

3M Science.
Applied to Life.™

**Take care of yourself so you
can continue to care for others.**

3M™ Healthcare Particulate Respirator

#3MScienceOfSafety



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.

Surgical Mask or Surgical Respirator

What's right for me?



Helps reduce the risk of large particles expelled by the wearer from reaching patients and is used as a physical barrier to protect the user from hazards, such as splashes of large droplets of blood or body fluids.

Often fits loosely, leaving gaps between the mask and your face. Does not require it testing or user seal checks.

Helps protect the sterile surgical field from contamination by exhaled particles. Fluid-resistant surgical masks help reduce your exposure to blood and body fluids.

Listed on the ARTG by its Sponsor.

Tested for Bacterial Filtration Efficiency (BFE), plus fluid resistance, differential pressure and flammability.

Intended Use

Fit

Applications

Approvals

Testing



Helps reduce wearer exposure to certain airborne particles.

Designed to fit tightly, creating a seal between your face and the respirator. Requires fit testing and user seal checks.

Designed to help reduce your exposure to certain airborne particles, including those generated by electrocautery, laser surgery and other powered medical instruments. Also helps protect the sterile surgical field from contamination by exhaled particles. Fluid-resistant surgical respirators help reduce your exposure to blood and body fluids.

NIOSH Approved Respiratory Protection Device 1870+, 1860, 1860S, 1804 and 1804S is entered in the ARTG 255656.

Meets NIOSH 42 CFR 84 N95 requirements for a minimum 95% filtration efficiency against solid and liquid aerosols that do not contain oil, plus fluid resistance.

Proprietary filter media maximises performance and comfort

3M™ Health Care Particulate Respirator and Surgical Masks are scientifically designed to help make breathing easier and safety more comfortable. Our unique manufacturing process injects a powerful electrostatic charge into an open formation material, improving the efficiency of particle removal while allowing more air to pass through. The result is a highly effective respirator, so you can focus on caring for your patients.

3M's unique filter media features highly charged microfibers designed to significantly enhance the capture of airborne particles. This effectiveness allows 3M to design respirators with a more open formation, helping lessen breathing resistance.

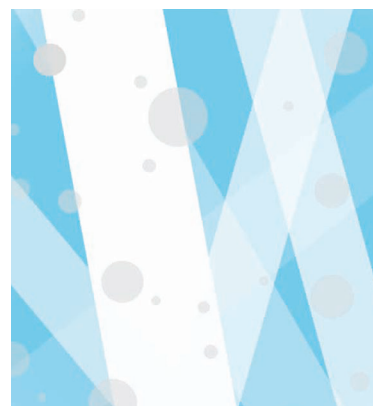


Illustration of how 3M's electrostatically charged microfibers—magnified 10,000 times—attract and capture particles from the air.

3M™ Flat Fold N95 Health Care Respirator & Surgical Mask 1870+

Features and Benefits

Nose clip

- Mould nose clip to wearer's nose shape for secure fit and seal
- Helps to reduce fogging of eyewear

3M™ Proprietary Filter Media

- Effectively filter performance giving low breathing resistance for improved comfort

Embossed top panel

- Embossed top panel helps to reduce fogging of eyewear
- Sculpted top panel allows more room for eyewear and conforms to wearer's nose and eye contours
- Improves compatibility with eyewear
- Low profile design provides a good field of vision

Innovative Chin tab

- Ease of positioning, donning and adjustment

Individually wrapped

- Protects from contamination prior to use
- Flat-fold design allows for convenient storage prior to use
- Aids portability

Unique 3-panel flat fold design

- Allows for greater facial movement
- Added comfort for the wearer

Performance Characteristics

- BFE>99%
- Highest level of fluid resistance according to ASTM F1862 at 160 mm Hg (Level 3)

Regulatory / Compliance:

- NIOSH N95 approved/ 1870+ is entered in the ARTG 255656

Materials

The following materials are used in the production of 1870+ respirators:

Straps	Polyisoprene
Staples	Steel
Nose Clip	Aluminium
Nose Foam	Polyurethane
Filter	Polypropylene
Coverweb	Polypropylene

This respirator does not contain components made from natural rubber latex.

