



<b>Subject:</b> Respiratory Protection Program	<b>Date:</b> 08/21/19
<b>EH&amp;S Program:</b> Occupational Safety	<b>Next Review:</b> 08/21/22
<b>Scope:</b> University Wide	<b>Original:</b> 1994

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**Policy:**

The respiratory protection program impacts all employees who are required, or elect, to wear respiratory protection as part of their employment. Only respirators which are applicable and suitable for the purpose intended shall be used.

The control of potential health hazards caused by breathing air contaminated with harmful levels of chemical, physical or biological agents shall be accomplished as far as feasible by accepted engineering control measures. When effective engineering controls are not feasible, or while they are being instituted, appropriate respiratory protection shall be used.

**Definitions:**

**NA**

**Procedures:**

**A. Responsibilities**

1. Departments must:
  - a. Maintain workplaces in order to minimize airborne contaminants.
  - b. Identifying operations, environments and/or materials that require evaluation for airborne contaminants.
  - c. Communicate with the Department of Environmental Health and Safety to discuss the following information:
    - 1) Description of the work being performed
    - 2) The material(s) being handled
    - 3) The amount of time expected to complete the operation
    - 4) The estimated frequency of exposure
    - 5) And the number of employees involved.

- d. Provide the healthcare provider information regarding how the employee will use the respirator at work including, but not limited to:
  - 1) Type and weight of respirator to be used
  - 2) How long and how often employee will typically be wearing the respirator
  - 3) Amount of effort required to complete work while wearing respirator
  - 4) Other protective clothing or equipment employee will wear during respirator use
  - 5) Temperature and humidity extremes at work
- e. Implement engineering and/or administrative controls where feasible.
- f. Establish an employee health surveillance program with a qualified health care provider.
- g. Workers are not to be assigned tasks requiring the use of respirators unless they have been medically cleared to wear a respirator.
- h. A respirator may not be worn until a written confirmation of the employee's ability to wear a respirator is received from the licensed physician, PA, RN, or NP. This must be done prior to an employee's first use of a respirator and on an annual basis thereafter. The department is responsible for:
  - 1) Assuming all costs related to the evaluation.
  - 2) Coordinating a schedule of training and fit testing.
  - 3) Purchasing the appropriate respiratory protection as specified or approved by the Department of Environmental Health and Safety.
  - 4) Supervising the maintenance and provide storage for respirators.
  - 5) Procure and provide respirator to staff.

## 2. Environmental Health and Safety

- a. Determines the need for employee respiratory protection.
- b. Evaluates potential hazards.
- c. Recommends engineering controls and administrative controls.
- d. Selects or approves respiratory protection.
- e. Provides training in the selection and use of respiratory protection equipment.
- f. Conducts Fit Tests for respirators.
- g. Conducts periodic inspections and evaluations to determine the continue effectiveness of the program.

## 3. Employees are required to

- a. Complete the employer provided medical questionnaire and any necessary testing or follow-up as required by the healthcare provider.
- b. Attend mandatory respiratory protection training.
- c. Use the assigned respirator when respiratory protection is required.
- d. Inspect the respirator before each use to ensure that it is functioning properly.
- e. Properly maintain and use the respirator in accordance with the training provided.

- f. Return the respirator to supervision when it is no longer needed or requires maintenance.

## **B. Respirator Selection and Use**

1. Selection of respirators and respirator accessories, fitting and testing must be coordinated through the Department of Environmental Health and Safety.
2. The Department of Environmental Health and Safety will evaluate the work area for chemical toxicity, the potential for exposure, the concentration and duration of exposure, and the limitation of the various types of respiratory protection that are available.
3. A respirator should never be worn before an evaluation has been made. Use of a respirator by an untrained individual, or in an application other than that for which it was designed, can prove extremely dangerous. In addition, a single respirator facepiece cannot be designed to fit the entire working population.

## **C. Medical Evaluation and Clearance**

1. Medical evaluations shall be provided to all employees required to wear a respirator. The medical evaluations can be performed by Stony Brook Occupational Medicine (part of Stony Brook Family and Preventative Medicine Services).
2. Medical evaluations will be conducted prior to initial use and annually thereafter unless there is a significant change in employee job duties or in employee medical condition/symptoms that requires earlier re-evaluation. Medical evaluations shall be conducted by a licensed Physician, PA, RN, or NP.
3. Medical evaluations shall include review of OSHA respirator questionnaire or medical history and/or examination covering equivalent content, including:
  - a. A medical history, including previously diagnosed disease, particularly known cardiovascular or respiratory diseases
  - b. Psychological problems or symptoms including claustrophobia
  - c. Problems associated with breathing during normal work activities
  - d. Past problems with respirator use
  - e. Past and current usage of medication
  - f. Any known physical deformities or abnormalities, including those which may interfere with respirator use
  - g. Previous occupations
  - h. Medical evaluation may include physical examination, spirometry, pulmonary function tests or other testing/referrals that the evaluating healthcare

provider may determine necessary for respirator clearance or that are required by specific OSHA medical surveillance standards

- i. The following may disqualify an employee from wearing a respirator:
  - 1) Facial deformities and facial hair
  - 2) Use of prescription eyeglasses when a fullface respirator is required, unless respirator includes corrective lenses
  - 3) Perforated tympanic membranes
  - 4) Respiratory diseases affecting pulmonary function
  - 5) Symptomatic coronary artery disease, significant arrhythmias, or history of recent myocardial infarction
  - 6) Endocrinal disorders which may cause the employee to suffer sudden loss of consciousness or response capability
  - 7) Inability to perform coordinated movements and conditions affecting response and consciousness due to neurological disabilities
  - 8) Use of medications that affect judgement, performance or reliability or alter the state of awareness or consciousness
  - 9) A history of claustrophobia may require further evaluation
  - 10) Any other condition which the physician believes might require special restriction
  
- j. Documentation of medical clearance shall be provided by the employee to the affected department and to the Department of Environmental Health and Safety.

