Every Breath You Take

What’s at Stake?

To stay alive and healthy, you need air which is clean, free of toxic gases and other contaminants, and contains the right amount of oxygen. Most of the time, the air around you at home, on the street and at work fills the bill. But under certain circumstances, the air contains hazardous substances or doesn’t have enough life sustaining oxygen.

What’s the Danger?

Airborne contaminants can cause a variety of problems. They can create temporary or chronic irritation or damage to the nose, throat and lungs. They can cause poisoning involving irreversible damage to internal organs such as the liver. Sometimes the damage to your body is instant; sometimes it takes years to develop.

Air can be contaminated by these and other substances:

- Gases which are toxic or which displace oxygen;
- Dust created when materials are ground down into small particles;
- Mists created when liquids are sprayed;
- Fumes created when materials are heated or burned;
- Vapors given off by volatile liquids.

Oxygen can also be in short supply in confined spaces where materials have rotted, rusted, burned or where chemical processes have been carried out. Oxygen can also be missing from the air because it has been displaced by other gases.

Your respiratory system, which takes oxygen from the air through the lungs into the bloodstream where it nourishes the body, can be threatened in these circumstances. If vital organs such as your brain are deprived of oxygen, even for a short period of time, the result can be death.

How to Protect Yourself

The first line of defense against respiratory hazards is to separate yourself from the hazards.

In some situations, the hazards cannot be removed. It is vital to wear your respiratory personal protective equipment (PPE) for these circumstances.

Choosing the proper equipment and using it correctly is extremely important. You must receive guidance in picking and fitting the equipment, as well as training in using and maintaining it correctly. Fitting of all types of respirators is essential. The mask must be snug for proper protection.

Final Word

Choosing and using a respirator is serious business. Be sure you receive adequate training and assistance before entrusting your life to respiratory protection.