Maximum mass of products = 10g

5 year shelf life from date of manufacture



Potential settings and applications

Operating Rooms, Clinics, TB Wards, Patient Care, Labor and Delivery, Infection Control Practices, Laboratory, emergency or pandemic preparedness planning, stockpiling, etc.

3M™ Cupped N95 Health Care Respirator & Surgical Mask 1860 & 1860S

Features and Benefits

Nose clip

- Mould nose clip to wearer's nose shape for secure fit and seal
- Helps to reduce fogging of eyewear

3M™ Proprietary Filter Media

- Effectively filter performance giving low breathing resistance for improved comfort

Cupped design

- Traditional, robust style that fits most facial sizes
- Collapse resistant
- Cushioning nose foam, and light weight construction for comfortable wear

Braided headbands

- Dual latex free head straps

Available in 2 sizes to fit a broad range of faces
(1860 and 1860S)

Performance Characteristics

- BFE>99%
- 1860 - Fluid resistant according to ASTM F1862 at 120 mm Hg (Level 2)
- 1860S - Fluid resistant according to ASTM F1862 at 80 mm Hg (Level 1)

Regulatory / Compliance:

- NIOSH N95 approved/1860 and 1860S is entered in the ARTG 255656

Materials

The following materials are used in the production of 1860, 1860S respirators:

Straps	Braided Polyisoprene
Staples	Steel
Nose Clip	Aluminium
Nose Foam	Polyurethane Foam
Filter	Polypropylene
Shell	Polyester
Coverweb	Polypropylene

This respirator does not contain components made from natural rubber latex.

Maximum mass of products = 11.3g

5 year shelf life from date of manufacture

































**Available in two sizes:
Standard and Small**

Potential settings and applications

Operating Rooms, Clinics, TB Wards, Patient Care, Labor and Delivery, Infection Control Practices, Laboratory, emergency or pandemic preparedness planning, stockpiling, etc.

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 			
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  + 			
Risk of high-velocity fluids + sterile field	 +  OR  +  OR  +  OR  + 			
Airborne (or aerosol) particulate hazards† + risk of high-velocity fluids + sterile field	 +  OR  + 			

July 2020

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; 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 organisation 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 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.

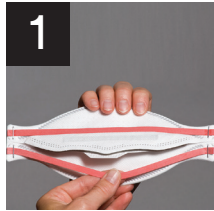
††Not cleared for use in surgery.

Helping You Wear it Right

Disposable respirators are most effective when there is a good seal between the edges of the respirator and your face. The instant this seal is broken, protection is compromised as contaminated air can leak in through any gaps.

These fitting instructions must be followed each time a disposable respirator is worn.

Application



Remove the respirator from its packaging and hold with straps facing upward. Place the bottom strap under the center flaps next to the "ATTENTION" statement.



Fully open the top and bottom panels, bending the nosepiece around your thumb at center of the foam. Straps should separate when panels are opened. Make certain the bottom panel is unfolded and completely opened.



Place the respirator on your face so that the foam rests on your nose and the bottom panel is securely under your chin.



Pull the top strap over your head and position it high on the back of the head. Then, pull the bottom strap over your head and position it around your neck and below your ears.



Adjust for a comfortable fit by pulling the top panel toward the bridge of your nose and the bottom panel under your chin. Make certain hair, facial hair, jewelry and clothing are not between your face and the respirator as they will interfere with fit.



Place your fingertips from both hands at the top of the metal nosepiece. Using two hands, mold the nose area to the shape of your nose by pushing inward while moving your fingertips down both sides of the nosepiece.

Note: Always use two hands when molding the nosepiece. Pinching the nosepiece with one hand may result in improper fit and less effective respirator performance.



Perform a User Seal Check

Check the seal of your respirator each time you use the respirator.

