3M HALF FACEPIECE ELASTOMERIC RESPIRATOR TRAINING

Beth Israel Lahey Health

What is a half facepiece elastomeric P100 respirator?

- Reusable, negative-pressure respirator
- P100 will filter at least 99.97% of particles greater than 0.3 microns
  - P: strongly resistant to oil particulates
  - 100: filter efficiency
- Regulated by OSHA, approved by NIOSH
  - CDC and NIOSH recommend use of elastomeric respirators in most situations in which a disposable N95 could be used
  - 3M elastomeric respirators **cannot be worn in areas where sterile procedures are performed** (including operating rooms and cardiac cath labs) regardless of presence of exhalation valve filter
- Wide variety of makes and models
  - This training will cover the 3M 6000 Series Respirator

You have been fit tested to a specific sized respirator

- 3 different sizes of the 3M elastomeric respirators are available and **not** interchangeable
  - 6100 Small
  - 6200 Medium
  - 6300 Large

- Elastomeric respirators have exhalation valves and:
  - **May be used in non-sterile procedural areas** (e.g., endoscopy unit, bronchoscopy suite, & interventional radiology) with an exhalation valve filter or if exhalation valve is covered with a surgical mask that does not interfere with the respirator fit
  - **May <u>not</u> be used into the operating room or other sterile areas** (e.g., cardiac cath lab) regardless of presence of exhalation valve filter

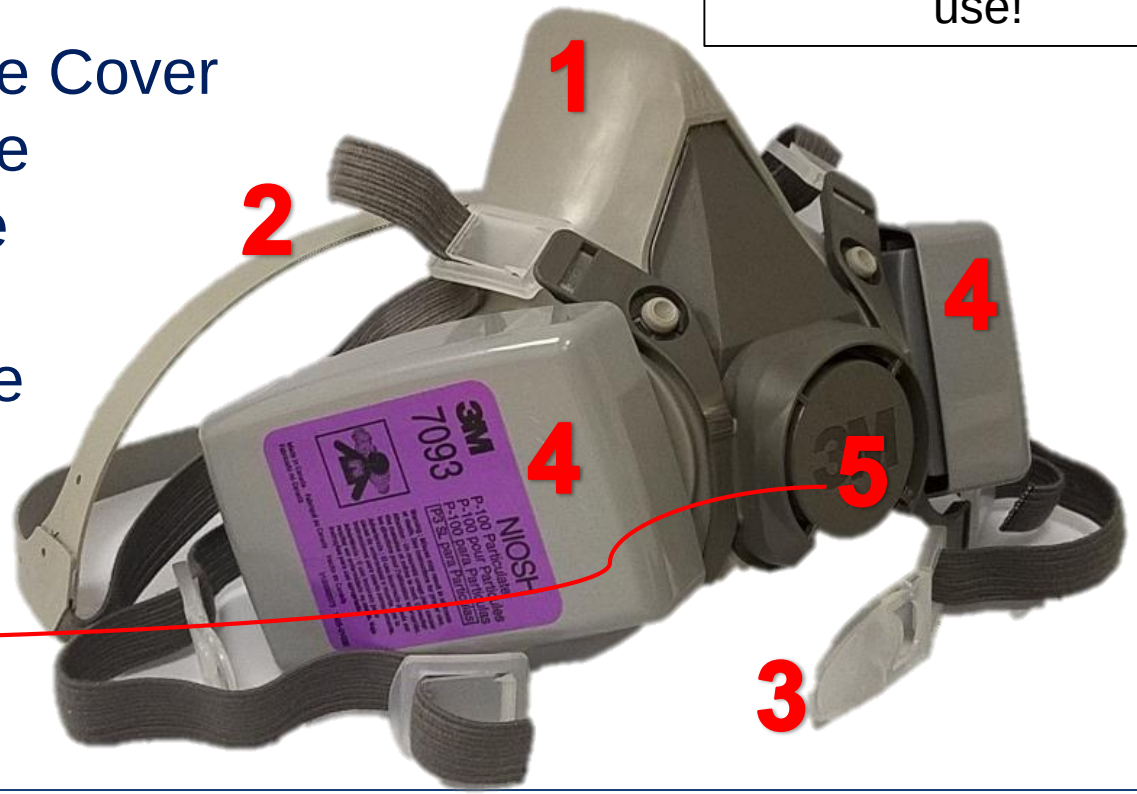
Filters will be distributed to individual healthcare workers

