

Information Bulletin

NUMBER 36

Respiratory Protection Program

Employees need to wear respirators whenever engineering and work practice control measures are not adequate to prevent atmospheric contamination at the worksite. When employees must work in environments with insufficient oxygen or where harmful dusts, fogs, smokes, mists, fumes, gases, vapors or sprays are present, they need respirators to prevent occupational illness. Both Federal and State Occupational Safety and Health Administrations (OSHA) require employers to establish and maintain an effective respiratory protection program (RPP) when employees must wear respirators to protect against workplace hazards.

Implementation of a full respirator protection program will assure the safety of your workers in the workplace, improve productivity and increase efficiency. Continuous monitoring and improvement of the program will protect the workers from continuing and new respiratory exposures and keep your workers' compensation costs down.

For complete details on developing and implementing a Respiratory Protection Plan, visit the Federal OSHA website at www.osha.gov. Click on R on the site index. You will find the standard as well as training aids to assist you in implementing the program. Training aids include selecting the proper type of respirator, fit testing, an employee training program and the medical questionnaire.

An Effective Respiratory Protection Program

The employer must designate a program administrator who will be responsible for the RPP. The program administrator must know enough about respirators to supervise all elements of the program. In addition, an effective RPP must cover the following items:

- Written worksite specific procedures

- Selection of an appropriate respirator approved by the National Institute for Occupational Safety and Health (NIOSH)
- Training
- Fit testing
- Inspection, cleaning, maintenance and storage
- Medical evaluations
- Work area surveillance
- Air quality standards
- Program evaluation

Selecting the Proper Respirator

When selecting the proper respirator, the program administrator first must determine what the hazard is and its extent. Next, consider user factors that will affect respirator performance and then select an appropriate NIOSH-certified respirator either of the air-purifying or atmosphere-supplying type.

Air-purifying respirators use filters or sorbents to remove harmful substances from the air. They range from simple disposable masks, to cartridges to sophisticated devices. They do not supply oxygen and must not be used in oxygen-deficient atmospheres.

Atmosphere-supplying respirators are designed to provide breathable air from a clean air source other than the surrounding contaminated or oxygen-deficient work atmosphere. They include supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA).

Training

Documented training is essential for correct respirator use. Employers must teach supervisors and workers how to properly select, use and maintain respirators. Training must be comprehensive enough for the employee to demonstrate knowledge of the limitations and capabilities of the respirator, why the respirator is necessary and how improper fit, usage or maintenance can compromise the respirator and cause chronic disease or death.

Conduct the first training prior to employee use of a respirator. Retraining is required annually and when changes in the workplace affect respirator use or whenever it appears necessary to ensure safe respirator use.

Medical Evaluation

The employer must provide a medical evaluation, performed by a physician or licensed health care professional (LHCP), before the employee is fit tested and uses the respirator in the workplace. The employer must obtain a written recommendation for each employee's ability to wear a respirator. An annual review of medical status is not required. At a minimum, the employer must provide additional medical evaluations if:

- Employee reports medical signs or symptoms related to the ability to use the respirator
- The LHCP, supervisor or program administrator informs the employer that an employee needs to be reevaluated
- Information from the respirator program, including observations made during fit testing and program evaluation, indicates a need
- A change in workplace conditions that may substantially increase the physiological burden on the employee

Work Area Surveillance

Maintain surveillance of the work area conditions and the degree of worker exposure or stress - a combination of work rate, environmental conditions and the physiological burdens of wearing a respirator. Changes in operating procedures, temperature, air movement, humidity and work practices may influence the concentration of the contaminant in the work area atmosphere.

Air Quality Standards

Compressed air, compressed oxygen, liquid air and liquid oxygen used for respiration must be of high quality and meet certain requirements. Either cylinders or air compressors must supply breathing air. Containers of breathing gas must be marked in accordance with NIOSH requirements. Compressors for supplying air must have the necessary safety devices and alarms. If using an oil-lubricated compressor, ensure that it has both a high-temperature and carbon monoxide alarm. Air-line couplings must be incompatible with outlets for other gas systems.

Program Evaluation

The program administrator must conduct evaluations of the workplace to ensure effective implementation of the program. This would include regular consultation with the employees required to use respirators to assess their views on program effectiveness and to identify and correct any problems. Factors to be assessed include respirator fit (including effect on performance), appropriate selection, proper use and proper maintenance.

Recordkeeping

The following records must be maintained by the employer:

- Medical evaluations
- Training
- Fit tests
- Written copy of the current RPP

Employee Request for Respirator Use

When an employee requests the use of a respirator in an area where otherwise one is not required, the employer must determine that such use in itself will not create a hazard. If voluntary use is permitted, the employer must provide users with information contained in Appendix D of CFR 1910.134. The employer must also establish and implement those elements of the written RPP necessary to ensure that the employee is medically able to use the respirator and that it is cleaned, stored and maintained so it does not present a health hazard to the user.

This bulletin is intended only as a reminder and is offered solely as a guide to assist management in its responsibility of providing a safer working environment. This bulletin is not intended to cover all possible hazardous conditions or unsafe acts that may exist. Other unsafe acts or hazardous conditions should also be noted and corrective action taken.