



Science.
Applied to Life.™

3M™ Respiratory Protection Solutions
for Healthcare Professionals

Helping protect you,
so you can protect them.



3M Respiratory Protection Solutions

Our shared mission to transform outcomes starts with helping to protect you, so you can protect those in your care. To that end, we offer a range of respiratory protection options for healthcare professionals.

What you need when your patients need you.

Your safety is essential in order to deliver care to your patients. Even in a time of constrained resources, you show up for them. You care for them. You protect them. As we navigate through this time of change together, we share a common goal: Making respiratory protection the highest priority.



3M™ Surgical Filtering Facepiece Respirators



3M™ Reusable Elastomeric Respirators



3M™ Powered Air-Purifying Respirators (PAPRs)



3M™ Health Care Surgical and Procedure Masks*

*Surgical and procedure masks are not respirators and are not designed to help reduce the wearer's exposure to airborne hazards.

3M™ Surgical Filtering Facepiece Respirators

3M™ Surgical Filtering Facepiece Respirators (FFRs) are scientifically designed to help make respiratory protection more comfortable. Our unique manufacturing process injects a powerful electrostatic charge into an open-formation material, improving the efficiency of particle trapping while allowing more air to pass through. This results in highly effective respirators—NIOSH-approved and FDA-cleared for fluid resistance—so you can focus on caring for your patients.



Illustration of how 3M's electrostatically charged microfibers—magnified 10,000 times— attract and capture particles from the air.



3M™ Aura™ Health Care Particulate Respirator and Surgical Mask 1870+

- Flat-fold design optimizes storage and portability
- Individual packaging helps prevent contamination
- Soft nosefoam and smooth inner materials enhance comfort
- Helps accommodate facial movements while talking
- Sculpted nose panel allows more room for eyewear
- Embossed top panel helps reduce eyewear fogging
- Designed for the highest level of fluid resistance to splash and spatter of blood and other infectious materials*

*According to ASTM F1862 at 160 mm Hg



3M™ VFlex™ Health Care Particulate Respirator and Surgical Mask 1804, 1804S

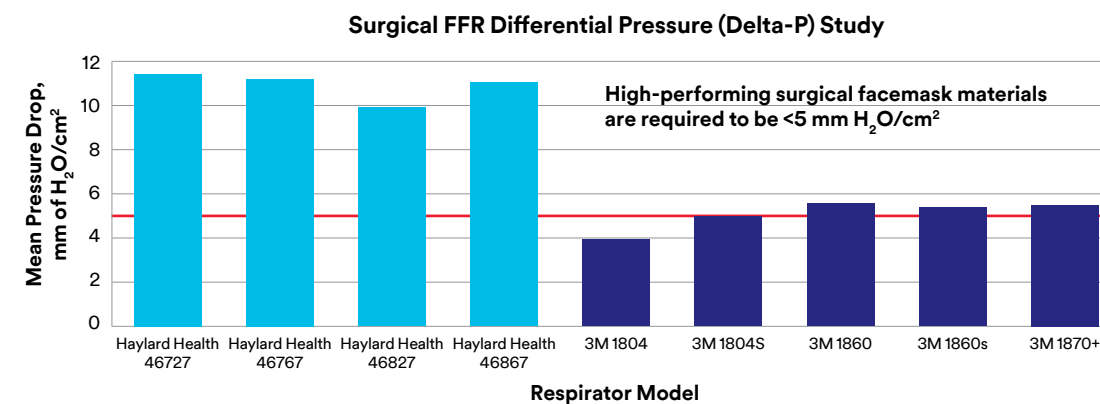
- Flat-fold design optimizes storage and portability
- Pleats flex with mouth movement
- Unique tabs for easy positioning
- Available in two sizes



3M™ Health Care Particulate Respirator and Surgical Mask 1860, 1860S

- Collapse-resistant cup shape design
- Braided headbands for comfort
- Cushioning nosefoam
- Available in two sizes

3M's NIOSH-approved surgical filtering facepiece respirators (FFRs) help protect the wearer from harmful particles while approaching—the material breathability performance requirements of a traditional surgical mask.



