

# RESPIRATORS

[types]

There are different types of respirators, ranging from disposable paper masks to self-contained breathing apparatus with full face masks and air cylinders. When respiratory protection is required, it is important to make sure that the right type of respirator is used.

The two basic types of respirators are:

- Air-purifying
- Supplied-air

*[Instructor to show sample of each type of respirator]*

## **Air-purifying respirators**

Air-purifying respirators do exactly what the name implies. They purify and filter the air drawn through them.

They do not **supply** air or oxygen. They can only purify air in the surrounding atmosphere. If the oxygen content in the surrounding air is less than 19.5%, you cannot use the air-purifying respirator. You will need a supplied-air respirator.

There are different air-purifying filters for different hazards.

As always, the protection must be matched to the hazard. The hazard may be dust from cutting concrete or from asbestos removal. It may be mist from spraying latex paint or vapour from spraying oil-based paint.

Each of these hazards may require a different air-purifying mask, filter or cartridge.

There is no all-purpose air-purifying respirator.

## **Supplied-air respirators**

A supplied-air respirator does exactly that, it supplies air. The air comes from a cylinder or a compressor.

These respirators provide the best protection against many hazards. But they have their limitations.

With self-contained breathing apparatus come problems of weight and of limited supply of air. With airline units, the trailing hose can get snagged or tangled.

There are also concerns with the quality of air stored in cylinders or supplied by compressors. Caution should be exercised to ensure that the supplied air is clean and breathable.

**Remember** – respirators are the last line of defence!

When engineering controls or ventilation cannot eliminate airborne contaminants, then an air-purifying or supplied-air respirator should be used.

To provide proper protection, the respirator must be:

- Suited to the hazard
- Properly fitted
- Used correctly
- Properly maintained

*[Instructor to show different types of filters and colour coding. Review company policy on respiratory protection. Ask crew to identify jobs on site where respiratory protection is worn. Are there jobs where respiratory protection should be worn but isn't?]*

In New Brunswick, the law on respiratory protective equipment can be found in the *Occupational Health and Safety Act*, section 12(d) as well as in *General Regulation 91-191*, sections 38 and 45 – 47.