Place one or both hands completely over the middle panel. Inhale and exhale sharply. Be careful not to disturb the position of the nosepiece as described in Step 6. If air leaks around your nose, re-adjust the nosepiece as described in Step 6. If air leaks around respirator edges, adjust panels and position of straps and make certain respirator edges fit snugly against the face. **If you cannot achieve a proper seal, do not enter the contaminated area. See your supervisor.**

Removal

Can be performed using one or both hands



Without touching the respirator facepiece, slowly lift the bottom strap from around your neck up over your head.



Lift off the top strap. Do not touch the respirator.



Store or discard according to your facility's infection control policy.

Posters educating users on how to wear it right for other models available on request.

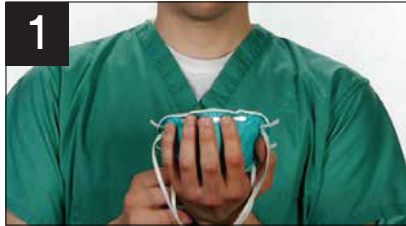
The Importance of Fit.

Respiratory protection is only effective if it is correctly selected, fitted and worn throughout the time when the wearer is exposed to respiratory contaminants. Disposable respirators are only effective when there is a good seal between the edges of the respirator and your face. The instant this seal is broken protection is compromised as contaminated air can leak in through any gaps.

These fitting instructions must be followed each time a 3M 1860/1860S respirator is worn.
3M™ Health Care Particulate Respirator and Surgical Mask



Application



Cup the respirator in your hand with the nosepiece at fingertips, allowing the head straps to hang freely below hand.



Position the respirator under your chin with the nosepiece up.



While holding the respirator in place, pull the top strap over your head so it rests high on the back of your head.



While continuing to hold the respirator firmly in place, pull the bottom strap over your head and position it around your neck, below your ears. Untwist the straps. Position the respirator low on your nose.



Using both hands, mold the nosepiece to the shape of your nose by pushing inward while moving your fingertips down both sides of the nosepiece.

Note: Always use two hands when molding nosepiece. Pinching with one hand may result in improper fit and less effective respirator performance.

Positive Pressure Fit Check



The respirator must be checked before each use. To perform the fit check, place both hands completely over the respirator, being careful not to disturb the position, and exhale sharply. If air leaks around your nose, adjust the nosepiece as described in step 5. If air leaks at respirator edges, adjust the straps back along the sides of your head. Perform fit check again if an adjustment is made. If you cannot achieve a proper fit, see your supervisor. Do not enter area requiring respirator use.

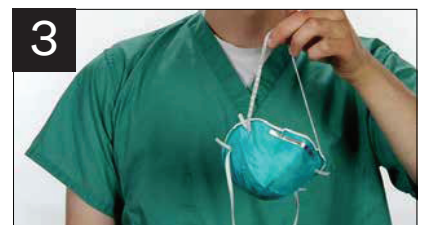
Removal



Without touching the respirator, slowly lift the bottom strap from around your neck up and over your head.



Lift off the top strap. Do not touch the respirator.



Store or discard according to your facility's infection control policy.