3M surgical FFRs show lower initial pressure drop than the competitive respirator models tested.†*

†Testing per MIL-SPEC 36945C 4.4.1.2 using 4.9cm² sample at 8L/min. Source: Representative pressure drop performance from internal testing of multiple lots of all models, November 2017. Selection of respirator models, testing protocol, data generation and conclusions were reviewed and approved by an expert from the University of Illinois at Chicago. Statistically different per T-tests (P-value <0.0001).
*Performance requirement ASTM F2100-11 medical facemask materials classification.

3M™ Reusable Elastomeric Respirators

3M™ Half Facepiece Reusable Respirators are another respiratory protection option for healthcare workers. When used with replaceable particulate filters, reusable respirators offer a minimum of 95% filtration efficiency. They have the ability to be disinfected and reused. Common use includes these areas:

- Cohort (Infectious Disease) Unit
- Emergency Department
- Emergency Medical Services
- Radiology

CDC does not recommend use as a method of source control¹

3M™ Half Facepiece Reusable Respirator 6000 Series

- Comfortable, soft, lightweight facepiece with adjustable head straps
- Can be disassembled, cleaned and reused
- Available in 3 sizes (small-6100, medium-6200, large-6300)



3M™ Particulate Filter 7093/7093B, P100

- NIOSH-approved with 99.97% filtration efficiency against non-oily particulates
- Channeled airflow protects filter for enhanced breathability and longer service life
- Swept-back design provides enhanced field of view and greater comfort
- Lightweight, low-profile design
- Plastic filter encasement for easy wipe-down



3M™ Particulate Filter/Retainer/Adapter Kit 6N01

Kit includes 40 3M™ Particulate Filters 5N11, 20 3M™ Filter Adapter 603 and 20 3M™ Filter Retainer 501



Reusable Respirators by the Numbers

Reusable respirators (RRs) offer a sustainable option to help protect healthcare workers from potentially infectious airborne particles.

Projected respirators needed during a severe pandemic:



1
Reusable Respirator

=



576
Filtering Facepiece Respirators (FFRs)²

\$200 savings

per employee protected, compared to disposable respirator single high-exposure risk use²

In a comparative study, users rated their sense of protection:

★★★★★ vs. ★★★☆☆
4.1/5 RRs vs. 3.6/5 FFRs³

“We want something that is reusable and that can be relatively comfortable. And the fact that you can clean and decontaminate it is very important.”

— MD, Emergency Medicine

The clinician represented in the image is a model and is not associated with the quote.

3M™ Powered Air-Purifying Respirator Solutions



3M™ Powered Air-Purifying Respirators (PAPRs) are battery-operated, reusable respirator systems that can cover the full face and neck. When used correctly, the HEPA filter can filter 99.97% of airborne particles. They're typically worn in clinical or airborne isolation areas and provide respiratory protection from potentially infectious airborne particulates.



A stethoscope may be used with the alternate headcover model S-133.

3M™ Versaflo™ PAPR TR-300+

The lightweight, low-profile 3M™ Versaflo™ PAPR TR-300+ provides reliable, comfortable protection in airborne particulate environments — so you can keep working, even in difficult conditions.

Why you can trust 3M™ Versaflo™ PAPR systems:

- Easy to assemble, disassemble, and troubleshoot for maintenance and decontamination.
- Lightweight and comfortable for long periods.
- Low-battery and low-flow alarms.
- Intuitive user interface (blue components represent user touch points).
- Lightweight soft hoods are designed to help reduce neck strain or fatigue by not wearing motor blower on head.

3M™ Versaflo™ S-Series Hoods and Headcovers with Integrated Suspension

- For quick assembly choose integrated suspension models. For fast, cost-effective replacement of outer fabrics, select premium reusable suspension models.
- Feel protected knowing the S-Series headcovers have an APF of 25 and hoods have an APF of 1000 when used as part of a NIOSH-approved PAPR system.
- Designed to fit a variety of head sizes and offer a wide field of view.

Assigned Protection Factors (APF) means the workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program.



