

RESPIRATORY PROTECTION – PROGRAM SUMMARY

This SOP provides a summary of UNL's Respiratory Protection Program and is intended for employees who are **required** to use respirators and their supervisors. For requirements pertaining to voluntary use, see the EHS SOP, ***Respiratory Protection - Voluntary Use of Respiratory Protection Equipment***.

Pre-Use

EHS Exposure Assessments

Contact EHS prior to assigning work or working in atmospheres that may require respiratory protection. EHS will assess and document potential air contaminants (identity, state, form, and likely concentration), as well as workplace conditions and user factors to assist in selecting the appropriate type of respirator. EHS will review the exposure assessment at the time of refresher training to confirm that the conditions of use have remained stable; and if not, conduct a new assessment. EHS will also review the exposure assessment upon notification of potential changed conditions by the respirator user or their supervisor, or other indication that a review is warranted (e.g., audit findings, injury/illness reports, etc.).

Medical Qualification

Prior to initial required use of a respirator, an employee must be qualified by a medical professional. At a minimum, medical qualification will consist of completion of a respirator questionnaire by the employee and review by a medical professional. In some cases, the employee may be subject to a medical examination and/or additional tests. This will occur when the employee provides an affirmative response to any of the questions related to smoking; pulmonary/lung or cardiovascular problems/illnesses/symptoms, history of seizures, allergies, or fatigue, etc. (OSHA Respirator Use Questionnaire, Part A, Section 2, Questions 1-8). The physician may also require an examination and/or additional tests at his/her discretion.

Medical re-evaluation is required:

- At the intervals specified by the medical professional;
- When an employee reports medical signs or symptoms related to their ability to use a respirator;
- When observations are made that indicate a need for employee re-evaluation (i.e., by an employee's supervisor during conduct of work, by EHS during fit-testing, etc.);
- When change(s) occur in the workplace conditions that may result in substantial increase in the physiological burden placed on the employee during respirator use.

To begin the medical evaluation process, print a copy of the medical questionnaire (located on the EHS web page at <http://ehs.unl.edu/ehs-rpp-04.pdf>). Fax the completed questionnaire to Company Care at (402) 742-8419. The questionnaire contains confidential medical information and should be handled and transmitted only by the employee. UNL does not file or maintain copies- this is the responsibility of the medical provider.

If the medical provider determines that the employee requires further testing, someone from Company Care or EHS will contact the employee and advise them to schedule a physical examination. After completing their evaluation, Company Care will notify EHS if the employee is able to wear a respirator and any associated restrictions, as well as the recommended interval for medical re-evaluation. EHS will not fit-test an employee until the medical qualification is obtained. Employees and their supervisors are responsible to ensure that medical evaluations occur at the required intervals; although EHS will send reminders.

Training

EHS conducts respirator training. Training must be completed prior to initial use and annually thereafter. Re-training is also required:

- When an employee is assigned a new type of respirator;
- When significant changes occur in the workplace that render previous training incomplete or obsolete;
- When observations of the employee's skills or knowledge indicate that prior training was insufficient or not retained

Successful completion of training requires the user to demonstrate knowledge of:

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;
- The limitations and capabilities of the respirator;
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;
- How to inspect, put on and remove, use, and check the seals of the respirator;
- Procedures for maintenance and storage of the respirator;
- Medical signs and symptoms that may limit or prevent the effective use of respirators

Employees and their supervisors should contact EHS to schedule annual re-training approximately 11 months following the previous training, or sooner in response to one of the situations described above. Employees and their supervisors are responsible to ensure that refresher training is completed annually; although EHS will send reminders.

Fit-Testing

EHS conducts fit-testing for respirator users. Fit-testing is not required for loose-fitting respirators. Respirators come in a variety of types, styles, and sizes. The purpose of fit-testing is to select a respirator that provides the user with an adequate fit so the assigned protection factor remains valid. Fit-testing must be completed prior to initial

use of negative or positive pressure tight-fitting respirators, including filtering facepieces, and at least annually thereafter. Additional fit-testing is required if:

- An employee is assigned a different make, model, style, or sized respirator;
- If the employee has a change in condition that may affect the fit of the respirator (e.g., facial scarring, change in body weight, dental or facial structural changes, etc.).

