eyes.
* Exclude employees at high risk for severe illness from contact with known or suspected COVID-19 residents.

**References and Resources**

Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19). Optimizing Supply of PPE and Other Equipment during Shortages. July 16, 2020: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

1 Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19). Strategies for Optimizing the Supply of Eye Protection, Updated Dec. 22, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>

Centers for Medicare & Medicaid Services. COVID-19 Long Term Care Facility Guidance. April 2, 2020. <https://www.cms.gov/files/document/4220-covid-19-long-term-care-facility-guidance.pdf>