Warning about Face Fit Check

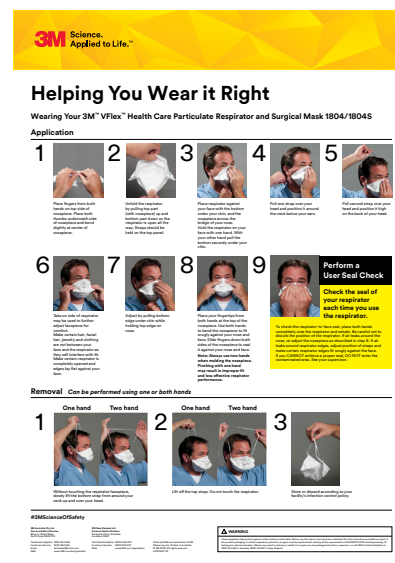
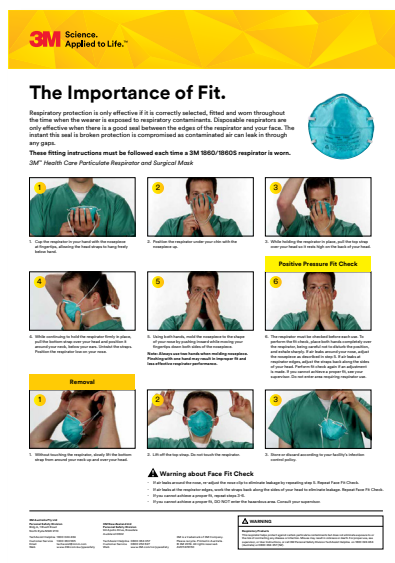
- If air leaks around the nose, re-adjust the nose clip to eliminate leakage by repeating step 5. Repeat Face Fit Check.
- If air leaks at the respirator edges, work the straps back along the sides of your head to eliminate leakage. Repeat Face Fit Check.
- If you cannot achieve a proper fit, repeat steps 3-6.
- If you cannot achieve a proper fit, DO NOT enter the hazardous area. Consult your supervisor.

Ordering Information

Item ID	3M Ordering Code	Description	Packaging
1870+	XA010033554	3M™ Flat Fold Particulate Respirator & Surgical Mask 1870+, N95 with Level 3 160mmHg Fluid Resistance	20 each/ box 12 boxes/ case
1860	AT010607219	3M™ Cupped Particulate Respirator & Surgical Mask 1860, N95 with Level 2 120mmHg Fluid Resistance	20 each/ box 6 boxes/ case
1860S	XA010000546	3M™ Cupped Particulate Respirator & Surgical Mask 1860S (small size), N95 with Level 1 80mmHg Fluid Resistance	20 each/ box 6 boxes/ case

Additional resources available

Fit Posters



Videos

[Tips for using a 3M 1870+ Flat Fold filtering facepiece respirator](#)

[Tips for using a 3M 1860 filtering facepiece respirator](#)

[3M Fluid Resistance Testing](#)

Why is fit testing so important?

The biggest contributor to reduced respiratory protection is poor fit. Checking that a respirator, with a tight fitting facepiece provides an adequate seal to the wearer's face has long been considered best practice as part of a general Respiratory Protection Program.

Reflecting this, a fit test for wearers tight fitting facepieces is required for compliance to AS/NZS 1715:2009. Respirators with tight fitting facepieces include disposable respirators, half and full-face respirators, including those that form part of a powered or air-fed respirator.

Fit testing should be carried out:

- Before the respirator is issued
- On all wearers of respirators with tight fitting facepieces where fit testing has previously not been performed

Fit testing should be repeated at appropriate times such as:

- If the wearer significantly loses or gains weight, has major dental work or sustains a major facial injury
- If a different size or model of Respiratory Protective Equipment (RPE) is specified
- Annually or when specified by the company policy e.g. during a health surveillance check
- Fit testing is in addition to performing a self-fit check. Prior to entering the contaminated area, at each use, the wearer should carry out a self-fit check to test the respirator fit.

There are two main methods of fit testing available:

- Qualitative fit testing (Aerosol Taste Test ATT)
- Quantitative fit testing (Ambient Aerosol Condensation Nuclei Counter (CNC) and Controlled Negative Pressure (CNP)

You can contact 3M for qualitative and quantitative fit testing advice. During both methods of testing, it is essential that the person is free from facial hair and other items that may interfere with the face seal.

Wearers with facial hair or stubble (even a day's growth) must not wear a respirator which has a tight fitting facepiece. All tests require a series of exercises to be performed during the fit test. Manufacturer's instructions for the test equipment should be followed at all times.

A record of the result of the test should be generated and retained for at least 5 years. Some schools of thought consider these records to be identifiable to an individual and related to health controls; in which case records may need to be kept for 40 years. Check with your local regulatory authorities to determine their requirements.

