

## Clinical Strong Practice (CSP)

# Types of Respirators and Masks Available in the Health Care Setting for COVID-19

### Practice Purpose

This document describes what types of masks and respirators are preferable for staff and providers to use in the health care setting for respiratory protection. The purpose of this document is to provide information about the various types of respiratory protection available in VA facilities to protect health care providers (HCPs) from exposure while caring for COVID-19 patients.

This document is subject to update based on emerging guidelines.

#### Sources

1. Infectious Diseases Society of America Guidelines on Infection Prevention for Health Care Personnel Caring for Patients with Suspected or Known COVID-19. Infectious Diseases Society of America. [www.idsociety.org/COVID19guidelines/ip](http://www.idsociety.org/COVID19guidelines/ip)
2. NIOSH-Approved Particulate Filtering Facepiece Respirators. Centers for Disease Control and Prevention. [https://www.cdc.gov/niosh/npptl/topics/respirators/disp\\_part/default.html](https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html)
3. Strategies for Optimizing the Supply of Facemasks. Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>
4. Infographic - Understanding the Difference, Surgical Mask, N95 Respirator. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. <https://www.cdc.gov/niosh/npptl/pdfs/UnderstandDifferenceInfographic-508.pdf>
5. Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings. Centers for Disease Control. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>



This COVID Strong Practice was developed in response to the COVID-19 Pandemic to enable VHA to adapt quickly for the benefit of Veteran and employee health. Do you have feedback on this practice or would you like to submit a practice for consideration as a Clinical Strong Practice? Please email us here [VHAClinicalStrongPractices@va.gov](mailto:VHAClinicalStrongPractices@va.gov)











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## Air Purifying Respirators

- The type of Air Purifying Respirator used by the HCP depends on availability at facility and local decisions
- Additional PPE (e.g. eye protection and/or face shield, gown, gloves) is to be worn in conjunction with the respirators listed here
- All respirators listed below provide at least equivalent protection to N95 filtering facepiece respirators
- All respirators listed below require fit-testing or medical evaluation in accordance with OSHA standards
- **Respirators with exhalation valves** are **NOT** used for the care of COVID-19 patients and do **NOT** provide source control. Do **NOT** use if a sterile field must be maintained; valve allows unfiltered exhaled air onto sterile field. In rare circumstances, if no other respirators available, cover respirators with an exhalation valve with a surgical mask and face shield to protect others; the wearer may be an asymptomatic carrier
- **In a contingency or crisis scenario, it is acceptable to use reprocessed respirators, to extend use, or reuse respirators in conjunction with appropriate additional PPE and face shield using CDC guidelines**





Model <sup>^</sup>	COVID PPE	Appropriate Setting	Other Considerations
<b>N95 or higher Filtering Facepiece (FFP) Respirators</b> 		<ul style="list-style-type: none"> <li>• Use when performing or present for aerosol generating procedures<sup>1</sup></li> <li>• Use when an HCP enters the room of a patient with known or suspected COVID-19. If available, respirators are preferred<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• National Institute for Occupational Safety and Health (NIOSH) approved N95 or higher FFPs can be identified with the NIOSH Certification stamped or embossed on the respirator<sup>2</sup></li> <li>* See below</li> </ul>
<b>Industrial N95s</b> 		<ul style="list-style-type: none"> <li>• Use in clinical settings as other N95s and other FFPs, as listed above</li> <li>• Use when there are <b>NOT</b> expectations for high velocity jets or splashes of blood</li> </ul>	<ul style="list-style-type: none"> <li>• Provides equal protection as the standard N95 or higher filtering facepiece respirator: has same filtering capability<sup>2</sup></li> <li>* See below</li> </ul>
<b>R95, R99, R100</b> 		<ul style="list-style-type: none"> <li>• Use in clinical settings as other N95s and other FFPs, as listed above</li> </ul>	<ul style="list-style-type: none"> <li>• NIOSH approved facepiece respirators and is at least as protective as the N95<sup>2</sup></li> <li>* See below</li> </ul>
<b>P95, P99, P100</b> 		<ul style="list-style-type: none"> <li>• Use in clinical settings as other N95s and other FFPs, as listed above</li> </ul>	<ul style="list-style-type: none"> <li>• Same guidelines as R series respirators listed above</li> <li>* See below</li> </ul>
<b>Surgical N95s</b> 		<ul style="list-style-type: none"> <li>• Use in clinical settings as other N95s and other FFPs, as listed above</li> <li>• Provides protection against high-pressure jets of fluid hazards, such as splashes or sprays<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• If surgical N95 respirators are <b>NOT</b> available and there is a risk of exposure to high velocity splashes/sprays of blood or body fluids, then a face shield+ should be worn over the standard N95 respirator<sup>1</sup></li> <li>* See Below</li> </ul>

