




FACE MASKS

UNDERSTANDING THE DIFFERENCE



TYPE	 <p><u>N95 RESPIRATOR</u></p>	 <p><u>SURGICAL MASK*</u></p>	 <p><u>CLOTH MASK</u></p>
PURPOSE	<p>Provides a high level of protection for both the wearer and others from viral spread.</p> <p>NOTE: N95s with exhalation valves may allow viruses to pass outward. They may not protect others and should be avoided during the COVID-19 pandemic.</p>	<p>Provides partial protection for both the wearer and others from viral spread.</p> <p>NOTE: Surgical masks are tested, FDA-approved products. The level of protection offered by non-FDA-approved look-alikes is unknown.</p>	<p>Many cloth masks provide some protection to the wearer but mainly serve to protect others from viral spread.</p> <p>NOTE: Finding a fabric-design combination for the most protective cloth mask is an area of active research.</p>
INTENDED USERS	Healthcare workers	Healthcare workers and general public	General public
CERTIFICATION	NIOSH and FDA	FDA	FDA-EUA (or none if homemade)
SPECS	<p>NIOSH-approved masks have these features:</p> <ol style="list-style-type: none"> Multiple layers including electrostatic filter⁴ with >95% filtration efficiency. Edges of mask seal to face (requires fit-test and seal-check). 	<p>FDA-approved masks have these features:</p> <ol style="list-style-type: none"> Three-ply with an electrostatic filter^{5,6,7,8} in the middle and hydrophobic outer layers that reduce liquid penetration. Adjustable nose-bridge to reduce gaps through which virus can travel. <p>NOTE: Surgical masks should be worn with the color side facing out.</p>	<p>The most effective masks have these features:</p> <ol style="list-style-type: none"> 2-3 layers of tightly woven fabric or non-woven fabric with sufficient breathability. Adjustable nose-bridge to reduce gaps through which virus can travel. Large enough to cover the chin.
DECON FOR REUSE	<p>Intended for single-use.</p> <p>If decontamination is necessary, follow CDC guidelines and see www.N95decon.org for more information.</p> <p>DO NOT wash with soap, put in the dryer, or apply alcohol; these will destroy the electrostatic filter.^{11,12}</p>	<p>Intended for single-use.</p> <p>If decontamination is necessary, a promising method is time-based decontamination: allowing time for viral inactivation⁹ by storing in an out-of-the-way place with good aeration for at least 7 days.¹⁰</p> <p>DO NOT wash with soap, put in the dryer, or apply alcohol; these will destroy the electrostatic filter.^{11,12}</p> <p>NOTE: Methods for surgical mask decontamination are not validated.</p>	<p>Generally, wash mask after use with hot water and soap and dry completely.¹³</p> <p>FOR ALL MASKS:</p> <p>DO NOT touch the inside or outside of the mask while putting on, wearing, or taking off; the mask might be contaminated on the outside if exposed to others who are infected, or on the inside if wearer is infected. Instead, handle by ear loops or ties.</p> <p>Always wash your hands before and after handling the mask to avoid contamination.</p>

* Masks vary in quality of filtration efficiency, fluid resistance, and fit. The highest quality masks are fluid-resistant surgical masks. Lower quality masks are sometimes referred to as medical or procedure masks in the USA.¹⁰ **! Those with trouble breathing should speak to their physician about mask use options.**

SUPPORTING RESEARCH

[1] CDC, 2019; [2] Lai et al., 2011; [3] Prather et al., 2020; [4] Martin & Moyer, 2000; [5] CDC, 2009; [6] Guha et al., 2017; [7] Rengasamy et al., 2014; [8] Rengasamy et al., Filtration Performance of FDA-Cleared Surgical Masks, JISRP, Vol. 26, 2009; [9] N95DECON 2020; [10] N95DECON 2020; [11] Applied Research Associates Bulletin, 2020; [12] Viscusi et al., 2007; [13] CDC, 2019

