



# Capital Health

## ADMINISTRATIVE MANUAL

### Policy & Procedure

<b>TITLE:</b>	Respiratory Protection	<b>NUMBER:</b>	CH 15-017
Effective Date:	April 2014	Page	1 of 8
Applies To:	Holders of Administrative Manual		

#### POLICY

1. As per the Nova Scotia provincial occupational health and safety legislation, Capital Health recognizes that there is potential for employees and other associates to be exposed to respiratory hazards throughout its operations and that there is a need for a comprehensive policy and program to protect employees from exposure to such hazards through the use of respiratory protection.
  - 1.1. The respiratory protection program is to ensure that, where necessary, respirators provide workers with effective protection against the airborne contaminants to which they may be exposed.

**Note:** This policy does not apply to an oxygen deficient atmosphere.
2. No employee is to be issued or wear a respirator until fit testing and training have been completed in accordance with this policy.
3. Capital Health strives to control airborne contaminants through accepted engineering and administrative control measures. When effective engineering controls are not feasible, or while they are being implemented, appropriate respiratory protection is to be used.

#### DEFINITIONS

**Administrative controls:**

Changes in work procedures such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazards.

**Clean-shaven:**

An employee with no facial hair that will interfere with an effective seal between the employee's face and the respirator face piece. In practical terms, the skin under the respirator seal must have less than one day of facial hair growth.

<b>Engineering controls:</b>	Use of engineered machinery or equipment to eliminate or reduce exposure to a hazard.  Examples: fumehoods, biosafety cabinets; mechanical ventilation, adding clean air to oxygen-deficient space, enclosure or isolation of the process or work equipment and substitution with less hazardous materials.
<b>Fit test:</b>	A quantitative or qualitative test to check a respirator's fit by detecting leakage of a test compound into the facepiece. Fit tests are to be performed in accordance with procedures found in CSA Standard Z94.4, "Selection, Use and Care of Respirators".
<b>Hazard:</b>	Any source of potential damage, harm or adverse health effects to someone.
<b>Quantitative Fit-Test (QNFT):</b>	A method of testing a respirator's facepiece-to-face seal using instrumentation that quantifies the actual protection factor provided by the respirator
<b>Respirator:</b>	Personal protective equipment (PPE) that protects a worker against the inhalation of airborne contaminants providing it is the correct type of respirator and is worn properly.
<b>Respiratory Protection Program:</b>	Comprised of the Respiratory Protection Policy and the Respiratory Protection Training Program, including: <ul style="list-style-type: none"> <li>• Statement of purpose and responsibilities;</li> <li>• Written procedures for selection, use, inspection, cleaning, maintenance, and storage of respirators;</li> <li>• Instruction and training;</li> <li>• Medical assessment of respirator wearers, where required;</li> <li>• Documentation;</li> <li>• Program review</li> </ul>

## GUIDING PRINCIPLES AND VALUES

1. Capital Health has the responsibility to ensure that employees and other associates are protected from respiratory hazards.
  - 1.1. Requirements specific to the use of personal protective equipment and respiratory protection are located in Part 3 of the *Occupational Safety General Regulations*.
2. Personal protective equipment (PPE), including respiratory protection, is a control measure used to minimize hazards associated with airborne contaminants.
  - 2.1. Respirators are the least satisfactory means of exposure control because they only provide good protection if they are properly selected, fit tested, worn by the workers, maintained, and replaced when their service life is over.

2.2. Respirators are the only form of respiratory protection available in the following situations:

- 2.2.1. to prevent occupational exposure to airborne infectious agents;
- 2.2.2. during the installation or implementation of feasible engineering and work practice controls;
- 2.2.3. in work operations, such as maintenance and repair activities for which engineering and work practice controls are not yet sufficient to reduce exposure; and
- 2.2.4. in emergencies.

## 1. Responsibilities

### 1.1. **Capital Health Senior Management:**

- 1.1.1. Assume ultimate responsibility for the development and implementation of an effective Respiratory Protection Program.
- 1.1.2. Allocate appropriate resources and employees to implement and maintain the Respiratory Protection Program.
- 1.1.3. Provide active support for activities associated with the Respiratory Protection Program.

