Policy

It shall be the policy of the University of Tennessee to prevent exposure to airborne hazards while on the job. A respirator is one means to provide protection when other controls are not available or are ineffective.

Introduction

The primary objective is to prevent harmful exposure to airborne contaminants. Where feasible, this shall be accomplished through engineering controls (for example, enclosure or isolation, general or local ventilation, and substitution of less toxic materials). When effective engineering controls and/or administrative controls are not feasible, or while they are being instituted or evaluated, the use of appropriate respiratory protection will be required.

Scope

This program shall apply to all respirators used by UT employees and students for the purposes of health protection. The program shall not apply to respiratory used for comfort or to prevent exposure to nuisance levels of air contaminants. The Respiratory Protection Manager is the Director of Environment, Health and Safety (EHS).

Responsibilities

A. Managers are responsible for:

1. Providing respirators for employee use when such equipment is necessary to protect the health of the individual.

2. Providing respirators that are suitable for the hazard.

3. The user shall be instructed and trained in the proper use (including putting on and removing) and any limitations of respirators.

4. Respirators shall be stored in a convenient, clean and sanitary location.
5. Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. A physician or licensed health care provider shall determine what health and physical conditions are pertinent.

B. Environment, Health and Safety (EHS) is responsible for:

1. Establishing and maintaining the Respiratory Protection Program.

2. Ensuring that respirators shall be selected from those approved by the National Institute for Occupational Safety and Health (NIOSH) and those that have been tested and certified for the particular hazard.

3. Ensuring that training and fit testing is provided prior to requiring the employee to use a respirator.

4. Performing appropriate surveillance of work area conditions to ensure the program is properly implemented and employees are using respirators appropriately.

5. Conduct an annual evaluation of program effectiveness.

6. Assist department with their respirator protection program needs, including site-specific written plans.

7. Maintaining selected records

C. Each UT Employee is responsible for:

1. Using provided respiratory protection in accordance with the instructions.

2. Attending required training and fit testing.

3. Immediately reporting any malfunction of the respirator to their supervisor.

4. Notifying their supervisor when a change in their health status occurs that could affect their ability to use a respirator.

Medical Evaluation

A. All employees will complete an OSHA Respirator Medical Evaluation Questionnaire before using a respirator. The questionnaire will be submitted to Student health to be evaluated by a qualified person. Pass/Fail information will be entered with records kept by EHS.
B. Pre-employment physical examinations will be conducted on all employees required to wear a negative pressure respirator.

C. Follow-up medical evaluations shall be provided, at no expense to the employee, when a change in the respirator user’s health is noted. The respirator users, his or her supervisor or the respiratory protection program administrator may request the need for a follow-up medical evaluation.

Respirator Selection

A. Only NIOSH approved respirators will be used in this program.

B. The choice of respirators will be dependent upon the following information:

   1. The airborne contaminants and concentration present.
   2. The physical, chemical, and toxicological properties of the contaminants.
   3. Odor threshold data (warning properties).
   5. Eye irritation potential.
   6. Service life information available on cartridges or canisters.

Fitting of Respirators

A. Requirements for Fit Testing

   1. Fit testing shall occur annually.
   2. Fit tester training programs will be utilized and the appropriately trained individuals may be used for specific departmental fit testing.
   3. Additional fit testing may be required whenever an employee reports or the employer observes changes in the employee’s physical condition that could affect the respirator fit (facial scarring, dental changes, cosmetic surgery, an obvious change in body weight, etc.)
   4. Fit testing must be conducted using an OSHA-accepted protocol.
   5. Employees failing an initial fit test using a qualitative fit test method may be retested using a quantitative fit test method.
6. Employees with facial hair that interferes with the seal of the respirator will be requested to remove the interfering facial hair or sign a waiver stating that they declined to be fit tested.

7. Employees who cannot be fitted with an approved respirator may use a PAPR if available.

B. Single use respirators (N-95s)

1. Single use respirators will be available in the area when needed. Only tested and certified respirators shall be used.

2. Single use respirators will be discarded at the end of each shift.

3. Visibly soiled or contaminated respirators will be discarded immediately after use.

C. Proper fitting of respirators

Proper fitting of respirators is essential if employees are to receive the protection for which this program is designed.

In order to ensure a good face seal, the following rules will be observed:

1. Inspection for defects (including a leak check).

2. Cleaning and disinfecting.

3. Repair.

4. Storage equipment shall be properly maintained to retain its original effectiveness.

5. All respirators shall be inspected routinely before and after each use. A respirator that is not routinely used, but is kept ready for emergency use shall be inspected before and after each use and at least monthly to assure that is in satisfactory working condition.

6. Respirator inspection shall include a check of the tightness of connections and the condition of the face piece, headbands, valves, connecting tube, and cartridges or canisters. Rubber or elastomer parts shall be inspected for pliability and signs of deterioration.

7. A record shall be kept of inspection dates and findings for respirators maintained for emergency use.
8. Routinely used respirators shall be collected, cleaned, and disinfected as frequently as necessary to ensure that proper protection is provided for the wearer.

9. Only factory authorized persons shall do replacement or repairs with parts from the manufacturer designed for the respirator.

10. After inspection, cleaning, and necessary repair, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, theft, physical damage, or damaging chemicals. Cleaned respirators will be stored in a clean, plastic bag and kept in designated department locations. When storing a respirator, the face piece and exhalation valve must be in a normal position to prevent the abnormal set of elastomer parts during storage.

11. At the end of each week’s use (or more often if needed) respirators will be completely cleaned and disinfected by carrying out the following procedure:

   a. Remove the air-purifying elements such as cartridges if present (air-purifying elements must never be washed).

   b. Immerse the respirator in a warm, aqueous solution with a germicidal detergent. Scrub gently to remove all foreign matters.

   c. Rinse the respirator in clean, warm water and allow respirator to air-dry in a clean environment.

   d. After the respirator has dried, re-attach the air-purifying elements, if present.

Evaluation of Program Effectiveness

A. Frequent unscheduled observation of employee activities throughout the facility will be conducted to confirm proper respirator use is enforced.

B. Observation of and discussions with new employee activities throughout the facility will be conducted to confirm proper respirator use is enforced.

C. The overall effectiveness of the respirator program will be evaluated as necessary by the program administrator with actions taken to correct any defects found in the program.
Employee Training

A. Each employee assigned to an area requiring the use of a respirator will be shown and instructed on how to use (including putting on and removing) the respirator properly.

B. Each employee will be trained why the respirator is necessary and on the limitations of the individual respirator.

C. Employees required to wear respirators will be instructed to immediately leave a contaminated area upon suspicion of respirator failure.

D. A record shall be maintained of training and fit testing.

Recordkeeping

<table>
<thead>
<tr>
<th>Record</th>
<th>Location where record is kept</th>
<th>Minimum length of record retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Evaluation</td>
<td>EHS</td>
<td>40 years</td>
</tr>
<tr>
<td>Air Monitoring Results</td>
<td>EHS</td>
<td>40 years</td>
</tr>
<tr>
<td>MSDS</td>
<td>EHS</td>
<td>40 years</td>
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<tr>
<td>Respirator Fit Testing – Including Brand and Size</td>
<td>EHS</td>
<td>3 years</td>
</tr>
<tr>
<td>Employee Training</td>
<td>Department</td>
<td>3 years</td>
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</tbody>
</table>

Forms

None

Standards

29 CFR 1910.134