3M™ Versaflo™ Easy Clean PAPR Kit TR-300+ ECK Kit

This complete, ready-to-use HE PAPR system is easy to clean and features a maintenance-free disposable hood.

The kit includes: S-433L Hood Assembly, BT-20L Breathing Tube, TR-302N+ PAPR Unit, TR-327 Easy Clean Belt, TR-332 High Capacity Battery, TR-341N Battery Charger Kit, TR-3712N HE Filter, TR-3600 Pre-Filter, TR-971 Airflow Indicator.

3M™ Health Care Surgical and Procedure Masks



3M also offers you a variety of surgical and procedure masks for your specific needs. It's important to note that surgical and procedure masks are not respirators and are not designed to help reduce the wearer's exposure to airborne hazards. We offer options that are ideal for surgical and general purpose use, including models with built-in faceshields.



3M™ Tie-On Surgical Mask
1818, 1818FSG



3M™ High Fluid-Resistant Surgical Mask
1835, 1835FS



3M™ High Performance Surgical Mask
1838R, 1838FSG



3M™ Earloop Procedure Face Mask
1820, 1820FS



3M™ High Fluid-Resistant Procedure Mask
1840, 1840FS

Select the proper respiratory protection for your needs.

Healthcare workers may be exposed to a wide range of airborne hazards and the right respiratory protection strategy in place can make all the difference. Learn the key differences between the three types below, so you can make a more informed decision about respiratory protection at your healthcare facility.










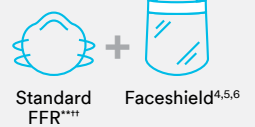




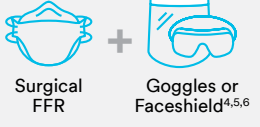
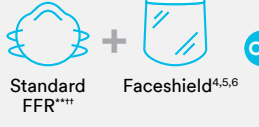
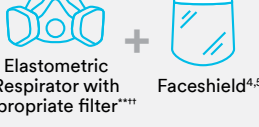


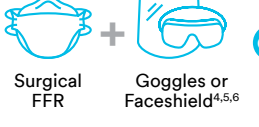
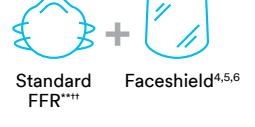
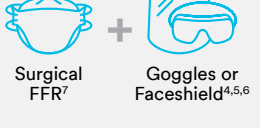
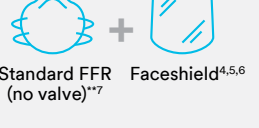
	3M™ Aura™ Health Care Particulate Respirator and Surgical Mask 1870+	3M™ Half Facepiece Reusable Respirators with particulate filters	3M™ Versaflo™ Easy Clean PAPR Kit TR-300N+ ECK
NIOSH filtration efficiency against non-oily particulates	95% (N95)	95% (N95), 99.97% (P100)	99.97% (HEPA)
OSHA Assigned Protection Factor (APF)	10 APF	10 APF	1000 APF
Able to use with stethoscope (with select head coverings for PAPR)	✓	✓	✓
Certain components intended to be disinfected and reused*		✓	✓
Replaceable filters available		✓	✓
No fit testing required			✓
Fluid resistant tested**	✓		
Pressure type	Negative	Negative	Positive

*Please refer to inspection, cleaning and maintenance instructions and follow facility protocol

**ASTM F1862 / F1862M - 17 Standard Test Method for Resistance of Medical Face Masks to Penetration by Synthetic Blood

What to consider when choosing respirators and masks.

3M™ Health Care Respirators and Surgical Masks do different jobs and their selection and use depends on the situation and the type(s) of protection you need. Be sure to take care of yourself and those around you by selecting the proper respirator and mask for the application.

