

UNDERSTANDING THE DIFFERENCE

N95 RESPIRATORS, SURGICAL MASKS, AND HOMEMADE CLOTH MASKS



N95 Respirator



Surgical Mask



Homemade Cloth

Testing & Approval	Evaluated, tested, and approved by National Institute for Occupational Safety & Health (NIOSH) as per the requirements in 42 CFR Part 84	Cleared by the U.S. Food and Drug Administration (FDA)	None
Intended Use & Purpose	Reduces the wearer's exposure to particles, including small particle aerosols and large droplets (only non-oil aerosols)	Protects the patient from the wearer's respiratory emissions Protects the wearer against large droplets, splashes, or sprays of bodily or other hazardous fluids Fluid resistant	Provides a cloth barrier to inhaling particles NOT fluid resistant
Face Seal Fit	Tight-fitting	Loose-fitting	Loose-fitting
Fit Testing Requirement	Yes	No	No
User Seal Check Requirement	Yes. Required each time the respirator is donned (put on)	No	No
Filtration	Filters out at least 95% of airborne particles including large and small particles Considered personal protective equipment (PPE) for respiratory protection	Does NOT provide the wearer with a reliable level of protection from inhaling smaller airborne particles NOT considered protective for respiratory protection	Least reliable protection (across all three mask types) NOT considered protective for respiratory protection
Leakage	When properly fitted and donned, minimal leakage occurs around edges of the respirator when the user inhales	Leakage occurs around the edge of the mask when the user inhales	Leakage can occur around ALL edges of the mask when the user inhales
Use Limitations	Ideally, discard after each patient encounter and after aerosol-generating procedures Discard when damaged or deformed; no longer forms an effective seal; becomes wet or visibly dirty; breathing becomes difficult; or becomes contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients	Disposable Discard after each patient encounter	Washable & reusable, but performance & safety is unknown Remove when wet or dirty
Level of Protection	Provides adults 50X the protection of a homemade cloth mask Provides 25X the protection of a surgical mask	Provides adults 2X the protection of a homemade cloth mask	May "decrease viral exposure and infection risk on a population level" (van der Sande et al., 2008)

INFORMATION IN THIS RESOURCE COMES FROM THE FOLLOWING SOURCES AND STUDIES

U.S. Centers for Disease Control. Understanding the difference, surgical mask, N95 respirator. [Infographic]. n.d.; <https://www.cdc.gov/niosh/npptl/pdfs/UnderstandDifferenceInfographic-508.pdf>. Accessed March 27, 2020.

van der Sande M, Teunis P, Sabel R. Professional and home-made face masks reduce exposure to respiratory infections among the general population. PLoS One. 2008;3(7):e2618.

Based on the current evidence, the Fuld Institute for EBP recommends and supports the provision of personal protective equipment (PPE) for healthcare workers (HCWs) at all points of care and that HCWs use appropriate PPE consistently and correctly, rather than homemade cloth masks. HCWs should consider homemade cloth masks only as a last resort. (03/31/2020)

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