Tight Fitting positive pressure facepiece e.g. Full facepiece on a PAPR or Self Contained Breathing Apparatus are also required to be fit tested with a Quantitative fit test method i.e. not the FT-10/FT-30 Qualitative kits. However when being fit tested the facepiece must be converted into a negative pressure facepiece irrespective of the mode it is used in on the job.

For more information on the requirements of Fit Testing, refer to the AS/NZS 1715:2009 & ISO 16975-3.

3M™ Qualitative Fit Test Kits

Conduct a fit test to ensure that a respirator with a tight fitting facepiece provides an adequate seal to the wearer's face.

The 3M Qualitative Fit Test apparatus FT-10 and FT-30 are designed for fit testing disposable respirators and half face reusable respirators fitted with particulate or combination gas/vapour and particulate filters.

Features and Benefits:

- Offers a convenient method for performing qualitative fit testing
- No calibration of equipment required
- No modification of facepiece required
- Training resources available, please contact your local 3M representative for more information
- Each kit contains a hood and collar assembly, two nebulisers, sensitivity solution, test solution and detailed instructions
- Replacement solutions and accessories can be purchased separately
- Available with Sweet (FT-10) or Bitter (FT-30) solutions



3M are proud to be an official supporter of the Australian Institute of Occupational Hygienists (AIOH) RESP-FIT respirator fit testing training and accreditation program. RESP-FIT main objective is to improve respirator fit tester competencies in Australia. They have developed a training course syllabus that training providers can develop their course against. They have also developed an accreditation process for fit testers to go through as a external assessment process as evidence of their competence. They also list fit test service providers who employ accredited fit testers. Visit www.respfit.org.au for further information.



Qualitative Fit Test (QLFT) Aerosol Taste Test (ATT) Kit and Accessories

- The 3M™ Qualitative Fit Test Kit is designed for fit-testing any negative pressure respirator e.g. 3M™ Disposable and Reusable Half Face Respirators.
- Each 3M™ Qualitative Fit Test Apparatus Kit contains: a laminated instruction booklet, sensitivity solution, fit test solution, two nebulisers, one hood, one collar assembly and two sets of replacement nebuliser inserts.
- 3M™ offers two Qualitative Fit Test Apparatus Kits FT-10 (Sweet) and FT-30 (Bitter). FT-10 uses a test solution of sodium saccharin that produces a sweet tasting aerosol. FT-30 uses a test solution of denatonium benzoate to produce a very bitter taste.
- Each kit is estimated to fit test approximately 150 people before replacement bottles may be required. This number will vary depending on the sensitivity and fit test solution top up sprays required for those being fit tested.
- NOT suitable to fit test full facepiece respirators



Accessories



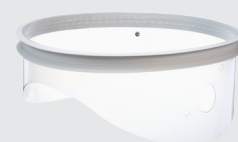
FT-11/FT-12



FT-13



FT-14



FT-15



FT-31/FT-32

3M Order Code	Model #	Description
70070121515	FT-10	3M™ Qualitative Fit Test Apparatus Kit FT-10, Sweet (Saccharin) – Kit contains 1 x FT-11 Sweet Sensitivity Solution 55ml, 1 x FT-12 Sweet Fit Test Solution 55ml, 2 x FT-13 Nebuliser, 1 x FT-14 Hood, 1 x FT-15 Collar & laminated user instructions
70070121457	FT-11	3M™ Sensitivity Solution FT-11, Sweet (Saccharin) Red label text
AT019167397	FT-12	3M™ Fit Test Solution FT-12, Sweet (Saccharin) Black label text
70070121473	FT-13	3M™ Fit Test Nebuliser FT-13
70070121481	FT-14	3M™ Fit Test Hood FT-14
70070121499	FT-15	3M™ Fit Test Collar FT-15
70070709640	FT-30	3M™ Qualitative Fit Test Apparatus Kit FT-30, Bitter (Bitrex) – Kit contains 1 x FT-31 Bitter Sensitivity Solution 55ml, 1 x FT-32 Bitter Fit Test Solution 55ml, 2 x FT-13 Nebuliser, 1 x FT-14 Hood, 1 x FT-15 Collar & laminated user instructions
AT010587395	FT-31	3M™ Sensitivity Solution FT-31, Bitter (Bitrex) Red label text
AT010587403	FT-32	3M™ Fit Test Solution FT-32, Bitter (Bitrex) Black label text

Fit testing at your fingertips.

