

Environmental Health and Safety

Consulting Training Service



ate grade of air is supplied from a bottle or a remote compressor through an air hose.

Air-purifying respirators come in a variety of models and styles and enable the wearer to breathe air filtered through cartridges attached to the facepiece.

Both supplied air and air-purifying respirators come in half-facepiece and full-facepiece models. Full facepiece respirators have a visor and cover the entire face; half facepiece respira-



tors only cover the nose, mouth and chin. Full-facepiece respirators are more protective than half-facepiece respirators. Full-facepiece respirators may be used when eye protection is recommended in addition to respira-

tory protection.

Getting Assistance

For additional information about the University's respiratory protection program or to obtain a fit test, contact EH&S.



Environmental Health & Safety

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Wenatchee 509-663-8181
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<http://www.ehs.wsu.edu>

Respiratory Protection Breathe Easy



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 UNIVERSITY

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Why Respiratory Protection?

Certain work-related tasks and duties performed by WSU employees require the use of respiratory protection to ensure acceptable breathing air quality. Examples of work-related tasks for which respiratory protection may be needed are:

- Use of cleaning agents, solvents, paints, or varnishes in poorly ventilated areas
- Working with lead or lead-containing products, scraping, sanding, or welding
- Applying pesticides or entering areas where pesticides may have been used
- Working in dusty areas, cleaning, or raising dusts in areas where rodent droppings are present
- Handling radioactive materials in areas where no fume hoods are present



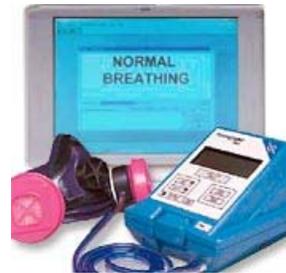
In many of these cases, there is a potential for harmful concentrations of contaminants to be present in the breathing air in the workplace. It is the responsibility of the employer to install, if possible, hoods or other ventilation devices to protect the employee against respiratory exposures to toxic agents. In cases where it is not reasonable to install hoods or other ventilation devices, employees may be required to wear respiratory protection.

WSU Respirator Program

WSU maintains a respirator program designed to protect all employees from overexposure to harmful airborne toxins.

This includes:

- Identifying employees and students who may be at risk of exposure to airborne toxins
- Performing a hazard assessment to determine the level of risk to the exposed employee
- Providing the required medical evaluation, respirator training, and fit-testing for each individual in the respiratory protection program
- Providing a mechanism for medical monitoring of employees whose respiratory health may be compromised
- Ensuring that proper respirator use occurs in the workplace through supervisory training and periodic worksite inspections



In addition to the training required for respirator users, supervisors of employees who utilize respirators must also receive training. However, it is not necessary for the supervisor to be fit-tested unless she/he will also wear a respirator in the workplace. Supervisors must be trained for each type of respirator worn by his/her employees.

Hazard Assessment

A hazard assessment must be completed for each task that is performed by WSU employees. The hazard assessment includes, but is not limited to:

- Identifying the process or duties that may cause exposure

- Evaluating the site or location where exposure may occur
- Estimating the exposure concentration and evaluating the risks associated with the contaminant
- Determining the feasibility of the use of engineering controls (ventilation hoods, etc.)
- Assessing which type(s) of respirators will protect the employee

Upon completion of the hazard assessment, the appropriate respirator model(s) are selected and displayed for the employee to try on. Employees are permitted to choose the model of respirator that fits best.

If the respirator is a filter-type unit, the respirator cartridge containing the proper filtering medium is determined by the hazard assessor. The cartridge for each respirator is chosen based on the agent the wearer must be protected against. For example, a high efficiency particulate air filter (HEPA) filter cartridge would protect individuals from exposure to particulates, dusts, and mists. On the other hand, an organic vapor (OV) cartridge contains an absorbent that is specifically designed to absorb organic vapors and thus purify the breathing air.

Types of Respirators

Respirators are either supplied air or air-purifying. Supplied air respirators do not require the use of a respirator cartridge to ensure breathing air quality because an appropri-