<sup>^</sup> Not all respirators will look identical to respirator pictured. Check closely; masks and respirators can look similar

\* All air purifying respirators listed are appropriate for HCP use when performing or assisting in close proximity to an aerosol generating procedure (AGP) and/or when entering the room of suspected or known COVID-19 patient. A facemask may be worn if a respirator is not available. When available, respirators are preferred





+ Face shields used should cover the entire front (that extends to the chin or below) and sides of the face

## Air Purifying Respirators (Continued)


Model <sup>^</sup>	COVID PPE	Appropriate Setting	Other Considerations*
<b>Elastomeric Respirator</b> <ul style="list-style-type: none"> <li>• ½ Mask</li> <li>• Full Mask</li> </ul> 		<ul style="list-style-type: none"> <li>• Use in clinical setting where the consideration of a sterile field is <b>NOT</b> a concern and if the clinician is <b>NOT</b> infectious to the patient</li> <li>• ½ Mask does <b>NOT</b> offer eye protection</li> <li>• Full mask offers eye protection</li> </ul>	<ul style="list-style-type: none"> <li>• Hard case filters can be decontaminated and reused almost indefinitely. The filter is inside the hard casing</li> </ul>
<b>Powered Air Purifying Respirators (PAPRs)</b> 		<ul style="list-style-type: none"> <li>• Use in clinical setting where the consideration of a sterile field is <b>NOT</b> a concern and if the clinician is <b>NOT</b> infectious to the patient</li> </ul>	<ul style="list-style-type: none"> <li>• There are many different configurations of PAPRs</li> </ul>

### Medical Face Masks

- Use for transmission-based precautions/isolation for Droplet, Contact Precautions (NOT airborne)<sup>4</sup>
- Does NOT provide protection from inhaling particles generated by AGPs<sup>4</sup>

<b><u>Procedure Masks/Isolation Masks</u></b> 	 <b>Except for AGPs</b>	<ul style="list-style-type: none"> <li>• Use for general health care procedures, non-AGPs</li> <li>• Use for respiratory etiquette</li> <li>• Use for Droplet Precautions</li> </ul>	<ul style="list-style-type: none"> <li>• <b>May not provide protection against splashes and sprays;</b> if anticipated, a face shield+ over procedure mask is recommended<sup>3</sup></li> </ul>
<b><u>Surgical Masks</u></b> 	 <b>Except for AGPs</b>	<ul style="list-style-type: none"> <li>• Same use as procedure masks/isolation masks (see above)</li> <li>• Food and Drug Administration (FDA)-cleared surgical masks are designed to protect against splashes and sprays<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• In contingency or crisis scenarios, may use in conjunction with face shield for AGPs if there is a shortage of respirators per IDSA guidelines+<sup>1</sup></li> </ul>

### Other Face Coverings

<b><u>Cloth Masks/Cloth Face Coverings</u></b> 	<b>Not COVID PPE</b>	<ul style="list-style-type: none"> <li>• <b>NOT intended to protect the wearer; intended to protect others.</b> May prevent the spread of virus from the wearer to others. This is important if someone is infected but does not have symptoms<sup>3</sup></li> <li>• Capability to protect HCP is unknown. Caution should be exercised when considering use<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>• <b>For source control; NOT PPE<sup>3</sup></b></li> <li>• In contingency or crisis scenarios, may use as part of universal masking to protect from asymptomatic carriers, in conjunction with face shield+<sup>3</sup></li> </ul>
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