Employees must be clean-shaven where the face meets the facepiece at the time of fit-testing and during use. Employees and their supervisors should contact EHS to schedule annual fit-testing approximately 11 months following the previous training, or sooner in response to one of the situations described above. Employees and their supervisors are responsible to ensure that fit-testing is completed annually; although EHS will send reminders.

EHS adheres to the fit-testing protocols established by the Occupational Safety and Health Administration (OSHA) in 29 CFR 1910.134. Respirator users are instructed to conduct routine “seal checks” each time that a tight-fitting respirator is used. Fit-testing and “seal checks” are not synonymous; both are required. Fit-testing and training are typically conducted by EHS in the same session.

Equipment Purchase

Following successful completion of training and fit-testing, EHS will provide employees and their supervisors with written information that prescribes the type, style, and size of respirator and necessary accessories (i.e., filters, cartridges, etc.) to which the employee has been medically-qualified, trained, and fit-tested. The fit-test and training, and possibly medical qualification, is valid **ONLY** for the respirator described.

In all circumstances, only NIOSH-approved respirators are appropriate. Devices that are not NIOSH-approved are not considered respirators and should never be used for protection against any atmospheric hazard. When respirators are being used in a clinical setting for the purpose of disease control or prevention (medical purposes), they are also subject to FDA approval. In these limited circumstances, dual NIOSH and FDA approval of the respirator is required.

Employers are responsible for the cost of respirator purchase, as well as maintenance of a suitable stock of replacement parts and consumables (i.e., filters, cartridges, etc.).

Use

Employees are responsible to adhere to all appropriate and proper use and maintenance procedures, as presented during training as well as those established by the manufacturer. Supervisors play an integral role in ensuring efficacy of the Respiratory Protection Program and are expected to evaluate employees' adherence to proper use and maintenance procedures.

Manufacturer's Instructions & NIOSH Certification

Manufacturer's instructions for use, maintenance, cleaning and care, and warnings regarding the assigned respirator's limitations must be read and observed at all times. A label or statement of certification will appear on the respirator or respirator packaging. The label will state what contaminants the respirator is designed for and the level of protection that it will provide. Use must conform to the conditions of the NIOSH certification at all times.

Unsuitable Atmospheres

Employees must not wear respirators into atmospheres containing contaminants or levels that are not compatible with their assigned respirator. For example, a respirator designed to filter dust particles will not protect against gases and vapors.

Individual Use

In most circumstances, employees are assigned a respirator for their own personal use. Employees should keep track of their assigned respirators so that another person does not use it. However, use caution in marking respirators with indelible ink or like substances because they can degrade or otherwise affect the performance of the respirator. Consult EHS if respirators are shared between employees to ensure a proper shared-use program is established.

Post-Use

Cleaning and Storing Equipment

Respiratory protection equipment must be kept clean. Single-use respirators must not be reused. For durable equipment, designate an area with a sink and provide the supplies necessary for properly cleaning the equipment, in accordance with the manufacturer's recommendations. These supplies will generally include respirator wipes, soap and water, a disinfectant solution, and containers (such as zip lock bags) for storing the equipment. The manufacturer will specify cleaning and disinfection products and procedures.

Designate a clean storage site that is free from contamination, dust, sunlight, extreme temperatures, excessive moisture, and chemicals. Respirators need to be packed and stored so that the facepiece and valves do not become deformed.

Records

EHS will maintain the most current assessment, fit-testing, and training records, as well as the most recent medical qualification statement. The UNL Occupational Medicine Provider will maintain confidential medical records.

Records pertaining to respirator and cartridge use (when using a cartridge change schedule) and respirator maintenance are maintained at the local level, in accordance with department procedures. These types of records should be maintained for a minimum of 1-year.

Changing Conditions

Promptly notify EHS of any changes in user's personal conditions that may affect their ability to wear a respirator, as well as conditions of use (e.g., temperature extremes, different PPE, exertion requirements, potential atmospheric contaminants or approximate concentrations, etc.). Changing conditions may trigger the need for a new exposure assessment, review by the medical professional, re-training, and/or fit-testing.

The information in this SOP supplements the UNL Respiratory Protection Program (RPP). Please refer to the full program document for more information.