

Respirator Basics

What Is a Respirator?

A respirator is a type of personal protective equipment (PPE). It is worn over the nose and mouth. Some respirators also cover the face and eyes. A respirator can protect you against breathing in harmful contaminants that are in the air - if you use it properly. *(Do not use dust masks or surgical masks. They are not respirators. They will not protect you.)*

What Are the Different Kinds of Respirators?

Air Purifying Respirators (APRs) use filters or filter cartridges to prevent dangerous substances that are in the air from getting inside your respirator. This allows you to breathe clean air.



Two types of Air Purifying Respirators

Supplied Air Respirators (SARs) prevent air from the workplace from entering your respirator. Instead, clean air comes from a tank on your back or through an airline that brings air from a clean area.



Self-Contained Breathing Apparatus (SCBA)
(One type of Supplied Air Respirator)

Types of Air Purifying Respirators



Disposable N95 Air Purifying Respirator (basic protection, cheapest). Must be labeled with the words "NIOSH" and "N95." If it does not have these words, don't use it!



Half Face Air Purifying Respirator with replaceable N100, R100, or P100 filter cartridges (better protection, more expensive).



Full Face Air Purifying Respirator with replaceable N100, R100, or P100 filter cartridges (still better protection, more expensive).



Full Face Powered Air Purifying Respirator (PAPR) with replaceable N100, R100, or P100 filter cartridges (best protection, most expensive).

Can Anyone Use a Respirator?

Using a respirator makes your lungs and heart work harder. ***If you have a lung or heart condition, wearing a respirator may be dangerous for you.*** If a medical condition prevents you from wearing a respirator, you cannot protect yourself against breathing in harmful contaminants in the air. ***If you have facial hair, you may not be able to wear a respirator.*** The edge of a respirator must form a tight seal against your skin. If the edge of a respirator rests on facial hair, contaminants can leak into the respirator. You must shave off any facial hair that touches the edge of the respirator.

How Can I Be Sure That My Respirator Fits Properly?

If your respirator does not fit correctly, it will not protect you from harmful contaminants. There are two ways to make sure that your respirator fits properly:

- ! Your employer is required by law to have a qualified person *fit-test* you at least once a year. This will identify the respirator make, model, style, and size that is best for you.
- ! You should conduct a "seal check" *every time* you put on a respirator. This will help you make sure it fits and is properly positioned on your face.

If you are using a disposable N95 respirator -

- Firmly cover the mask with the palms of your hands. Inhale and exhale more strongly than usual. If you do not detect any air flow in or out around the edges of the respirator, the respirator fits properly. (If the mask has an exhalation port, be sure to cover the port when you breathe out.)



If you are using a cartridge respirator -

- ***To check for leaks when exhaling (breathing out),*** completely cover the exhalation port with the palm of your hand so that no air can flow out. Exhale more strongly than usual. If the mask bulges slightly and you do not feel any air flow escaping across your face, the respirator fits properly when exhaling.



- ***To check for leaks when inhaling (breathing in)*** completely cover the filter cartridges with the palms of your hands so that no air can flow in. Inhale more strongly than usual. If the mask collapses slightly and you do not feel any air entering the mask across your face the respirator fits properly when inhaling.

When Should I Change My Filter Cartridges or My Disposable Respirator?

You must use the correct filter cartridges for the substance(s) you are exposed to. At the beginning of *each work day*, you should use either a new set of filter cartridges or a new disposable N95 respirator. During the work day, if it gets harder to breathe while wearing your respirator, go to a clean outdoor area and put on a new disposable N95 respirator or use new filter cartridges.

What Are My Legal Rights?

A federal law covers respirator use. The OSHA Respiratory Protection Standard requires your employer to assess hazards and to provide fit-testing, medical evaluation, and training. All employers, including contractors, must comply with this law. *OSHA regulations protect all workers, including undocumented workers.*