

# RESPIRATORS – TYPES

## IDENTIFY

Construction can involve airborne hazards — for instance, mist from spray-painting, fumes from welding, vapours from adhesives, and dust from concrete cutting.

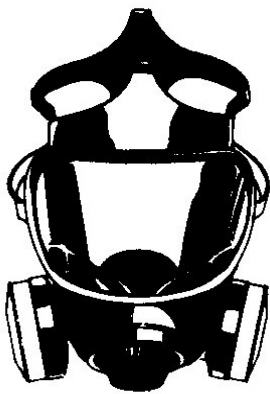
Airborne hazards can have short-term effects such as sneezing or long-term effects such as lung disease.

## COMMUNICATE AND CONTROL

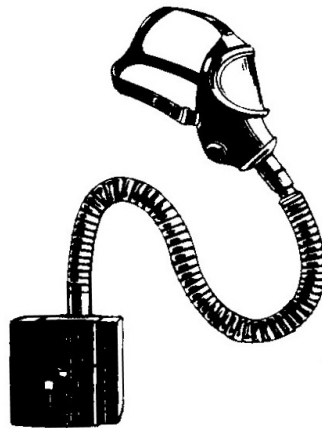
Respirators are the last line of defense against airborne hazards. When we can't isolate the hazard or use a different product, we have to wear a respirator.

There are two basic types of respirators:

1. Air-purifying respirators
2. Supplied-air respirators



**Air-purifying  
respirator**



**Supplied-air  
respirator**

Respirators only work when they are selected, maintained, and used properly. Each respirator must be matched to the particular hazard it is designed to protect against. There is no all-purpose respirator that can be used in every situation.

**Air-purifying respirators** have the following features:

- Filter contaminants like dust and fibers out of the air.
- Do NOT supply air or oxygen.
- Must be matched to specific hazards such as solvent vapours or mist from sprayed concrete form oil.
- Are specified in Safety Data Sheets (SDS) for controlled products.
- Have a limited lifespan based on contaminant levels and filter load. (Do NOT rely on the stated expiry date.)

**Supplied-air respirators** have the following features:

- Supply the wearer with breathable air from a compressor, cylinder, or tank.
- Offer the best protection against many hazards.
- Have limitations (for instance, air tanks are bulky and air lines can get tangled).
- Are the only respirators that can be used for confined space rescue or in dangerous atmospheres.

## FACTS AND TIPS

- Show CSA and NIOSH label.
- Stress that only CSA- and NIOSH-approved respirators that are appropriate for the hazard should be used.
- Show examples of air-purifying and supplied-air respirators. Show how to replace filters.
- Show where information on respirators can be found on a SDS.
- Review company rules and procedures on respirators.

# THE QUIZ

1. Airborne hazards can have short-term effects such as sneezing or long-term effects such as lung disease:

TRUE \_\_\_\_\_ FALSE \_\_\_\_\_

2. Construction can involve airborne hazards — for instance, mist from spray-painting, fumes from welding, vapours from adhesives, and dust from cutting concrete:

TRUE \_\_\_\_\_ FALSE \_\_\_\_\_

3. Respirators are the first line of defense against airborne hazards:

TRUE \_\_\_\_\_ FALSE \_\_\_\_\_

4. Any respirator can work in any situation:

TRUE \_\_\_\_\_ FALSE \_\_\_\_\_

5. Each respirator must be matched to the particular hazard it is designed to protect against:

TRUE \_\_\_\_\_ FALSE \_\_\_\_\_

6. What are the two basic types of respirators?

a) \_\_\_\_\_

b) \_\_\_\_\_

7. When we can't isolate the hazard or use a different product, we have to wear a respirator:

TRUE \_\_\_\_\_ FALSE \_\_\_\_\_

## ANSWERS:

1. TRUE; 2. TRUE; 3. FALSE; 4. FALSE; 5. TRUE;

6. Air-purifying respirator and supplied-air respirator;

7. TRUE