Setting or Anticipated Hazard	Respiratory and Face Mask Selection Guide*
Only airborne (or aerosol) particulate hazards†	 OR  OR  OR 
Only risk of high-velocity fluids	 OR  OR  OR 
Only sterile field	 OR  OR  OR 
Airborne (or aerosol) particulate hazards† + risk of high-velocity fluids	 OR  OR 
Risk of high-velocity fluids + sterile field	 OR  OR  OR 
Airborne (or aerosol) particulate hazards† + risk of high-velocity fluids + sterile field	 OR 

Note: For information about eye protection, see the [3M Eye Protection for Infection Control Technical Bulletin](#)
 *This guide is intended for a healthcare audience. The term "surgical" refers to those masks and respirators cleared for use as a medical device by the U.S. FDA; clearance requires demonstrated performance against established test criteria including fluid resistance testing to demonstrate the device will protect the wearer from high-velocity streams of fluids. This guide may not be inclusive of all options that could be used in the listed settings. It is the responsibility of the healthcare organization to determine suitability of any respirator, face mask, and faceshield used in their facility and ensure compliance with all applicable regulations including the respiratory protection program requirements of U.S. OSHA 29 CFR 1910.134 when respiratory protection is used.
 **Item is not FDA cleared for protection against high velocity fluids. The faceshield provides mouth, nose, eye, and skin protection.
 †Appropriate respirator selection depends on multiple factors, including hazard type, concentration, and substance-specific standards.
 ‡Not cleared by FDA for use in surgery.

July 2020

PPE and Skin Protection



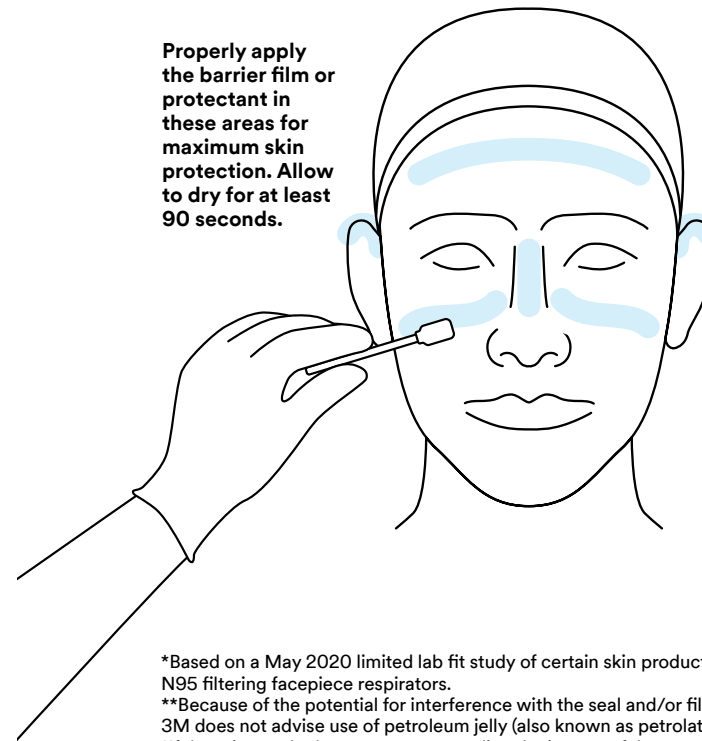
Prolonged use of PPE may impact skin and cause various levels of skin breakdown. Certain 3M skin health products may help protect your skin without interfering with the fit of respirators.*

Protect your skin while wearing PPE

The key consideration when determining how to help protect your skin while wearing facial PPE is ensuring that the skin protection product does not interfere with the PPE and its functionality. This means choosing a skin protection product that:

- Does not interfere with the seal of the respirator and/or fit of other facial PPE**
- Does not transfer off your skin and onto the facial PPE
- Protects skin from friction and moisture (waterproof)
- Is breathable, so moisture can evaporate from your skin
- Does not require removal or washing off
- Has a low dermatitis potential

Properly apply the barrier film or protectant in these areas for maximum skin protection. Allow to dry for at least 90 seconds.



3M™ Cavilon™ No Sting Barrier Film



3M™ Cavilon™ Advanced Skin Protectant

*Based on a May 2020 limited lab fit study of certain skin products (3M™ Cavilon™ No Sting Barrier Film, 3M™ Cavilon™ Advanced Skin Protectant) and several 3M N95 filtering facepiece respirators.

