

Safety Note # 128

RESPIRATORY PROTECTION PROGRAM EMPLOYEE REQUIREMENTS



Respiratory diseases associated with agriculture can severely limit a person's ability to breathe freely and can cause lifelong disability or death. These diseases are associated with workplace exposures to airborne contaminants such as pesticide chemicals, welding fumes, paint vapors, plant materials, soils, animal dander and bedding, and microorganisms (fungi, bacteria, and virus). Low oxygen atmospheres and conditions of extreme hot or cold temperatures can also pose potentially fatal health hazards for employees working in agriculture.

In many cases, harmful respiratory exposures can be prevented or reduced by following the hierarchy of controls – first seeking to avoid use of hazardous substances, then by use of engineering and administrative controls to reduce exposures if hazards can't be avoided, and finally by using a respirator *if other controls do not eliminate or reduce exposures to allowable levels*. Respirator use is mandatory when specified by regulation, pesticide label, or SDS.

As required under law, UC ANR has established and implemented a Respiratory Protection Program to guide use of respirators in the workplace. Employees who are seeking information about the respiratory protection program can obtain information by contacting their supervisor, location safety coordinator, or by contacting UC ANR EHS.

Use of respirators at UC ANR is limited to air-purifying respirators (APRs) only; use of supplied-air and SCBA-type respirator requires EHS authorization and outside referral to providers for medical evaluation and testing.

A properly-fitted air-purifying respirator that is worn correctly can protect the wearer from inhalation of hazardous airborne contaminants by filtering or absorbing a percentage of the contaminants. APRs do not supply oxygen. Employees must be able to recognize and avoid using an APR in Immediately Dangerous to Life or Health (IDLH) environments such as low oxygen atmospheres, inside fumigant containment structures, and building fires.

Employees must be aware of the physiological limitations created by the respirator and recognize which medical conditions may interfere with respirator use (breathing, heart, or sensory impairment) and what types of environmental conditions or work practices increase risks of respirator use (working alone, high/low temperature, limited visibility).

Medical evaluation is required prior to the first fit test to determine if the employee can safely use a respirator and if there are any medical restrictions upon respirator use. Additional medical evaluations may be required if employee reports a health status change or if health providers require more frequent evaluations.

Respirator fit test and respiratory protection training are required before first respirator use and annually thereafter for employees who are required to use respirators for their job. Employees using N95 respirators under voluntary use provisions are not required to be fit tested, but they must complete training and receive mandatory safety information. (See Safety Note #198 for more information on voluntary respirator use)

Respirator users should be able to identify the respirator brand, model, material type, and size with which they have previously passed a fit test and they should know how personal protective equipment (PPE) will affect respirator fit.

Respirator users are responsible for maintaining and storing their respirator in a clean and sanitary condition. This includes inspecting respirator before each use, recognizing when to remove a respirator from service, properly disposing of equipment, and communicating respirator problems found during inspection or use to supervisor. Respirators must be decontaminated after each use and regularly subject to deep cleaning with mild soapy water.

Employees must ensure safe and effective use of air-purifying respirators (APRs) by donning the respirator properly and performing a user-seal check at each donning. Facial hair must not interfere with the respirator seal.

More information about UC ANR's respiratory protection program can be found online at:
http://safety.ucanr.edu/Programs/Respiratory_Protection_Program/