
N95 RESPIRATOR PROTECTION PROGRAM AND PROCEDURE

Nipissing University recognizes its responsibility to protect employees/students/volunteers and contractors from exposures to hazardous airborne particles or droplet hazards by providing appropriate personal protective equipment (PPE), respirator fit testing, and training on the use of N95 respirators.

All employees/students/volunteers and contractors requiring the use of a N95 respirator must undergo qualitative or quantitative fit testing and training prior to using an N95 respirator. When a N95 respirator will not work, Nipissing University may provide an alternate respirator and/or another form of accommodation. Prior to fit testing the person requiring the N95 respirator must complete Section 2 of the Qualitative/Quantitative Fit Test Record. Section 2 is a self-assessment screening tailored to determine if the person has any medical conditions which may impact their ability to wear a respirator. All persons that have passed screening will then be fit tested and trained in the proper usage and care of N95 respirators or respirators that provide a greater level of protection.

Nipissing University is committed to the annual review and approval of this policy in consultation with the JHSC and stakeholders.

DEFINITIONS:

N95 Respirator: It is a respirator that is a tight fitting, air purifying respirator that removes airborne particles. Tight fitting means that the efficacy of the respirator is directly related to the ability of the respirator to seal tightly against a person's clean-shaven face when applied correctly. Particulate air-purifying respirators must be certified by the "National Institute for Occupational Safety and Health" (NIOSH) in the United States. An NIOSH class N95 respirator is one that if properly worn, is capable of filtering out 95% of airborne particles of 0.3 microns or more in size, but it is not suitable for workplaces where there may be oil mist in the air. (NIOSH Classifications: "N" rated respirators such as the N95 are indicated for workplaces that have "no-oil" mists in the air, "R" rated respirators indicate "oil resistant" and "P" rated respirators indicate "oil proof.") N95 respirators have limitations that are outlined by the manufacturer.

Fit Test: The use of a qualitative or quantitative method, to evaluate the fit of a specific make, model and size of a respirator on an individual. The purpose of the fit test is to ensure the user can achieve an acceptable seal with a specific tight-fitting respirator. (*CSA standard Z94.4-18*)

Fit Tester: An individual who is qualified through training and experience, to conduct fit testing appropriate for those respirators selected for use in the workplace, and using standardized fit test protocols.

Qualitative Fit Testing (QLFT): QLFT is a pass/fail method that relies on the subject's sensory response to detect a challenge agent in order to assess the adequacy of respirator fit.

Quantitative Fit Testing (QNFT): QNFT is a test method that uses an instrument to assess the amount of leakage into the respirator in order to assess the adequacy of respirator fit.

User Seal Check: A respirator seal check is an action conducted by the respirator user, to determine if the respirator is properly seated to the face. A positive and negative pressure check is required.

PURPOSE:

Employers are responsible to implement engineering and administrative controls to protect persons from workplace hazards, and where applicable provide and train on the use and care of PPE. The N95 respirator is a form of PPE that is worn over the mouth and nose to protect the wearer from hazards that may be present in the workplace air. Workplace air contaminants may include specific biological airborne or droplet hazards that may cause illness such as tuberculosis (TB), varicella or measles; pandemic flu; or illness from chemical/particulate exposures i.e. sanding dusts.

The purpose of fit testing and training for N95 respirators is:

- to determine through self-assessment screening if a person can safely proceed with fit testing and the subsequent wearing of a respirator;
- to determine the brand, model and size of respirator that fits and provides adequate protection to the user;
- to train on how to perform a seal check and use the N95 respirator in accordance with best practice and manufacturer guidelines;
- to record and maintain fit testing and training records; and
- to meet legislative compliance.

RESPONSIBILITIES:

EMPLOYER

- a) To provide necessary resources to develop, implement and maintain all elements of the respirator program including training and fit testing.
- b) To provide personal protective equipment to those requiring such.
- c) To ensure the dissemination of information, such as provincial directives, to those requiring N95 respirator protection.
- d) To ensure Nipissing University is compliant with legislative requirements.

SUPERVISOR/PERSON OF AUTHORITY

- a) To communicate to those who require N95 respirator fit testing and training of the requirement to do so.
- b) To ensure those under their direction are knowledgeable and understand the requirements for respirator usage in the workplace.
- c) In consultation with Environmental Health and Safety, to identify hazards in areas of their authority, where respiratory protection is required.
- d) To ensure availability of respirator protective equipment.
- e) To work co-operatively with Human Resources, Environmental Health and Safety, and others as required, regarding the development of accommodation strategies for those unable to wear a N95 respirator.
- f) To enforce compliance with this procedure and proper respirator use requirements.

RESPIRATOR USERS

- a) Are required to wear a respirator for their protection.
- b) Must participate in all aspects of respirator training and fit testing, and be re-fitted at least every 2 years or as indicated by this policy, and the *CSA Standard Z94.4-02*.
- c) Must be clean-shaven where the seal on the respirator comes in contact with the facial skin, for both the fit testing procedure and when using the respirator for protection.
- d) Advise a Person of Authority (i.e. Supervisor / Lab Instructor / Professor) if any conditions exist that may affect the fit of their respirator and attend testing/re-testing at frequencies stipulated in this policy.
- e) Maintain the fit testing card as proof of fit testing.

