**COVID-19**

**Optimizing the Supply of Isolation Gowns During COVID-19 Pandemic - Policy**

**Optimizing the Supply of Isolation Gowns During COVID-19 Pandemic**

**Policy**

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

# Purpose

To provide strategies or options for the facility to optimize supplies of isolation gowns 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 isolation gowns relative to need during the COVID-19 response. To help healthcare facilities plan and optimize the use of gowns 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 isolation gown supplies along the continuum of care.

* [**Conventional capacity**](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.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/isolation-gowns.html#contingency-capacity)**:** measures that may be used temporarily during periods of expected isolation gown 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/isolation-gowns.html#crisis-capacity): strategies that are not commensurate with standard U.S. standards of care but may need to be considered during periods of known gown 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 following contingency and crisis strategies are based upon these assumptions:

1. Facilities understand their current isolation gown inventory and supply chain
2. Facilities understand their isolation gown [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/conventional-capacity-strategies.html) including:
   1. Use physical barriers and other engineering controls
   2. Limit number of patients going to hospital or outpatient settings
   3. Use telemedicine whenever possible
   4. Exclude all healthcare personnel (HCP) who are not directly involved in patient care from patient encounters
   5. Limit face-to-face HCP encounters with patients
   6. Exclude visitors to patients with known or suspected COVID-19
   7. Cohort patients and/or HCP
5. Facilities have provided HCP with required education and training, including having them demonstrate competency with [donning](https://youtu.be/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.”1

**Note:** When facility supply of gowns return to normal, facility will promptly resume conventional practices

**Protocol for Optimizing the Supply of Isolation Gowns**

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 of more than one gown at a time by employees caring for residents with suspected or confirmed COVID-19 is not recommended
* Use isolation gown alternatives that can offer equivalent or higher protection (fluid-resistant and impermeable).
* Surgical gowns should be prioritized for sterile procedures during shortages.
* Fluid-resistant and impermeable protective isolation gowns
* Nonsterile, disposable patient isolation gowns are appropriate when caring for residents with suspected or confirmed COVID-19
* Washable gowns made of polyester or poly-cotton fabrics can be safely laundered after each use
  + Routinely inspect, maintain and replace gowns as necessary
  + Store gowns clean gowns in clean linen storage areas

Contingency Capacity

* Consider use of coveralls
* For training purposes, use gowns that are beyond the shelf life designated by the manufacturer
* Gowns that conform to international standards can be considered
* Prioritize gowns based upon the risk of the care/activity provided
  + Resident suspected or confirmed COVID-19 positive
  + Residents with infections from emerging highly resistant organisms

Crisis Capacity

* Facility can consider extended use of isolation gowns:
  + Extended use:
    - Same gown is worn by same employee when caring for more than one resident **known to be infected with same infection** **in same location** unless a resident has a co-infectious diagnosis transmitted by contact (i.e. c. diff)
      * **“**However, this can be considered **only** if there are no additional co-infectious diagnoses transmitted by contact (such as *Clostridioides difficile, Candida auris*) among patients. If the gown becomes visibly soiled, it must be removed and discarded or changed as per [usual practices](https://www.cdc.gov/niosh/npptl/pdfs/PPE-Sequence-508.pdf)”1

When There are No Gowns Are Available

* As a last result (These cannot be considered as Personal Protective Equipment-preferably with long sleeves and is able to be fastened and secured):
  + Disposable laboratory coats
  + Reusable and washable resident gowns
  + Reusable and washable laboratory coats
  + Disposable aprons
  + Clothing combinations
    - Long sleeve aprons with long sleeve resident gowns or lab coats
    - Open back gowns with long sleeve resident gowns or lab coats
    - Sleeve covers in combination with aprons and long sleeve resident gowns or lab coats
  + Launder according to facility policy
  + Inspect gown alternatives for integrity and replace as needed.

Re-use of Isolation Gowns

* Disposable gowns should not be reused
* Reusable gowns should be laundered before reuse
* Repeated donning and doffing a contaminated gown may increase risk for employee self-contamination
* If re-use is considered, dedicate to care of the individual resident
* Any gown that becomes visibly soiled should be disposed of or laundered

**References and Resources**

1 Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19). Strategies for Optimizing the Supply of Isolation Gowns. Updated Jan 1, 2021: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>

3Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19). Preparing for COVID-19 in Nursing Homes. Updated Nov. 20, 2020: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.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>