#### **D. Training and Fit Testing**

1. Appropriate training and instruction in the proper use of each type of respirator is provided by the Department of Environmental Health and Safety.
2. Upon written receipt of medical clearance from a licensed physician, the employee will be trained and fit tested on the approved respirator(s).
3. Fit tests will be conducted at least annually.
4. A satisfactory face seal is a prerequisite for successful completion of the respiratory protection training program. Verification of the successful fit test will be documented on a Respirator Registration Form.
5. The Respirator Registration Form will be kept on file in the Department of Environmental Health and Safety.

#### **E. Maintenance, Inspection, Storage and Repair**

1. Maintenance, inspection and storage guidelines are provided in written form to all employees who attend training.

2. The inspection of all respirators shall be performed before each use, and where applicable, shall include:
  - a. Checking face piece for cuts, tears, frays or loss of elasticity.
  - b. Checking for damaged or missing hardware.
  - c. Checking for dust or dirt on valve seats or valve flaps.
  - d. Checking for missing or cracked valve covers.
  - e. Checking the elasticity of the headbands.
  - f. Inspecting the lens of the face piece.
  - g. Checking threads, gaskets, and cartridges.
  - h. Checking hoses for cracks, cuts, or abrasions.
  - i. Checking regulator controls.
  - j. Checking backpack for dents or broken welds, and cylinder attachment.
3. A cleaning and disinfection program must be established for non-disposable type respirators.
4. Respirators issued for the exclusive use of one worker should be cleaned after each day's use, or more often if necessary.
5. Respirators used by more than one worker shall be thoroughly cleaned and disinfected after each use. It is recommended that respirators be assigned to individual workers for their exclusive use.
6. When not in use, respirators should be sealed in plastic bags and stored in a single layer with the facepiece and exhalation valve in a non-distorted position.
7. Respirators should be stored in a convenient, clean and sanitary location, avoiding temperature extremes and direct sunlight.

## **F. Repairs**

1. Certain parts of the respirator can be changed by the employee, however repair or replacement of component parts must be done by a qualified individual.
2. Substitution of parts from a different brand or type will invalidate the approval of the respirator.

## **G. Special Problems**

1. The respirator facepiece-to-face seal requires careful scrutiny to ensure that the inhalation of contaminants is being eliminated. An effective seal is difficult for individuals with standard prescription glasses, excessive facial hair, or absent dentures. Persons with atypical facial characteristics such as long faces, small faces and protruding noses may have difficulty in obtaining a successful seal. At present, commercial facepieces are produced to fit 95% of the male population.
2. Special arrangements may be necessarily investigated for personnel with fit problems (e.g. specular attachments for eyeglass wearers).

**Forms:**

Employee Respirator Certification Form

Occupational and Environmental Medical History

OSHA Respirator Medical Evaluation Questionnaire

**Policy Cross Reference:** NA

**Relevant Standards/Codes/Rules/Regulations/Statutes:**

29 CFR 1910.134 *Respiratory Protection*

ANSI Z88.2-2015 *Practices for Respiratory Protection*

ANSI Z88.6-2006 *Respirator Use - Physical Qualifications for Personnel*

NIOSH *Respirator Selection Logic 2004*

NIOSH *Certified Equipment List*

**References and Resources:** NA



RESPIRATOR CERTIFICATION FORM

Name: Employee ID: Date of Birth:
Department: Title:
Home Address: Work Phone:

I. MEDICAL CLEARANCE

- Fit for respirator use with no restrictions
Fit for respirator use with mild restrictions or accommodations (see comments)
Additional testing needed before fitness can be determined
Not fit for respirator use

Comments:

Signature of Medical Practitioner

Date:

II. TRAINING

This employee has been trained in the appropriate use, limitations and maintenance of respirator issued.

Grid of checkboxes for respirator models: N95 3M/1860/S, N95 3M/8210/R, N95 Moldex/1510/XS, N95 Moldex/1512/M, N95 3M/1860/R, N95 3M/8210/S, N95 Moldex/1511/S, N95 Moldex/1513/L

Other:

III. FIT TESTING

The employee was fit tested for the above respirator using the following method and passed the test.

- Bitrex - Sensitivity (circle one) 10 20 30
Saccharin - Sensitivity (circle one) 10 20 30
Smoke
Other

CERTIFICATION

- has successfully completed medical clearance, training and fit testing (Sections I-III) and is certified to wear the respirator issued.
Could not be certified for respirator use (see comments).

Comments:

Signature of Instructor

Date

ACKNOWLEDGEMENT

I was issued the above respirator and agree to use it accordingly to all provisions of the Respiratory Protection Program of Stony Brook University and the manufacturer's guidelines.

Employee's Signature

Date