



## Respirators – What Type?

It's possible, that if you work in general industry or construction, you've wondered: "When should I wear a respirator?" The simple answer is **whenever you need to protect yourself from hazardous airborne contaminants.**

More specifically, you need a respirator when the air around you contains sprays, fumes, vapors, dust, smoke, or gases that can hurt you or make you sick. You'll also need a respirator when there isn't enough oxygen in the air. There is a good likelihood that you should be wearing respiratory protection if you are near or involved in tasks like lead abatement, spray painting, asbestos removal, grinding concrete, applying chemical coatings or finishes, welding, or working in confined spaces.

The type of respirator you need depends on the kind of contaminants you're exposed to and the amount of protection you need. There are two basic types of respirators: air-purifying respirators and supplied-air respirators.

**Air-purifying respirators** clean the air you inhale with filters. They come in three varieties based on what they do: 1) remove particulates, 2) remove vapors and gases, and 3) remove particulates, vapors, and gases. Air-purifying respirators can only be used when: the air contains enough oxygen to sustain life, the concentration of the contaminants is known, and the contaminant levels don't exceed the limitations of the facepiece and the filter. You have to know what contaminants are in the air and make sure the filters in your respirator will remove them.

**Supplied-air respirators** provide clean, healthy air from a source away from the contaminated or oxygen-deficient air around you. Common types of supplied-air respirators include self-contained breathing apparatuses (SCBAs) and air-line respirators. SCBAs provide the highest level of respiratory protection but are limited to the air contained in the tank on your back. Air-line respirators provide an unlimited air supply for work in hazardous atmospheres. You may see them in sand-blasting operations.

Before you can use a respirator, you must 1) be trained about and understand how to wear, use, and maintain the respirator; 2) be medically qualified and complete a pulmonary function test to make sure you can breathe properly and easily when you're wearing the respirator; and 3) have a fit test to make sure that the respirator makes a good seal against your face. You may need to shave your facial hair if it interferes with the seal between your face and the respirator. All 3 of these steps are required. Bypassing one of these steps could kill you.



Every time you use a respirator, make sure that it fits properly, that it's clean, and that the filters aren't "used up." If you have any questions, ask your supervisor or the person who is responsible for the company's written respiratory protection program.