

RUTGERS UNIVERSITY

Respiratory Protection Program

I. PURPOSE

The purpose of this program is to outline the minimum acceptable requirements for the use of respiratory protection by Rutgers personnel. The program delineates responsibilities, establishes respirator selection criteria and defines fit testing and training requirements. The goal of the program is to provide appropriate respiratory protection to Rutgers personnel in a manner consistent with regulatory requirements and accepted professional practice. This program was developed in accordance with the federal *Respiratory Protection Standard* (29 CFR 1910.134) adopted by the New Jersey Public Employees Occupational Safety and Health Administration (PEOSHA).

II. SCOPE

This program applies to all employees who are required to wear respirators during normal work operations and during non-routine or emergency operations. This includes designated employees in the following departments:

- ◆ REHS (Rutgers Environmental Health and Safety) – For collection of bulk asbestos samples, waste handling and segregation, and emergency response incidents (i.e. hazardous substance spills, leaks, etc.)
- ◆ FMS (Facilities Maintenance Services):
 1. Painters – For lead-based paint work involving “at risk” tasks defined in the *Rutgers University Lead-Based Paint Program*; also for spray painting operations and varnish refinishing
 2. Pool Chemical Treatment – For administering pool chemicals at the Camden Campus Gymnasium
 3. HVAC Mechanics - Cleaning of cooling towers.
- ◆ Fire & Emergency Services – For first response incidents involving fire, explosion, chemical release or biological exposure (i.e. blood).
- ◆ University Police – For first response incidents involving Chemical, Biological, Radiological, and/or nuclear attack. (MSA Millenium CBRN)
- ◆ University Health Center personnel (All Campuses) - For potential exposure to tuberculosis (N-95).
- ◆ Animal Care Workers – For potential exposure to allergens (N-95).
- ◆ Plant Science/Plant Pathology – For application of pesticides in greenhouses, research farms and experimental research stations

III. DESIGNATION OF RESPONSIBILITY

RUTGERS ENVIRONMENTAL HEALTH AND SAFETY (REHS)

- A. Serve as the overall Program Administrator for the Rutgers Respiratory Protection Program
- B. Develop a University-wide written respiratory protection program. Update the program to reflect changes in regulations and current practice.
- C. Conduct exposure assessments of workplaces to determine the need for respiratory protection.
- D. Recommend appropriate respiratory protective equipment.
- E. Conduct fit tests for respirator wearers.
- F. Provide training on the proper use, care, and storage of respirators. Maintain training records.

OCCUPATIONAL HEALTH SERVICES

- A. Provide physical examinations in accordance with PEOSHA regulations to determine if an employee is medically fit to wear a respirator.
- B. Determine the frequency of follow-up examinations.
- C. Maintain the required medical records.

SUPERVISORS OF EMPLOYEES WHO WEAR RESPIRATORS

- A. Serve as the Program Administrator for their department.
- B. Purchase NIOSH approved respirators.
- C. Schedule medical examinations with the Occupational Health Physician for employees who use respirators.
- D. Arrange for annual fit testing through REHS.
- E. Maintain adequate stock of appropriate respirators, cartridges and spare parts.
- F. Evaluate the effectiveness of the respiratory protection program to ensure that:
 - ◆ Respirators are properly selected and used
 - ◆ Wearers are properly trained and fit tested
 - ◆ Respirators are properly cleaned, maintained and stored

EMPLOYEES WHO WEAR RESPIRATORS

- A. Use respirators as instructed by the manufacturer and REHS
- B. Conduct a user seal check each time the respirator is worn.
- C. Guard against damaging the respirator during use and storage.
- D. Clean the respirator after each use with appropriate disinfectant.

- E. Go immediately to an area having respirable air if the respirator fails to provide proper protection.
- F. Report any respirator malfunction to a supervisor or program administrator.

IV. SELECTION AND ISSUANCE OF RESPIRATORS

SELECTION

- A. REHS shall select the appropriate type of respiratory protection on the basis of an exposure assessment.
- B. Only NIOSH approved respirators shall be selected.
- C. At a minimum, respirators shall provide protection to reduce personal exposures to below the action limits for each contaminant. Higher levels of protection may be considered appropriate.

