**COVID-19**

**Optimizing the Supply of Gloves During COVID-19 Pandemic - Policy**

**Optimizing the Supply of Gloves During COVID-19 Pandemic**

**Policy**

It is the policy of this facility to optimize the use of gloves consistent with current CDC guidance.

**Purpose**

To provide strategies or options for the facility to optimize supplies of disposable medical gloves 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 gloves during the COVID-19 response. To help healthcare facilities plan and optimize the use of gloves 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 glove supplies along the continuum of care.

* [**Conventional capacity**](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/gloves.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/gloves.html#contingency-capacity): measure that may be used temporarily during periods of expected glove 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/gloves.html#crisis-capacity)**:** strategies that are not commensurate with U.S. standards of care but may need to be considered during periods of known gloves 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).

CDC’s optimization strategies for glove supply offer a continuum of options for use when glove supplies are stressed, running low, or exhausted. Contingency and then crisis capacity measures augment conventional capacity measures and are meant to be considered and **implemented sequentially**. Once glove availability returns to normal, healthcare facilities should promptly resume standard practices.

Decisions to implement contingency and crisis strategies are based upon these assumptions:

1. Facilities understand their current glove inventory and supply chain
2. Facilities understand their glove [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
   * Exclude all HCP not directly involved in patient care
   * Limit face-to-face HCP encounters with patients
   * Exclude visitors to patients with known or suspected COVID-19
   * 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&feature=youtu.be), with any PPE ensemble that is used to perform job responsibilities, such as provision of patient care

**Once availability of gloves returns to normal, healthcare facilities should promptly resume conventional practices.**Determining the appropriate time to return to conventional strategies can be challenging. Considerations affecting this decision include:

1. the anticipated number of patients for whom gloves should be worn by HCP providing their care
2. the number of days’ supply of gloves currently remaining at the facility
3. whether or not the facility is receiving regular resupply with its full allotment.”1

**Procedure for Optimizing the Supply of Gloves**

1. Complete a review of current and future PPE needs utilizing a process such as the PPE Burn Rate Calculator.
2. The DON, Infection Preventionist and Administration will determine and communicate to all staff conventional, contingency or crisis capacity.
   1. **Conventional Capacity**: Provide resident care using conventional glove use:
      1. FDA-cleared disposable gloves consistent with standard and transmission-based precautions and when cleaning and disinfecting equipment or environment
      2. Sterile gloves for sterile procedures
      3. Medical gloves for handling any chemotherapy or hazardous drugs
      4. Double gloves are not recommended by CDC when care is provided to residents with suspected or confirmed COVID-19
   2. **Contingency Capacity:** 
      1. Elective and non-urgent procedures that require glove use can be canceled if indicated
      2. Gloves may be used past the manufacturer-designated shelf life
         1. Prioritize activities (i.e. training or activities in which the employee is not potentially exposed to pathogens)
      3. Gloves similar to FDA-cleared surgical and examination gloves approved under other U.S. or international standards may be considered. Examples can be found in the table at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/gloves.html#conventional-capacity>
   3. **Crisis Capacity:**
      1. Elective and non-urgent procedures that require glove use can be canceled if indicated
      2. Gloves may be used past the manufacturer-designated shelf life
         1. Do not use sterile gloves past the manufacturer’s shelf life for sterile procedures
      3. Prioritize use of non-sterile disposable gloves for activities that protect hands from contact with blood or body fluids
      4. Consider suspending use of gloves when entering the room of resident with endemic multidrug resistant organisms.
         1. Employee must still continue to wear gloves when it is anticipated that they will be in contact with blood or other potentially infectious materials, mucous membranes, nonintact skin or potentially contaminated intact skin.
            1. Continue to follow policy on Hand Hygiene
      5. If no disposable medical gloves are available, non-healthcare disposable gloves may be used for situations where employee is not exposed to pathogens. Extended use guidance does not apply to non-healthcare glove alternatives.
      6. Extended use of disposable gloves: Employee wears gloves without changing them between patients or tasks for resident cohorted and with the same confirmed infectious disease in a shared or adjacent location.
         1. “During a glove supply crisis, gloves can remain on but must be sanitized between patients within the cohort to prevent cross transmission of any other pathogens from patient to patient.” (Note: this is not standard practice and should only be used in a crisis capacity)
            1. Alcohol-based hand sanitizer (ABHS is the preferred method to sanitize gloves when not visibly soiled and can only be done up to 6 times or if damaged/degraded)
            2. Soap and water between tasks or residents up to 10 times if not damaged/degraded)
            3. Diluted bleach: While gloves on, dip gloved hands into a [dilute bleach solution](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html) for five (5) seconds. Dilute bleach solution should remain on gloves for 1 minute after removing hands from solution. Rinse with water and wipe dry with clean towel. If damaged or degraded, discard gloves.
         2. Employee must clean gloved hands at intervals where gloves would normally be changed or hand hygiene normally performed
         3. Discard medical gloves if soiled or contaminated with blood, respiratory or nasal secretion or other body fluid, if signs of damage, after a maximum of 4 hours of use.
         4. Once gloves are doffed, do not re-don for any reason
         5. Perform hand hygiene

**References and Resources**

1Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of Disposable Medical Gloves, Updated Dec. 23, 2020: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/gloves.html#conventional-capacity>

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