The Respiratory Protection Program

SafetyNet #: 88

How the Program Works

There are three approaches to achieving respiratory protection while working around agents that may potentially cause unnecessary exposure. If possible, product substitution or elimination should be implemented. Following this, the first method of protection is local engineering controls such as fume hoods or local exhaust systems – this is the most effective and efficient means of protecting employees from potential hazards found in the breathing zone. In addition, administrative controls can help in protecting individuals: these include substituting less toxic materials if possible, reassessing the task to see if exposure can be minimized or eliminated, and the possibility of job rotation to reduce the exposure of any one person to acceptable levels. Lastly, when the first two methods are not feasible, not yet in place, or cannot provide adequate protection, respiratory protection equipment is often required.

Often times, an EH&S evaluation is necessary to help determine if a respirator is necessary. Only those employees who have been designated by their supervisor, principal investigator, EH&S or Occupational Health as required to use respiratory protection equipment, and who have been medically approved, properly fitted, and trained (all by Occupational Health) are authorized to use such equipment.

A properly fitted respirator can help protect you. Face shape, facial hair, eyeglasses, missing dentures, and certain skin conditions can all affect respirator fit. Choosing a respirator that both fits properly and provides the protection required for a specific type of contaminant is essential. Each employee who is required to use respiratory protection equipment must be quantitatively fit tested before any equipment can be issued. Occupational Health provides fit testing and training, and maintains all records related to the program. (There is a small section in Vet Med that conducts their own fit testing and maintains their own records).

Procedures For Obtaining Respiratory Protection Equipment

When it is clearly impractical to remove harmful dusts, fumes, mists, vapors, or gases at their source by using engineering or administrative controls, and the employee may be exposed to levels at or above the Cal/OSHA Permissible Exposure Limits (PELs) found in Title 8, the employee must be enrolled and participate in the Respiratory Protection Program. Respiratory protection should only be used when other control measures (i.e., engineering or administrative controls, etc.) are not feasible or adequate to reduce exposures to acceptable levels. Elements of the respiratory protection program include:
- **Contact Environmental, Health and Safety (752-1493)** – In order to have an evaluation to see if respirator is necessary.

- **Medical History / Respirator Questionnaire [1] and potential Pulmonary Function Test** - Upon referral from EH&S, the employee is responsible for filling out paperwork (i.e., respirator questionnaire / authorization form) and submitting to Occupational Health Services via fax at 530-752-5277 for medical review. An additional appointment with the Physician may or may not be necessary, which may include a pulmonary function test. Once the employee has received medical clearance, respirator fit testing and training will be conducted (all at Occupational Health).

- **Respiratory Protection Training** - The purpose of this training is to inform the user of the limitations, use, and care of the respirator. Anyone requiring a respirator, including N-95 (which OSHA defines as a respirator) must be trained on the make, size and model of the respirator they will be assigned.

- **Respirator Fit Testing** - Occupational Health will conduct a quantitative fit test when all the above elements are met. A selection of respirators that provide protection will be available to choose from.

Upon completion of these three requirements, a respirator, cartridges (if necessary), and respirator fit test report will be provided to the individual.

- **Voluntary Use** - In certain instances the employee or student would like to wear a respirator even though exposure levels are within regulatory limits. It is possible to wear an N95 under a voluntary basis, also known as ‘voluntary use’. The regulations covering “voluntary use” require special documentation. The individual and their Supervisor would need to sign and date, then submit the voluntary use form to Occupational Health. In addition, the individual would need to ensure that they have medical clearance, and a fit test from Occupational Health. Once obtaining medical clearance, a fit test, training and signing and submitting the voluntary use form, the individual is able to wear an N95 voluntarily for the given process. The voluntary use is only applicable to N95 units, not tight fitting elastomeric respirators.
  - Read the Voluntary Use Form (.pdf) [2]

- **Respirator User's Responsibilities**
  - Maintain medical clearance, training and fit test annually.
  - Reschedule for a future date if scheduled appointments cannot be made.
  - Follow the manufacturer’s instruction on use, limitations, maintenance, cleaning, and storage of the respirator.
  - Respirators must be returned to Occupational Health when employment, or time as a student is complete with UC Davis or when the respirator is no longer needed.

Note: Dust and surgical masks which have not been NIOSH certified are not acceptable for protection against hazardous airborne contaminants. These masks are therefore not included in the UC Davis Respiratory Protection Program.

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**Contact**

**Health and Safety**

healthandsafety@ucdavis.edu 530-752-1493

FAX: 530-752-4527