**Because of the potential for interference with the seal and/or filtration function of any of 3M's filtering facepiece respirators (FFR), including N95 respirators, 3M does not advise use of petroleum jelly (also known as petrolatum) ointments, thick barrier cream or dressings such as polyurethane foams and hydrocolloids.

†If there is any doubt or concern regarding the impact of these products on the respirator's seal, employees should be fit tested with these products applied to the skin as they would be during respirator wear.

Guidance during the COVID-19 Pandemic



Strategies for Respiratory Protection Conservation

During this global health emergency, many healthcare institutions are experiencing shortages of filtering facepiece respirators such as N95 respirators.

The United States Centers for Disease Control and Prevention (CDC) has issued [Strategies for Optimizing the Supply of N95 Respirators](#). In this guidance the CDC recommends conventional capacity strategies, contingency capacity strategies (during expected shortages) and crisis strategies (during known shortages).

Contingency and crisis strategies include use of N95s past their shelf life, extended use of N95s, use of other types of respirators, use of respirators from other countries, and re-use of respirators, ahead of decontamination of respirators.

The CDC discusses reuse and extended use of N95s as a crisis strategy at [Implementing Filtering Facepiece Respirator \(FFR\) Reuse, Including Reuse after Decontamination, When There Are Known Shortages of N95 Respirators](#).

Emergency Use Authorizations

In addition to guidance from CDC, there have been multiple emergency use authorizations (EUAs) issued by the U.S. Food and Drug Administration (FDA) related to the types of respirators that can be used during the global pandemic and guidance on the reuse of respirators. [Read more information about Personal Protective Equipment EUAs](#).



Ordering Information

Product Number	Description	Per case
3M™ Surgical Filtering Facepiece Respirators		
1870+	3M™ Aura™ Health Care Particulate Respirator and Surgical Mask	20/Box, 6 Boxes/Case
1804	3M™ VFlex™ Health Care Particulate Respirator and Surgical Mask	50/Box, 8 Boxes/Case
1804S	3M™ VFlex™ Health Care Particulate Respirator and Surgical Mask Small	50/Box, 8 Boxes/Case
1860	3M™ Health Care Particulate Respirator and Surgical Mask	20/Box, 6 Boxes/Case
1860S	3M™ Health Care Particulate Respirator and Surgical Mask Small	20/Box, 6 Boxes/Case
3M™ Reusable Elastomeric Respirators		
3M™ 6000-Series Half Facepiece Reusable Respirators		
6100	Half Facepiece Reusable Respirator-Small	24
6200	Half Facepiece Reusable Respirator-Medium	24
6300	Half Facepiece Reusable Respirator-Large	24
3M™ Particulate Filters and Assemblies		
7093	Particulate Filter, P100	12/Box, 5 Boxes/Case
7093B	Particulate Filter, P100	144
6N01	Particulate Filter/Retainer/Adapter Kit	40 3M™ Particulate Filters 5N11 20 3M™ Filter Adapter 603 20 3M™ Filter Retainer 501
3M™ Powered Air-Purifying Respirators (PAPRs)		
3M™ Versaflo™ TR-300+ Kits and Assemblies		
TR-300N+ ECK	Easy Clean PAPR Kit - Complete, Ready-to-Use System	1
TR-300+ HKL	Healthcare PAPR Kit - Complete, Ready-to-Use System with S133L Headcover	1
TR-307N+	PAPR Assembly with Easy Clean Belt and High Capacity Battery	1
3M™ Versaflo™ TR-300+ Pre-Filters / Filters		
TR-3600	Prefilter	100
TR-3712N-5	HE Filter 3712N	5
TR-3712N-40	HE Filter 3712N	40
3M™ Versaflo™ TR-300+ Batteries and Battery Chargers		
TR-332	High Efficiency Battery	1
TR-341N	Single Station Battery Charger Kit	1
TR-344N	4-Station Battery Charger Kit	1
3M™ Versaflo™ Breathing Tubes & Breathing Tube Cover		
BT-30	Adjustable Length Breathing Tube	1
BT-922/W-3228-10	Breathing Tube Cover	10
3M™ Versaflo™ S-Series Hoods and Headcovers with Integrated Suspension		
S-433L-5	Hood with Integrated Head Suspension - Medium/Large	5
S-433S-5	Hood with Integrated Head Suspension - Small/Medium	5
S-133L-5	Headcover with Integrated Head Suspension - Medium/Large	5
S-133S-5	Headcover with Integrated Head Suspension - Small/Medium	5

