

# Cheat Sheet: Strategies to Optimize PPE & Equipment

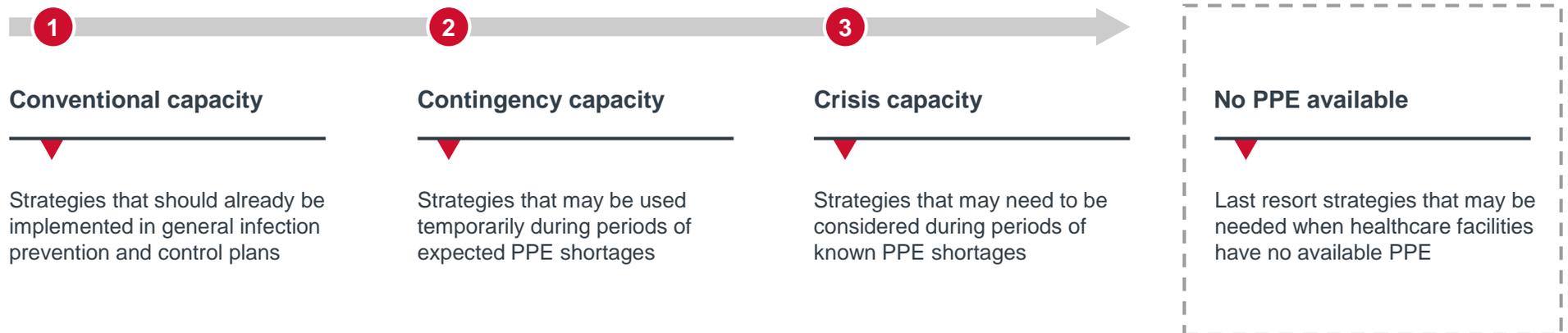
Overview of CDC’s new guidelines following PPE shortages due to COVID-19

## Abstract

The Centers for Disease Control and Prevention (CDC) loosened guidelines on what is acceptable for personal protective equipment (PPE) due to shortages of N95 respirators, facemasks, and gowns in the United States. The CDC shared strategies to optimize these PPE supplies in healthcare settings when there is limited supply. This document summarizes the “need-to-know” information from that guidance.

## Stages of PPE capacity

The CDC uses surge capacity as its framework to approach shortages in PPE supply, however, there are no specific measurements to differentiate surge capacity from normal capacity of a healthcare facility. Surge capacity is the ability to manage a sudden, unexpected increase in patient volume. Three stages are used to describe surge capacity and can be used to prioritize actions of the healthcare facility to preserve PPE supplies during the COVID-19 response.



Source: "COVID-19: Strategies for Optimizing the Supply of PPE." Centers for Disease Control and Prevention, March 17, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>.

# Strategies to Optimize PPE & Equipment

	N95 Respirators	Facemasks	Isolation Gowns	Eye Protection
<b>Conventional Capacity</b>	<ul style="list-style-type: none"> <li>Surgical N95 respirators are recommended only for use by HCP<sup>1</sup> who need protection from both airborne and fluid hazards.</li> </ul>	<ul style="list-style-type: none"> <li>Use facemasks according to product labeling and local, state, and federal requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Use isolation gown alternatives that offer equivalent or higher protection.</li> </ul>	<ul style="list-style-type: none"> <li>Use eye protection according to product labeling and local, state, and federal requirements.</li> </ul>
<b>Contingency Capacity</b>	<ul style="list-style-type: none"> <li>Use of N95 respirators beyond the manufacturer-designated shelf life for training and fit testing.</li> <li>Extended use of N95 respirators.<sup>2</sup></li> <li>Limited re-use of N95 respirators for tuberculosis.<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Remove facemasks for visitors in public areas.</li> <li>Implement extended use of facemasks.<sup>2</sup></li> <li>Restrict facemasks to use by HCP, rather than patients for source control.</li> </ul>	<ul style="list-style-type: none"> <li>Shift gown use towards cloth isolation gowns.</li> <li>Consider the use of coveralls.</li> <li>Use of expired gowns beyond the manufacturer-designated shelf life for training.</li> <li>Use gowns or coveralls conforming to international standards.</li> </ul>	<ul style="list-style-type: none"> <li>Shift eye protection supplies from disposable to re-usable devices (i.e., goggles and reusable face shields).</li> <li>Implement extended use of eye protection.<sup>2</sup></li> </ul>
<b>Crisis Capacity</b>	<ul style="list-style-type: none"> <li>Use of respirators beyond the manufacturer-designated shelf life for healthcare delivery.</li> <li>Use of respirators approved under standards used in other countries that are similar to NIOSH-approved N95 respirators.</li> <li>Limited re-use of N95 respirators for COVID-19 patients.<sup>2</sup></li> <li>Prioritize the use of N95 respirators by activity type.</li> </ul>	<ul style="list-style-type: none"> <li>Use facemasks beyond the manufacturer-designated shelf life during patient care activities.</li> <li>Implement limited re-use of facemasks.<sup>2</sup></li> <li>Prioritize facemasks for selected activities.</li> </ul>	<ul style="list-style-type: none"> <li>Extended use of isolation gowns.<sup>2</sup></li> <li>Re-use of cloth isolation gowns.<sup>2</sup></li> <li>Prioritize gowns for certain activities.</li> </ul>	<ul style="list-style-type: none"> <li>Use eye protection beyond the manufacturer-designated shelf life during patient care activities.</li> <li>Prioritize eye protection for selected activities.</li> <li>Consider using safety glasses that have extensions to cover the side of the eyes.</li> </ul>
<b>No PPE available</b>	<ul style="list-style-type: none"> <li>HCP use of non-NIOSH<sup>3</sup> approved masks or homemade masks.</li> </ul>	<ul style="list-style-type: none"> <li>Use a face shield that covers the entire front (that extends to the chin or below) and sides of the face with no facemask.</li> <li>HCP use of homemade masks.</li> </ul>	<ul style="list-style-type: none"> <li>Consider using gown alternatives that have not been evaluated as effective.</li> </ul>	

1. Healthcare personnel (HCP) refers to all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials.

2. Recommended guidance for extended use and re-use can be found on the CDC page "Strategies for Optimizing the Supply of PPE."

3. National Institute for Occupational Safety and Health.

This document does not constitute professional legal advice. Advisory Board does not endorse any companies, organizations or their products as identified or mentioned herein. Advisory Board strongly recommends consulting legal counsel before implementing any practices contained in this document or making any decisions regarding suppliers and providers.

Source: "COVID-19: Strategies for Optimizing the Supply of PPE." Centers for Disease Control and Prevention, March 17, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>.