

Safety Note # 128

GENERAL RESPIRATOR SAFETY



Photographs courtesy of ANR
Communication Services

An estimated five million workers wear respirators in 1.3 million workplaces throughout the United States. Respirators protect workers against oxygen deficient environments, harmful dusts, smokes, mists, gases, vapors, and sprays. These hazards may cause cancer, physical damage to lungs, brain, heart, other organs, diseases, and death. EH&S administers a Respiratory Protection Program which includes procedures and information for: employee/supervisor training, medical monitoring, fit testing, respirator selection, and maintenance. **Two videos, (E-052 Respiratory Safety) and (E-058 Respiratory OSHA Update) are available from the ANR Environmental Health & Safety Library at <http://safety.ucanr.edu>.**

Pre-Use Activities

- Employees who wear respirators must be familiar with and understand the written [ANR EH&S Respiratory Protection Program](#). Employees must also be familiar with and understand the [ANR EH&S Respiratory Protection Manual](#) for Pesticide Handlers and Applicators. Employee training must meet the requirements of California Code of Regulations (CCR) Title 3, Section 6739 and CCR Title 8, Section 5144.
- Employees are to complete a Medical Evaluation Questionnaire, which will be submitted to a qualified medical professional for evaluation prior to respirator fit testing and work. Additional medical evaluations are not required unless the following conditions occur: the employee reports medical signs or symptoms related to their ability to wear a respirator; a medical professional or supervisor informs the employer of the need for a re-evaluation; observations during the fit test indicate a need for re-evaluation; or a change to the working conditions that substantially increase the physiological burden to employee(s) while wearing a respirator.
- Employees shall be annually trained and fit tested for respirator selection using either a qualitative or quantitative fit test method prior to wearing a respirator for work.

Respirator Use Precautions

- Employees must be clean shaven prior to wearing a tight fitting respirator for work. Facial hair can cause the respirator to not properly seal on the face, thus risking breakthrough and harmful exposure.
- Prior to wearing a respirator, employees must know what the respiratory hazard is for the work. Employees must be familiar with Material Safety Data Sheets (MSDS's) and pesticide labels. Ask your supervisor if you are unsure of the hazards of the work to be performed.
- Inspect the respirator before each use. Insure both inhalation and exhalation valves are intact and check for wear and deterioration of the respirator and headband. Replace any missing or defective parts before work.
- Employees are to know which cartridge(s) and filter(s) to use for the hazard and when to replace cartridges and filters. EH&S requires cartridges to be replaced after eight hours of use. Employees are to keep track of cartridge hours used. Replace cartridges and filters if they become wet, difficult to breathe through, or if detecting any odor or taste of contaminant(s) inside the respirator. Use only new cartridges and filters, which come in factory sealed bags for replacement. Do not borrow or use unknown opened cartridges and filters.
- Before using a respirator, conduct a positive and negative pressure check to detect leaks between the face and facepiece of the respirator. If you cannot achieve a proper fit, do not use the respirator.
- Respirators should be cleaned and disinfected after each use. Unclean respirators can result in rashes and infections. Respirators should be placed in a clean bag and stored in a locker, desk or shelf for protection. Cartridges and filters must be removed from the respirator and placed in a separate bag for storage. Do not leave respirators and cartridges unprotected out in the open.
- Only same brand cartridges and filters can be used with the respirator. **Do not cross brand any parts of the respirator.** Respirators will not provide protection if parts are of a different brand. Interchanging different brand parts violates Cal-OSHA regulations.
- Employees are to know the warning signs of harmful exposure. Notify your supervisor if you suspect you have been exposed to a harmful substance. Medical service must be provided to anyone exposed to a harmful substance while wearing respiratory protection. **Do not drive yourself to seek medical attention.** Have someone else drive you and bring the pesticide label or MSDS with you to provide to the medical facility.