Introducing the 3M™ Wear it Right App.

The 3M™ Wear it Right App makes the task of qualitative fit testing less tedious with the tap of a button. Grab your 3M™ Fit Test Kit, download the app, and you'll be ready to experience convenient digital data recording. Test both half face reusable and disposable respirator wearers.

The app supports multiple types of fit tests and has modes for both beginner and experienced fit testers. Users follow consistent fit test protocols at every step of the process, helping to ensure accurate results.

3M



Digital gets it done.

Streamline your fit testing program with the 3M™ Wear it Right App.

Helps fit testers and wearers follow the exact fit test protocol at every step of the process.



Compliance, confidence and convenience

The app is preloaded with OSHA & ISO QLFT-ATT fit test protocols to help ensure testing requirements are consistently met* and provides easily accessible fit testing records.



Go Paperless

Often times, the fit test process relies on paper recordkeeping. The app digitizes the fit test process, eliminating the need to track manually.



Easy Recordkeeping

The app acts as a digital data record and supports importing wearer details and exporting fit test records.

All data collected is stored locally on the specific iPad being used**.



Versatile

Tests both half facepiece reusable respirator and disposable respirator wearers.



Step-by-Step Instructions

Helps users follow fit test protocol with prompts for each step of the process to help ensure tests are performed correctly.



Training on Demand

The app provides self-guided, in-depth instructions to make it easy for new fit testers to hit the ground running while helping both testers and wearers understand why fit matters.



2 Modes, 1 App

The app has two modes—one for fit testers who need less step by step guidance and one for those who prefer more detailed guidance.



[Download the app now on iOS.](#)



[Download the app now on Google Play.](#)

Scan the QR code to download your free 3M™ Wear it Right App from the iOS or Google Play store.

*It is the responsibility of each user to understand the local specific fit testing standards. If any questions arise, 3M recommends users to refer to the standard as this app is not a substitute for knowledge of applicable standards and regulations.

**Should the app be deleted, or should the device be damaged beyond fixing, the collected data will be lost. 3M recommends users to routinely export the collected data, as 3M doesn't have access to local app data.

Training and Support

3M's team of Occupational Hygienists and Technical Specialists offer support to meet the needs of our customers.

They can provide customers:

- Initial and ongoing technical support
- Advice and support for your company

No matter how effective a piece of PPE is, it will offer little or no protection if it is not fitted and worn correctly. Proper inspection, cleaning and storage is vital for safety equipment that protects a worker's health and well being.

That is why 3M offers support and resources to show the correct way to fit, inspect, clean and store the PPE designed and manufactured by our company.

3M TechAssist

3M TechAssist is the ideal point of contact for your questions, especially when you require a prompt answer. Supported by trained staff, Tech Assist is an immediate link to the worldwide resources of 3M.

Customers can contact TechAssist to answer questions on product information, technical advice, guidance with product selection, Australian Standards and other important information they need to know on a day-to-day basis.

You can contact 3M's TechAssist service:

Australia

TechAssist Helpline on 1800 024 464 or by email at techassist@mmm.com

New Zealand

TechAssist Helpline on 0800 364 357

Nationwide Distributor Network

3M distributes our wide range of workplace safety products through a distributor network which includes over 250 stores and branches throughout Australia.


To find a 3M safety distributor near you, visit our website:

Australia

www.3M.com.au/ppesafety or ring 3M customer service on 1300 363 565

New Zealand

www.3m.com/nz/ppesafety or ring 3M customer service on 0800 252 627



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