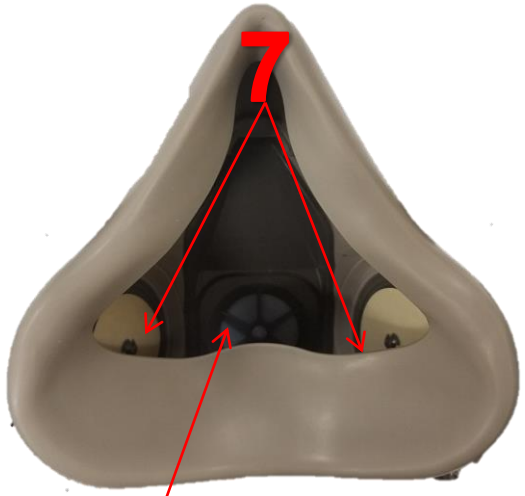
- 3M 7093 P100 filters are compatible with all 3M 6000 respirators
- Filters will be changed based on BILH Respirator Service Life by Respirator Type
- Plan for new filters to be issued at annual fit testing sessions
- Replace filter immediately if
  - grossly contaminated and unable to be cleaned
  - damaged or wet
  - breathing becomes noticeably more difficult for the user
- If new filter cartridge or exhalation valve filter is needed prior to the scheduled interval, please contact Distribution
- Proper disinfection of the exterior of the filter is essential to reduce cross contamination

Familiarize yourself with the respirator parts and accessories

1) Facepiece
2) Head Harness Assembly
3) Neck Harness
4) P100 Filter (2x)
5) Exhalation Valve Cover
6) Exhalation Valve
7) Inhalation Valve
8) Filter Gasket
9) Exhalation valve filter

Write **your name** on the front of **your respirator** and on **your storage bag** with first use!





Every part of your respirator serves a purpose

1) **Facepiece** – part of the respirator that secures filters and head straps to create a tight seal around your face
2) **Head Harness Assembly** – sits on crown of head to secure respirator
3) **Neck Harness** – connects around neck to secure respirator
4) **P100 Filter** (2) – filters greater than 99.97% of particles 0.3µm and larger; indicated by magenta color on label
5) **Exhalation Valve Cover** – plastic cover over the exhalation valve
6) **Exhalation Valve** – one way valve allowing exhaled breath to leave the respirator; exhausted breath is **NOT** filtered
7) **Inhalation Valve** – one way valve allowing filtered inhaled air to enter the respirator
8) **Filter Gasket** – ensures filter secures properly to face piece
9) **Exhalation Valve Filter** – filters exhaled air and provides source control (to protect those around the wearer)

Inspect your respirator prior to each use for integrity

1) Check facepiece for cracks, tears and dirt. Be certain facepiece, especially face seal area, is not distorted
2) Examine inhalation valves for signs of distortion, cracking or tearing
3) Make sure head straps are intact and have good elasticity
4) Examine all plastic parts for signs of cracking or fatiguing
5) Make sure filter gaskets are properly seated and in good condition
6) At the start of each shift:
   - Remove exhalation valve cover
   - Examine exhalation valve and valve seat for signs of dirt, distortion, cracking or tearing
   - Replace exhalation valve cover prior to use
   - If using an Exhalation Valve Filter, attach to exhalation valve cover

