



Weekly Safety Meeting

Respirator Protection

Air that's contaminated or lacks oxygen can be very harmful to your health. Inhaling chemical vapors, gases, or fumes and dust can irritate and even seriously damage the lungs, respiratory systems, or other organs, sometimes fatally. Lack of oxygen can cause death in minutes.

Wear the respirator designed to protect against your specific job hazards. Check job procedures and/or chemical SDSs. 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% 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.

Respiratory Hazards:

- Harmful dusts (lead, silica, and other heavy metals);
- Fumes and smokes (welding fume);
- Gases and vapors (chemical exposures);
- Oxygen deficiency (oxidation, displacement, and consumption); and
- Biological hazards (tuberculosis, whooping cough, flu viruses)

Leak in the Seal:

A leak in the seal of the respirator allows hazardous contaminants to bypass the filters. Several situations can affect the seal.

- Facial hair; generally, only a neatly trimmed mustache will be acceptable;
- Changes in the shape of the face or nose, due to injury;
- Hair trapped between your face and the seal of a full-face respirator; and
- The tightness of the straps for support.

Respirator Basics:

- Respirators must always be inspected prior to donning.
 - The inspection should check for missing or worn respirator parts.
- For air-purifying respirators, the proper cartridge or filter must be selected based on the hazard.
- Respirator users must don the respirator properly and verify a good fit by performing positive and negative user seal checks each time the respirator is donned.
- Respirator users must know the limitations of their respirator and stay clean shaven in the respirator seal area.
- Employees may not share respirators and must only use the respirator for which they have been fitted.
- Respirators must be cleaned and stored properly after each use.

Safe Procedures:

- Positive Pressure Check: Close off the exhalation valve with the palm of your hand. Exhale gently. The fit is good if you can build up a slight positive pressure inside the face piece without leaks.
- Negative Pressure Check: Close off the inlets of the cartridges by covering them with the palms of your hands. If you can't close them off with your hand, a latex or nitrile glove may be used. Inhale gently so the respirator collapses slightly and hold your breath for 10 seconds. The fit is good if no air leaks into the respirator.

If leaks are detected, you need to adjust the fit. You may have to tighten the straps, remove obstructions (such as hair), shave, or talk to your supervisor about getting a different style or size of respirator.

Maintenance:

Respirators must be inspected before and after every use.

Consider the following:

- All parts should be clean and working properly.
- Check the face-piece for dry rot, cracks, and holes.
- Perform a leak check.
- Replace valves and hoses if cracked, brittle, or punctured.
- Check head harness for damage or deterioration.
- Tighten loose clamps or connectors.
- Check for proper filter selection and placement.
- Replace damaged or clogged filters.

Remember:

Following each use, respirators should be cleaned, disinfected, and stored according to the manufacturer's instructions.

A properly chosen respirator is an excellent tool for maintaining your health around hazardous chemicals. However, it does not provide protection when there are leaks, so perform the user seal checks every time you put it on.

SAVE YOUR BREATH...WEAR YOUR RESPIRATOR!!

Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

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