ISSUANCE

- A. Respirators shall be provided by department supervisors. Employees may be requested to acknowledge receipt of the respirator.
- B. Whenever feasible, individual respirators shall be issued to employees for their exclusive use.

V. TRAINING

- A. All employees shall be trained in the proper use, limitations, and care of each type of respirator they may need.
- B. Training shall be provided annually, or more frequently if deemed necessary. Training shall be provided by REHS.
- C. Training shall also include a review of the applicable OSHA standards, fit testing procedures, and the respiratory protection program.

VI. RESPIRATOR FIT TESTING

- A. Respirators shall not be used when conditions prevent a good facepiece seal (e.g. facial hair, eyeglasses, dentures).
- B. Respirator fit testing shall be performed initially before use and **annually** thereafter. Fit testing shall be performed by REHS.
- C. Quantitative fit testing will be performed for all SCBA users and for University Police using Chemical, Biological, Radiological and Nuclear (CBRN) respirators. Quantitative fit testing will be performed using the TSI Portacount Plus Quantitative respirator fit tester model 8020.
- D. Qualitative fit test procedures shall also be used. The irritant smoke procedure shall be the preferred method. Other methods (i.e. isoamylacetate, saccharin) may be used at the discretion of REHS and/or Occupational Health Services.
- E. A positive and negative user seal check (fit check) shall be performed each time a respirator is worn

VII. MAINTENANCE AND CARE OF RESPIRATORS

- A. INSPECTION – All respirators shall be inspected routinely before each use and after cleaning and assembly.
- B. CLEANING AND DISINFECTION – Respirators shall be cleaned as needed or, if necessary, after each use. Cleaning and disinfection is not necessary for single use respirators. Cleaning procedures are as follows:
 - 1. Remove filters/cartridges and disassemble removable parts.
 - 2. Wash all parts in warm, soapy water. Use a mild disinfectant in the wash solution.
 - 3. Rinse all parts thoroughly in clean water to remove soap residue.
 - 4. Air dry respirator in a clean area. DO NOT dry the respirator in an oven, clothes dryer, microwave or other mechanical device.
 - 5. Replace any defective parts.
 - 6. Reassemble the respirator.

7. Store in a clean plastic bag in a suitable area away from sources of heat, excessive sunlight, or chemicals.

C. REPAIR – Damaged or worn respirators must be repaired or replaced as necessary.

VIII. MEDICAL EVALUATIONS

- A. An initial medical evaluation is required *prior to* respirator use. The evaluation is conducted by the University Occupational Health Physician and includes the following:
 1. Physical Examination
 2. Medical History (Mandatory Questionnaire)
 3. Pulmonary Function Test
 4. Chest x-ray
 5. Electrocardiogram
 6. Blood/urine Analysis
 7. Tuberculin Skin Test
- B. Medical evaluations shall be provided at no charge to the employee.
- C. The frequency of periodic medical examinations for respirator wearers shall be determined by the Occupational Health Physician.

IX. PROGRAM EVALUATION

- A. Random inspections shall be conducted to ensure that respirators are properly selected, used, cleaned, and maintained.
- B. Inspections shall be performed by department supervisors and/or REHS.
- C. The respiratory protection program shall be reviewed on a periodic basis by REHS.

IX. REFERENCES

OSHA *Respiratory Protection Standard* (29 CFR 1910.134)

OSHA Instruction: *Inspection Procedures for the Respiratory Protection Standard*

Respirator Selection Guide (OSHA Publication)

NIOSH/OSHA Pocket Guide to Chemical Hazards

Industrial Respiratory Protection (NIOSH Publication)

Respirator Decision Logic (NIOSH Publication)

NIOSH Guide to the Selection and Use of Particulate Respirators Certified Under 42 CFR 84

Documentation of Threshold Limit Values (Current Issue)

ANSI Respirator Standard Z 88.2 (1992)