







Respiratory Protection Program

Under the OSHA Respiratory Protection Standard, employers are obligated to develop a written program, properly select respirators, evaluate respirator use, correct deficiencies in respirator use, conduct medical evaluations, provide for the maintenance, storage and cleaning of respirators, and retain and provide access to specific records. UMass employees (including paid students) who are required to wear respirators (either by EH&S or by their supervisor) are covered by the Respiratory Protection Standard.

How do respirators provide protection?

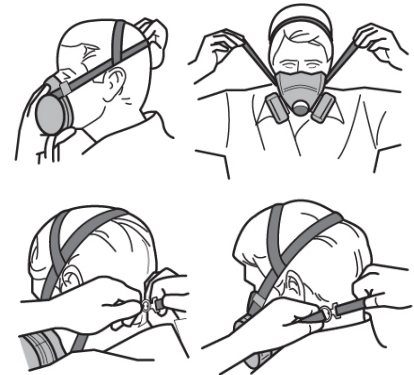
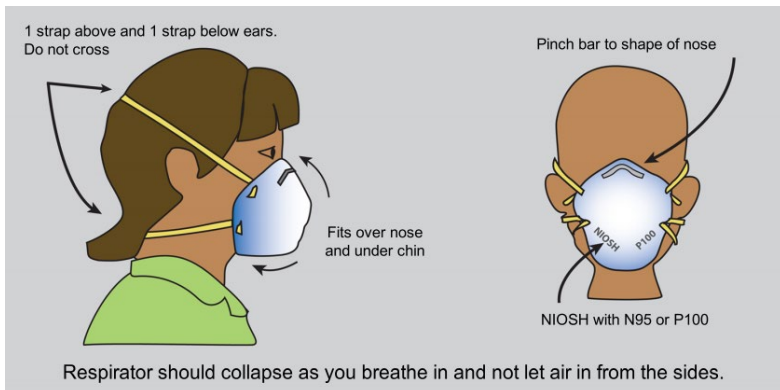
Air-purifying respirators (shown in the table below) filter the air by removing particles and/or gasses and vapors from the air as it passes through the respirator and into the wearer’s breathing zone. However, in order to provide this protection, **a proper seal between the respirator and the user’s face must be created**. When the seal is broken, contaminants in the air are able to seep through the space between your face and the mask, resulting in inhalation exposure.

| | Respirator Type | Type of Protection Provided |
|--|---|---|
|  | Not a respirator This is a loose-fitting surgical mask, often confused with a filtering facepiece. | None If the mask does not say “N95”, “P100” or “NIOSH” on it, then it is a surgical mask and will not provide protection. |
|  Valved Non-Valved | Filtering Facepiece - Disposable Also called “N-95” or “dust mask”. Some have exhalation valves, which help keep the face cooler. | Particulates Does NOT protect against gasses or vapors. |
|  | Half-face - Reusable With appropriate cartridge or filter. | *Dependent upon filter/cartridge selection |
|  | Full-face - Reusable With appropriate cartridge or filter. | *Dependent upon filter/cartridge selection |
|  | *Filters To be attached to Half/Full face respirator. | Particulates Does NOT protect against gasses or vapors. |
|  | *Cartridges To be attached to Half/Full face respirator. | Gasses/Vapors Different types for different exposures (e.g. organic vapor cartridge vs. acid gas cartridge). |

How do I ensure a good seal has been created?

Following the steps listed below will help to create a proper seal between the wearer’s face and the respirator and ensure that the wearer is getting the full protection provided by the respirator.

- 1.) **Get fit-tested to find a respirator that fits your unique face.** For each type of respirator, there are several different options that come in different sizes, shapes, and comfort levels. It's important to find one that fits your face well enough to create a proper seal.
- 2.) **Inspect reusable respirators for signs of damage prior to use.**
- 3.) **Clean reusable respirators after every use and store in a bag in a cool dry area when not in use. Dispose of dust masks after each use and/or if it becomes visibly soiled.**
- 4.) **Properly don and doff.** If you don't don your respirator correctly, or if you adjust it during your work with the hazard, the seal will be compromised and airborne contaminants will have the opportunity to seep inside the mask through the broken seal.



https://www3.epa.gov/airnow/smoke_fires/the-right-respirator-and%20proper-fit-508.pdf

<https://www.ccohs.ca/oshanswers/prevention/ppe/wearing.html>

- 5.) **Conduct positive and negative user seal checks prior to use.** User seal checks are a quick and easy way to check whether you have created a seal and should be conducted each time before using the respirator. For valved dust masks, only the negative pressure check can be conducted. For non-valved dust masks, only the positive pressure check can be conducted.



http://www.ehso.com/RespProtection_Training.htm



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Negative Pressure Check

Inhale sharply while blocking the paths for air to enter the facepiece. A successful check is when the facepiece collapses slightly under the negative pressure that is created with this procedure.

Positive Pressure Check

Exhale gently while blocking the paths for air to exit the facepiece. A successful check is when the facepiece is slightly pressurized before increased pressure causes outward leakage.

How often do I need to be trained and fit tested?

At least annually, or when changes occur in the workplace conditions that affect respirator use. EH&S will notify you when you are due for your annual fit test and training.

For more information please visit <https://ehs.umass.edu/respiratory-protection-program> or e-mail respirators@umass.edu.