

# How to Choose Respiratory Protection

## Protecting What Matters Most

Keeping employees and customers safe is a top priority for all of us, and protecting them from airborne particles and pathogens has never been more important. Use this guide to help choose respiratory protection for you and your colleagues. Find related definitions and distinctions between types of masks and respirators and PPE options based on the operational task.



### Cloth Masks

Cloth masks are reusable (washable) and nonsterile. Commonly worn to reduce aerosols that can spread viruses in social situations, they are soft, breathable, and comfortable for everyday wear. Most have front panel pleats, soft elastic ear loops, and an adjustable nose piece for better fit. Cotton masks offer low levels of filtration efficiency and are not recommended for surgical use. They do not require fit testing and are not airtight.

#### **Eisco™ Cloth Face Masks, Adult or Child Size**

Cat. Nos. S27420, S27421

*Available in U.S. only*



### Disposable Non-Woven Masks

Disposable face masks are designed for single or limited use and are similar to surgical masks in filtration and fluid resistance. Universally sized, they are latex free with soft, elastic ear loops. Not intended for medical use, disposable face masks have 2- or 3-ply construction, do not require fit testing, and are not airtight.

#### **Fisherbrand™ Disposable Face Masks with Ear Loops**

Cat. No. 12-888-001A

*Available in U.S. and Canada*



### Procedure and Surgical Masks

Surgical masks are tested to meet levels of barrier protection as specified in ASTM F2100-19. Procedure masks are FDA-approved medical devices for use in healthcare procedures. They do not require fit testing and are not airtight.

#### **Medicom™ SafeMask™ FreeFlow Earloop Mask, Level 3**

Cat. No. 19-910-717

*Available in U.S. only*



## N95 Respirators

An N95 mask or respirator filters at least 95% of airborne particles as defined by the U.S. National Institute for Occupational Safety and Health (NIOSH, 42 CFR Part 84). They are functionally equivalent to FFP2 respirators (European Union) and KN95 respirators (China), with slightly different certification criteria.

In the United States, the Occupational Safety and Health Administration (OSHA) requires that healthcare workers use N95 respirators if they are working with patients suspected or confirmed to be infected with COVID-19, Ebola, Mycobacterium tuberculosis, pandemic or avian influenza, or severe acute respiratory syndrome (SARS).

Fit testing is required by OSHA for N95 respirator wearers to both identify the right model, style, and size, and to verify fit thereafter. These respirators can make breathing more difficult, so the wearer must also be medically evaluated for heart conditions, lung disease, and claustrophobia.

### Moldex™ N95 Disposable Particulate Respirators

Cat. No. 18-999-1449  
Available in U.S. and Canada



## Surgical N95 Respirators

Surgical respirators (also called Surgical N95, medical, or healthcare respirators) are N95 masks used specifically in healthcare; they meet both FDA and NIOSH requirements. In response to shortages during the COVID-19 pandemic, the Families First Coronavirus Response Act changed liability and certification requirements to allow the use of industrial N95 respirators.

Fit testing is required by OSHA for N95 respirator wearers to both identify the right model, style, and size, and to verify fit thereafter. These respirators can make breathing more difficult, so the wearer must also be medically evaluated for heart conditions, lung disease, and claustrophobia.

### Moldex™ N95 Healthcare Particulate Respirators Surgical Masks

Cat. No. 19-150-0429  
Available in U.S. only

### Available Resources

- <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html>
- [https://www.cdc.gov/niosh/npptl/topics/respirators/disp\\_part/default.html](https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html)
- <https://www.cdc.gov/niosh/npptl/pdfs/UnderstandDifferenceInfographic-508.pdf>
- [https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_id=12716&p\\_table=standards](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=12716&p_table=standards)
- <https://www.nelsonlabs.com/en14683-harmonizes-bacterial-filtration-efficiency-and-differential-pressure-with-astm-f2100/>
- <https://buyandsell.gc.ca/specifications-for-COVID-19-products#200>
- <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/medical-devices/personal-protective-equipment/medical-masks-respirators/face-covering-classifications-notice.html>

### Useful Links

- <https://www.cdc.gov/niosh/npptl/hospres toolkit/default.html>
- <https://www.cdc.gov/coronavirus/2019-ncov/communication/print-resources.html>

### ASTM Levels

- **Level 1:** Low barrier protection; for low-risk, non-surgical procedures and exams that do not involve aerosols, sprays, or fluids
- **Level 2:** Moderate barrier protection; for low-to-moderate levels of aerosols, sprays, and fluids
- **Level 3:** Maximum barrier protection; for situations with potential for heavy aerosols, sprays, and fluid exposure

Due to recent unprecedented global demand, some respiratory protection products have limited availability and extended lead times.

Visit [fishersci.com/respiratory-protection](https://fishersci.com/respiratory-protection) or [fishersci.ca/respiratory-protection](https://fishersci.ca/respiratory-protection) to find other respiratory PPE products.

Visit [fishersci.com/safety-specialist-contact](https://fishersci.com/safety-specialist-contact) or [fishersci.ca/safety-specialist-contact](https://fishersci.ca/safety-specialist-contact) to contact your safety specialist.

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