



GOALS

This safety session should teach employees to:

- Realize the importance of respirators.
- Carefully inspect, clean, and store respirators.

Applicable Regulations: CFR 1910.134



1. Respirators are vital pieces of personal protective equipment.

- Air-purifying respirators remove harmful contaminants from the air you breathe. They protect against substances that can cause cancer, lung impairment, and other diseases.
- Air-supplying respirators provide clean breathable air. They protect against oxygen-deficient atmospheres that could cause disorientation or death.
- Therefore, it's crucial that respirators function properly—and it's your job to ensure that they do.

2. Inspect respirators before and after each use.

- The Occupational Safety and Healthy Administration (OSHA) requires employees to inspect respirators for wear and deterioration both before and after each use.
- Check rubber or plastic parts for signs of holes, cracks, or tears.
- Check the face piece (especially the face seal surface), the headband, the valves, the connecting tube, and the fittings for signs of wear or deterioration.
- Check for loose connections.
- Check to see whether air and oxygen cylinders of self-contained breathing apparatuses are partially depleted. They should be fully charged according to the manufacturer's instructions.
- Check for dents or corrosion in filters, cartridges, or canisters. Replace as needed.
- Turn in any respirator that needs repairs. Don't perform the repairs yourself.

3. Clean respirators after each use.

- Respirators must be cleaned and disinfected before they are reissued.
- Air-supplying and emergency-use respirators must be cleaned and disinfected immediately after each use.
- Respirators can be cleaned in batches of 20 as long as the cleaning fluid and rinse water are changed between batches.
- Batch respirators together by manufacturer to avoid confusing disassembled parts.
- It's generally best to disassemble and clean respirators one at a time to avoid losing or confusing the parts.
- Respirators may be rinsed in buckets of clean water, but OSHA says it's better to rinse them thoroughly in running water. Detergents or disinfectants that dry on respirators can cause dermatitis.



4. Follow this step-by-step procedure to clean and sanitize respirators.

- Remove filters, cartridges, or canisters.
- Disassemble face pieces by removing speaking diaphragms, valve assemblies, hoses, and other components.
- Wash respirator parts in a bucket of warm water (no hotter than 110 degrees Fahrenheit (°F)) with a mild, nonoily detergent. Remove dirt with a stiff-bristle brush. Use a sponge on lenses to avoid scratches.
- Rinse components thoroughly in clean, warm running water.
- Disinfect respirator parts by immersing them for two minutes in a bucket of disinfectant solution. Use one of the following disinfectant solutions: quaternary ammonia and water, household bleach and water, or tincture of iodine and water.
- Rinse respirator parts thoroughly in warm running water.
- Dry respirators by air-drying or by wiping them with a clean, lint-free cloth.
- Reassemble the face piece, then replace filters, cartridges, and canisters as needed.
- Test the respirator to be sure that inhalation and exhalation valves are in place and that the respirator is working properly.

5. Store respirators in the proper manner.

- Store respirators away from dust, sunlight, heat, extreme cold, excessive moisture, and damaging chemicals.
- Rest face pieces and exhalation valves in a normal position to prevent them from warping.



DISCUSSION POINTS:

Show employees how to disassemble a respirator. Discuss which cleaning and sanitizing solutions you provide and how much solution to mix with water. Then demonstrate how to clean, rinse, sanitize, rinse, and reassemble a respirator.



CONCLUSION:

- Take good care of respirators because they take care of you.
- Respirators can protect you from harm. So take good care of respirators with proper inspection, cleaning, and storage procedures.



TEST YOUR KNOWLEDGE:

Have your employees take the Respirator Care and Cleaning quiz. By testing their knowledge, you can assess their understanding of how to care for respirators and determine whether you need to review this important topic again soon.



RESPIRATOR CARE AND CLEANING QUIZ

- 1. Air-purifying respirators remove harmful contaminants from the air you breathe.**
a. True b. False
- 2. Employees should inspect respirators for wear and deterioration:**
a. Before each use
b. After each use
c. Both before and after each use
- 3. When inspecting respirators, you should look for signs of:**
a. Holes, cracks, and tears
b. Deteriorating or warped face pieces
c. Loose connections
d. All of the above
- 4. After use, respirators should be:**
a. Cleaned
b. Disinfected
c. Both cleaned and disinfected
- 5. Respirators can be cleaned in batches of 20 as long as you change the cleaning solution and rinse water between each batch.**
a. True b. False
- 6. If you clean respirators in batches, you should group them together by manufacturer to:**
a. Be more efficient.
b. Avoid losing or confusing the parts.
c. Save on cleaning fluid.
- 7. It's important to rinse respirators thoroughly after cleaning and disinfecting to avoid dermatitis.**
a. True b. False
- 8. Respirators can be cleaned all in one piece.**
a. True b. False
- 9. Respirators should be stored in the sun to dry.**
a. True b. False
- 10. When storing respirators, you should take care not to bend the face piece or valves.**
a. True b. False

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

Name: _____

Date: _____



ANSWERS TO RESPIRATOR CARE AND CLEANING QUIZ

1. a. True. Air-purifying respirators remove harmful dusts, mists, gases, and sprays that could cause cancer or impair your lungs.
2. c. Respirators should be inspected both before and after each use.
3. d. All of the above.
4. c. Respirators must be cleaned and disinfected.
5. a. True. It's important to change the cleaning solution and water between each batch of respirators.
6. b. Group respirators together by manufacturer when cleaning to avoid confusing the disassembled parts. In fact, that's why it's easier to disassemble and clean respirators one at a time.
7. a. True. If cleaners and disinfectants are allowed to dry on the respirators, these dried solvents can cause dermatitis, especially where the face piece contacts the skin.
8. b. False. You must remove cartridges, canisters, and filters, and set them aside. Then you should disassemble the face piece, valves, and hoses, and be sure to clean and disinfect these components.
9. b. False. Respirators should be air-dried or wiped dry with a clean cloth. You should avoid exposing them to the sun or to extreme heat.
10. a. True. This can cause permanent warping.