### 1.2. **Director, Manager, and Supervisor:**

- 1.2.1. Ensure the health and safety of all employees under their direct supervision.
- 1.2.2. Ensure that an assessment is conducted to identify and evaluate respiratory hazards, particularly when there are changes in working conditions that may result in exposure to higher concentrations or new contaminants.
- 1.2.3. Periodically review each department's compliance with the Respiratory Protection policy as an element of the performance review.
- 1.2.4. Eliminate or minimize all respiratory hazards.
- 1.2.5. Ensure employees are fit tested, as applicable, and maintain associated documentation.
- 1.2.6. Provide and maintain the respiratory protective equipment needed for any airborne hazard present at the worksite, and ensure that employees use the equipment when required.
- 1.2.7. Provide materials for employees to clean their respirators.
- 1.2.8. Provide education, training, and supervision necessary for the safe use, maintenance and storage of respirators.
- 1.2.9. Develop emergency evacuation procedures and ensure appropriate training in any workplace where employees may need to be rescued or evacuated because of respiratory hazards.
- 1.2.10. Ensure that all illnesses or injuries resulting from respiratory hazards and requiring medical aid are reported, investigated, and recorded.
- 1.2.11. Require a medical assessment if there is a concern about an employee's ability to wear a respirator, due to problems experienced during respirator use, such as

discomfort, skin irritation, or breakthrough of contaminants, causing breathing difficulty or exposure to an infectious agent.

### 1.3. **Employee:**

- 1.3.1. Complete Appendix B prior to being fit tested.
- 1.3.2. Assume responsibility for own safety as well as that of co-workers.
- 1.3.3. Understand and follow safe work procedures.
- 1.3.4. Participate in respirator fit testing.
- 1.3.5. Use the respirator as instructed.
- 1.3.6. Understand the limitations of the respirator being used and follow the manufacturer's instructions carefully.
- 1.3.7. Inspect respirators before use.
- 1.3.8. Immediately report any equipment malfunction or other problem to the manager/supervisor.
- 1.3.9. Properly clean, maintain, and store respirators.
- 1.3.10. Report all symptoms related to respirator use to the manager/supervisor and to the SAFE line.
- 1.3.11. Report unsafe or harmful conditions to the manager/supervisor and to the SAFE line
- 1.3.12. Notify the manager/supervisor if there are medical concerns about using a respirator.

### 1.4. **Infection Control:**

- 1.4.1. Perform ongoing assessments following Public Health Agency of Canada (PHAC) guidelines to address the need for respiratory protection in relation to the hazardous infection process.
- 1.4.2. Identify high, medium, and low risk areas and populations to facilitate fit testing prioritization for the prevention of infectious risk transmission.
- 1.4.3. Notify Safety Programs of any changes in the workplace that would impact the efficacy of a respirator in relation to the prevention of infectious disease transmission.

### 1.5. **Safety Programs:**

- 1.5.1. Assist with chemical and biological hazard assessments where required to facilitate the selection of respiratory protection.
- 1.5.2. Facilitate and/or conduct fit testing using either qualitative or quantitative methods.
- 1.5.3. Create and maintain a database of employee fit test records.
- 1.5.4. Provide employees with documentation of their fit test records and respiratory protection authorized for use.
- 1.5.5. Provide instruction and training on selection, care, and use of respirators.

- 1.5.6. Administer, maintain, and review the respiratory protection policy and program.
- 1.5.7. Provide technical guidance on respiratory equipment that can be used when an individual cannot be fitted or where an individual cannot be clean shaven for religious or cultural reasons.

#### 1.6. **Emergency Preparedness:**

- 1.6.1. Monitor and plan for response to infectious disease pandemics by ensuring that appropriate respiratory protection is selected and stockpiled.

### 2. **Scope**

- 2.1. A Capital Health employee familiar with the work site and processes, assesses and identifies the presence of a hazard that cannot be controlled without the use of respiratory protection.
- 2.2. Infection Control, in consultation with Safety Programs identifies those Healthcare Providers (HCPs) who are required to be fit tested for N95 respirators.

**Note:** This encompasses those HCPs who are providing direct care or are exposed to patients with an identified or suspected illness transmitted through biological fluids or aerosolized particles which present a biological inhalation hazard.

### 3. **Selection**

- 3.1. Select the respirator for the intended conditions of use; base selection upon a systematic review of the airborne contaminant hazards, appropriate standards, regulatory criteria, and manufacturer's information on the types of respirators and limitations.

**Note:** Capital Health employees must be supplied and use only respirators that are approved by the National Institute for Occupational Safety and Health (NIOSH), or equivalent.

- 3.2. In situations where the respirator has not been defined, or if there are concerns about the adequacy of the selected respirator, the Manager or delegate completes the *Respiratory Hazard Assessment* form and forwards the information to Safety Programs
- 3.3. Using the information on the completed *Respiratory Hazard Assessment* form, Safety Programs determines the appropriate respirator.

### 4. **Respirator Fit Testing**

- 4.1. Conduct the fit testing process for respiratory protection use as per the CSA Standard Z94.4 "Selection, Use and Care of Respirators" and the manufacturer's instructions for the selected respirator.