Ordering Information

Product Number	Description	Per case
3M™ Health Care Surgical Masks		
1818	3M™ Tie-On Surgical Mask	12/Box, 5 Boxes/Case
1818FS	3M™ Tie On Surgical Mask with Face Shield	50/Box, 4 Boxes/Case
1835	3M™ High Fluid-Resistant Surgical Mask	50/Box, 6 Boxes/Case
1835FS	3M™ High Fluid-Resistant Surgical Mask with Face Shield	50/Box, 6 Boxes/Case
1838R	3M™ High Performance Surgical Mask	50/Box, 12 Boxes/Case
1838FSG	3M™ High Performance Surgical Mask with Face Shield	50/Box, 4 Boxes/Case
3M™ Health Care Procedure Masks		
1820	3M™ Earloop Procedure Face Mask	50/Box, 12 Boxes/Case
1820FS	3M™ Earloop Procedure Face Mask with Face Shield	50/Box, 6 Boxes/Case
1840	3M™ High Fluid-Resistant Procedure Mask	50/Box, 6 Boxes/Case
1840FS	3M™ High Fluid-Resistant Procedure Mask with Face Shield	50/Box, 6 Boxes/Case
Skin Protection		
3M™ Cavilon™ No Sting Barrier Film		
3343	1.0 mL Wand	25/Box, 4 Boxes/Case
3344	1.0 mL Wipe	25/Box, 4 Boxes/Case
3M™ Cavilon™ Advanced Skin Protectant		
5051	.07 mL Applicator	20

For more resources and information about choosing the right mask or respirator for your needs, go to [3M.com/healthcareppe](https://www.3m.com/healthcareppe)

¹Centers for Disease Control and Prevention. (2020). Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic. Retrieved July 15 from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.htm>

²National Academies of Sciences, Engineering, and Medicine 2019. Reusable Reusable Elastomeric Respirators in Health Care: Considerations for Routine and Surge Use. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25275>.

³Hines, S. E., Brown, C., Oliver, M., Gucer, P., Frisch, M., Hogan, R., ... & McDiarmid, M. (2019). User acceptance of reusable respirators in health care. American journal of infection control, 47(6), 648-655.

⁴Centers for Disease Control and Prevention. (2020). Personal Protective Equipment: Questions and Answers. Retrieved July 15 from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-use-faq.html>

⁵Centers for Disease Control and Prevention. (n.d.). Guidance for the Selection and Use of Personal Protective Equipment (PPE) in Healthcare Settings. Retrieved July 15 from <https://www.cdc.gov/hai/pdfs/ppe/PPEslides6-29-04.pdf>

⁶Centers for Disease Control and Prevention. (2020). Operational Considerations for Personal Protective Equipment in the Context of Global Supply Shortages for Coronavirus Disease 2019 (COVID-19) Pandemic: non-US Healthcare Settings. Retrieved July 15, from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-us-settings/emergency-considerations-ppe.html>

⁷Centers for Disease Control and Prevention. (2020). Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic. Retrieved July 15 from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>



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WARNING

These respirators help protect against certain airborne particulates. Before use, the wearer must read and understand the User Instructions provided as a part of the product packaging. Follow all local regulations. In the U.S., a written respiratory protection program must be implemented meeting all the requirements of OSHA 29 CFR 1910.134 including training, fit testing and medical evaluation. In Canada, CSA standards Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. Misuse may result in sickness or death. For correct use, consult supervisor and User Instructions, or call 3M Health Care Helpline in USA at 1-800-228-3957 and in Canada at 1-800-563-2921.