Filters must be attached to the respirator carefully to function properly

1) Align the line on the inside of filter with bayonet lug on the face piece
2) Push together onto the gasket
3) Turn clockwise ¼ turn to stop and repeat for the second filter

Filters can be removed by turning them ¼ turn counterclockwise

Exhalation valve filters must be properly attached to the filter for source control

1) Align the connector tabs and hooks on the exhalation valve filter with the breathing slots on the valve cover
2) Push the exhalation valve filter onto the valve cover
3) Turn clockwise ¼ until rotation stops, lightly pull outwards to confirm complete connection
4) You are not required to wear a surgical mask over your respirator for source control purposes while an exhalation valve filter is in place

Exhalation Valve Filters can be removed by turning them ¼ turn counterclockwise

Don respirator as follows for a successful user seal check

1) Perform hand hygiene.
2) Carefully remove respirator from storage bag and inspect for integrity. Respirator storage bags are cleanable and reusable.
3) Place respirator over your mouth and nose with bottom straps unfastened.
4) Pull harness over your head, placing it on crown of your head.
5) Take bottom straps in both hands, place them behind your neck, and hook them together.
6) Adjust top head straps first, then lower neck straps by pulling on ends. Strap tension may be decreased by pushing out on back side of buckles. DO NOT pull too tight!

Performing two user seal checks is required with every use

Step 1: Positive Seal Check

- Use one hand to cover the exhalation valve filter and exhale gently
- If you feel the facepiece expand away from your face with no leaks between the face and facepiece, a proper seal has been obtained

Step 2: Negative Seal Check

- Use hands to compress the filter toward the face piece and inhale gently
- If you feel the facepiece collapse slightly and pull closer to your face with no leaks between the face and facepiece, a proper seal has been obtained

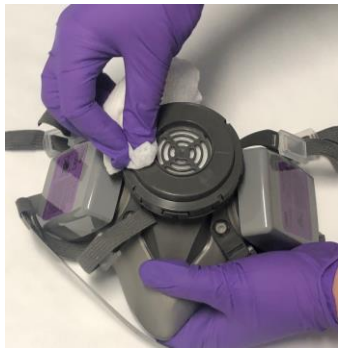
- Adjust straps and/or reposition facepiece until seal check is successful and no face seal leakage is detected
- Perform hand hygiene (and don clean gloves as appropriate) after user seal checks
- **Do NOT enter patient care area without performing a successful user seal check**

Follow the removal procedure to prevent self contamination

1) Remove additional PPE in appropriate order and perform hand hygiene
2) Remove eye protection or face shield used over the respirator
3) Unhook bottom straps of respirator using both hands
4) Pull the head harness over your head and away from your face
   - Avoid touching the potentially contaminated front of respirator and filters

Individual healthcare workers will clean their own respirators

1) Clean and disinfect your respirator and additional PPE **after each use** with hospital-approved germicidal wipes, following manufacturer's contact times for the disinfectant
2) Wipe down all parts of the facepiece, including straps, exhalation valve filter, and head harness
3) Remove and wipe down the exterior of the filters; avoid getting the interior of the filter wet
4) Note that multiple wipes may be used during this process
5) Allow to air dry completely prior to storing
7) Place the respirator into your reusable storage bag, labeled with your name
8) Remove gloves
9) Perform hand hygiene
10) Carry your reusable storage bag on your person for the next use, or transfer bag to your department’s designated storage location



Clinical concerns and elastomeric respirators

- **Care and maintenance of the respirator is the responsibility of the healthcare worker**
  - If you have questions about how to properly perform any of the steps described in this training, please reach out to your local Safety Officer prior to using your respirator
- Elastomeric respirator design may require you to speak loudly and slowly when communicating with patients and other care team members in order to be heard
- Healthcare workers may experience facial heat and/or skin breakdown after prolonged periods of wear
- If you cannot achieve a proper fit, see your supervisor or contact institutional Safety Officer and do not enter area requiring respirator use