**Note:** A fit test is required to ensure that a tight seal is formed with the face and that it will provide an adequate level of protection when used correctly. As per CSA Standard Z94.4 Fit testing is done only if the user is clean shaven where the face piece seals to the skin. Staff members unable to be clean shaven for religious or cultural reasons will be required to wear a full face hood system.

- 4.2. Perform fit testing:

- 4.2.1. for each employee required to wear a respirator
- 4.2.2. for each type and specific model/size of respirator the employee is required to wear.
- 4.2.3. prior to using the respirator in a hazardous atmosphere, as per CSA Standard Z94.4 every two years thereafter, and following any change in condition that may affect the ability of the respirator to form a tight seal with the face (E.g.: major weight gain or loss, growth of facial hair, or use of additional personal protective equipment such as safety glasses or hard hat).

4.3. A trained Capital Health employee, or a suitable external service provider conducts fit testing using either qualitative or quantitative methods.

## 5. Medical Surveillance

5.1. Prior to fit testing or any respirator use, assess employees to determine whether a personal medical condition(s) may prevent them from safely using the selected respirator.

5.2. Ask that employees presenting for fit testing complete the form: *Respirator Medical Screening*.

**Note:** Properly completed, this form will not contain personal medical details and can be handled as an administrative document.

5.3. Employees answering “No” on the *Respiratory Medical Screening* form may proceed to fit testing.

5.4. Employees answering “Yes” on the *Respiratory Medical Screening* form require further medical assessment prior to either fit testing or respirator use.

5.5. Forward the forms to Employee Health; a staff Occupational Health Nurse conducts a primary review with the employee (by phone or in person); if deemed necessary, Capital Health’s Occupational Health Physician reviews the case.

5.6. After medical evaluation, Employee Health provides management / Safety Programs with a completed *Medical Fitness for Respirator Use* form.

**Note:** The *Medical Fitness for Respirator Use* form will contain summary/functional information only; no personal medical information will be indicated.

The form indicates one of the following outcomes:

5.6.1. No medical limitation to respirator use.

5.6.2. Specific limitation(s) exists with respect to respirator use (temporary/permanent).

5.6.3. Medically unfit respirator use (temporary/permanent). Cases in which further investigation is required will be assigned to this latter group temporarily.

5.7. Employee Health clinical staff are available to reassess any individual employee’s case at any time should information suggest a significant change has occurred in their condition(s).

## 6. Training

6.1. A competent person provides the training for respiratory protection use, care and maintenance in accordance with the CSA Standard Z94.4 “Selection, Use and Care of Respirators” and the manufacturer’s instructions for the selected respirator, including:

- 6.1.1. Policy/Procedure/Responsibilities
- 6.1.2. Overview of respirator selection process
- 6.1.3. Proper use, care and maintenance of the selected respirator
- 6.1.4. Donning and doffing the respirator
- 6.1.5. Negative and positive pressure seal checks

6.2. The trainer:

- 6.2.1. completes and maintains records of attendance in training sessions
- 6.2.2. forwards a copy to the employee's manager.

## 7. Communication Plan

- 7.1. Ensure that specific work areas (E.g.: maintenance areas, laboratories, hazardous materials processing areas etc.) identified as containing a respiratory hazard have the required posted signage which at a minimum states:



## 8. Documentation

- 8.1. Safety Programs retains the current copy of the Respiratory Protection Policy and Training Program.
- 8.2. Managers/supervisors include completed written *Respiratory Hazard Assessments* and fit testing records provided by Safety Programs as part of the employee's training record.
- 8.3. Employee Health retains employee health assessments and associated information within confidential medical files.
- 8.4. Safety Programs maintains fit testing records and issues a user card to the employee indicating the type of respirator the employee is authorized to use and the expiry date of the cardholders training.

## 9. Program Review and Audit

- 9.1. To continuously improve the Respiratory Protection Program, Safety Programs reviews the Respiratory Protection Program as required, including:
- 9.1.1. the written policy and training program,
  - 9.1.2. training records,
  - 9.1.3. exposure assessments,
  - 9.1.4. safe work procedures,
  - 9.1.5. health assessment program
  - 9.1.6. relevant changes in practice and/or industrial hygiene which may have been adopted

## REFERENCES

CSA Standard Z94.4-93: Selection, Use and Care of Respirators

CSA Standard Z180.1: Compressed Breathing Air and Systems

## RELATED DOCUMENTS

### Policies

CH 20-021 Workplace Hazard Identification and Safety Inspections and Compliance

CH 20-014 Air Quality Concerns

CH 20-055 Personal Protective Equipment:

CH 20-035 Occupational Health and Safety – Rights and Accountabilities:

### Forms

[Respiratory Hazard Assessment](#)

[Respirator Medical Screening – Mask Fitting Approval Form](#)

Medical Fitness for Respirator User (internal use form, contact Employee Health

\* \* \*