



GOALS

This safety session should teach employees to:

- Understand when to use the different types of respirators.
- Understand how to fit, inspect, and maintain respirators.

Applicable Regulations: 29 CFR 1910.132, .134



1. Air that's contaminated or lacks oxygen can be very harmful to health.

- Inhaling chemical vapors, gases, or fumes and dust can irritate and even seriously damage the lungs, respiratory system, or other organs, sometimes fatally.
- Lack of oxygen can cause death in minutes.

2. The Occupational Safety and Health Administration (OSHA) requires employers to identify and protect against breathing hazards.

- Engineering controls are the preferred form of protection, e.g., ventilation, using less toxic materials, and enclosing operations that create air contaminants.
- When air measurements reveal that engineering controls haven't brought air hazards to safe levels, employers must provide employees with respirators.

3. Wear the respirator designed to protect against your specific job hazards.

- Check job procedures and/or chemical safety data sheets.
- Air-purifying or filtering respirators screen out or "wash" contaminated air, but don't supply oxygen.
 - A canister, cartridge, or filter color-code shows what chemical this type of respirator protects against.
 - Disposable surgical-type masks can be used only for very minimal dust hazards.
- Air-supplying respirators supply oxygen when the air contains 19.5 percent oxygen or less, and in situations termed immediately dangerous to life or health (IDLH).
 - Self-contained breathing apparatuses (SCBAs) have tanks that hold limited amounts of air and signal when air is low.
 - Full-face mask respirators connect with tanks or compressors that provide an unlimited supply of air. The connecting hoses, however, can get in the way.

4. Get a good respirator fit that will seal out contaminants.

OSHA requires employees to have fit tests to ensure a good seal. A respirator should:

- Be secure, but not too tight, around the chin.
- Not slip.
- Not pinch the nose.
- Allow you to move your head and talk.



5. Not everyone can wear a respirator.

You may not be able to get a good fit or use a respirator safely if you:

- Wear eyeglasses
 - OSHA says contact lenses can be worn with any type of respirator, but their use is not recommended in dusty atmospheres while wearing a half-mask face piece.
- Have a beard or sideburns.
- Wear a skull cap.
- Are missing dentures.
- Have breathing problems or a heart condition.
- Are heat sensitive or claustrophobic (fear of confined spaces).

6. Inspect respirators to be sure they retain protective ability.

Inspect respirators before and after each use, and report:

- Connections that aren't tight
- Holes, cracks, tears, or other damage
- Wear or deterioration, especially in rubber parts like the face piece seal and connecting tube
- Dents or corrosion in filters, cartridges, or canisters
- Less than a full charge in an air or oxygen canister

7. Maintain and store respirators properly.

- Remove respirators without contaminating your skin or clean areas.
- Follow decontamination, cleaning, and disinfecting procedures.
- Store the respirator so it's protected from dust, sunlight, heat, extreme cold, excessive moisture, and damaging chemicals.
 - Respirators stored in lockers or tool boxes must be in carrying cases or cartons.
- Rest the respirator's rubber and plastic parts in their normal position for storage.
 - Don't squish. Doing so will deform and impair the seal.



DISCUSSION POINTS:

Ask participants to demonstrate how to select, inspect, and wear a respirator, using respirators that protect against your facility's hazards.



CONCLUSION:

- Wear a properly fitted respirator to protect against breathing hazards.
- Learn to fit and use respirators to ensure safe levels of oxygen and to avoid inhaling harmful contaminants.



TEST YOUR KNOWLEDGE:

Have your employees take the Respiratory Protection quiz. By testing their knowledge, you can judge their ability to ensure proper respiratory protection and whether they need to review this important topic again soon.



RESPIRATORY PROTECTION QUIZ

- Employers first try to eliminate or reduce workplace breathing hazards by:**
 - Issuing respirators
 - Using engineering controls like ventilation
 - Issuing dust masks
- You may need to wear a respirator if the air is contaminated or:**
 - Is too cold
 - Can't be vented outside
 - Has too little oxygen
- You use an air-purifying or -filtering respirator when:**
 - There's too little oxygen but no air contaminants.
 - The air is contaminated but has enough oxygen.
 - The situation is "immediately dangerous to life or health."
- An air-supplying respirator uses:**
 - A tank or compressor to supply air
 - A canister that cleans air
 - Paper filters to clean air
- Air-purifying and -filtering respirators use labels or color coding to identify the:**
 - Respirator's manufacturer
 - Most recent inspection dates
 - Chemicals the respirator protects against
- A respirator's fit must:**
 - Provide a good seal to keep contaminants out.
 - Go easily over eyeglasses.
 - Provide ventilation to let clean air in.
- Respirator fit testing is required only for people with glasses, beards, or other respirator fit problems.**
 - True
 - False
- You may not be able to use a respirator safely if you have respiratory problems or a heart condition.**
 - True
 - False
- When inspecting a respirator, you should report problems like:**
 - Deteriorated rubber or plastic parts
 - Fully charged oxygen tanks
 - Tight connections
- Respirators should be stored in areas that are dust-free and:**
 - Warm and damp
 - Dry and neither very hot nor cold
 - Sunny and hot

When you have completed this quiz, turn it in to your supervisor.

Name: _____

Date: _____



ANSWERS TO RESPIRATORY PROTECTION QUIZ

1. b. Using engineering controls like ventilation.
2. c. Has too little oxygen.
3. b. The air is contaminated, but has enough oxygen.
4. a. A tank or compressor to supply air.
5. c. Chemicals the respirator protects against.
6. a. Provide a good seal to keep contaminants out.
7. b. False. All employees must have proper respirator fit testing; people with glasses or beards may not be able to get a good fit.
8. a. True.
9. a. Deteriorated rubber or plastic parts. A respirator should have tight connections and fully charged tanks.
10. b. Dry and neither very hot nor cold.