ENVIRONMENTAL HEALTH AND SAFETY

- a) To oversee the respiratory protection program, co-ordinate medical assessments as required, and maintain confidential health information.
- b) To provide consultation and direction to Supervisors/Persons of Authority regarding hazards that may require N95 protection.
- c) To co-ordinate and provide N95 fit testing and training.
- d) To maintain fit testing and training records and provide fit testing lists to Supervisors/Persons of Authority as needed.
- e) To assist in the facilitation of accommodations, where it has been determined that a person is unable to wear a N95 respirator.

EXTERNAL EMPLOYERS / AGENCIES

- a) Where applicable, must provide appropriate fit testing and training to persons they are responsible for who may work/volunteer/study at Nipissing University.
- b) On request, be able to provide evidence, such as a fit test record or card that indicates that fit testing was successfully completed.

PROCEDURE ELEMENTS

1. Fit Testing Frequency
2. Health Screening and Records
3. Fit Testing and Records
4. Respiratory Training and Communication
5. Maintenance of Fit Testing and Training Records
6. Program Evaluation and Quality Improvement

1.0 FIT TESTING FREQUENCY

Fit testing is required **every two years or sooner** if medical conditions or facial structure change significantly so as to adversely affect the usage and/or seal of the respiratory as per *CSA standard Z94.4-02*. Such conditions include but are not limited to:

- medical conditions which may impact respirator usage
- dental changes such as new dentures or major reconstruction
- facial scarring
- facial cosmetic surgery
- significant weight gain or loss (includes pregnancy weight gain) i.e. greater than 10%

Respirator users are responsible for reporting any condition which may impact respirator usage or fit to their Supervisor/Person of Authority and Environmental Health and Safety. Subsequent actions may include gaining a medical professional's opinion and/or undergo re-testing to ensure a proper respirator seal.

2.0 HEALTH SCREENING AND RECORDS

2.1 RESPIRATORY PROTECTION SCREENING

Prior to fit testing the person requiring the N95 respirator must complete Section 2 of the Qualitative/Quantitative Fit Test Record. Section 2 is a self-assessment screening tailored to determine if the person has any medical conditions which may impact their ability to wear a respirator. If such conditions are realized the person may be required to undergo further testing by a qualified medical professional. This subsequent testing will determine if such person can wear a respirator and/or which type of accommodation would be appropriate. All pertaining documents will be forwarded to Environmental Health and Safety.

2.2 CONDITIONS FOR ACCOMMODATION

Those who for medical reasons, or any other reasons, cannot wear a respirator, must convey such restrictions to their Supervisor/Person of Authority and/or Human Resources for further follow-up and direction. Accommodations will be managed on a case by case basis.

2.3 MAINTENANCE OF CONFIDENTIAL HEALTH SCREENING AND MEDICAL RECORDS

Human Resources will maintain all confidential medical information pertaining to respiratory use.

3.0 FIT TESTING

3.1 FIT TESTER

A qualified fit tester will provide fit testing. The fit tester must be competent through training and experience.

3.2 FIT TESTING PROTOCOL

An approved qualitative bitter aerosol taste threshold screening test (QLFT), and/or quantitative fit testing (QNFT) protocol using a portacount shall be used by Environmental Health and Safety or contracted fit testers. Only NIOSH approved N95 or better respiratory protection shall be used. All persons must be clean-shaven prior to fit testing as identified in the *CSA standard Z94.4-18*. Equipment shall be cleaned as per infection control procedures.

3.3 FIT TEST FAILURES

Where a respirator cannot be found to fit, Human Resources, Environmental Health and Safety and the Supervisor / Person of Authority will review the matter on an individual basis. Subsequently, the person will not be permitted to perform tasks where a N95 respirator is required for protection. Refer to section [2.2 Conditions for Accommodation](#).

4.0 RESPIRATOR TRAINING AND COMMUNICATION

N95 Respirator training will include:

- a) purpose of the respirator;
- b) limitations and capabilities of the respirator;
- c) proper use of the respirator including donning, seal check and doffing;
- d) make, model and size of respirator;
- e) requirements for re-testing.

At hire employees requiring N95 fit testing must sign up for fit testing and training, or provide proof of fit testing within the last two years. Environmental Health and Safety will provide Supervisors / Persons of Authority with updated lists of those requiring re-fit testing/training on request, and also communicate fit testing/training reminders. Supervisors / Persons of Authority are required to communicate fit testing/training and re-fit testing/training requirements to applicable respirator users and ensure attendance for all respirator training sessions.

5.0 MAINTENANCE OF FIT TESTING AND TRAINING RECORDS

A fit test record will be completed and signed by both the respirator user and fit tester. The record will include the person's name and department; job position information; date tested; specific make, model and size of the respirator; type of fit test; test agent used if any; relevant conditions of the fit test; and results of the fit test.

The Laboratory Safety Coordinator will maintain fit testing and training records; maintain a fit testing database; and provide a fit testing card to the respirator user with their name, make/model/size of respirator and date of testing.

Respirator users will be required to sign the fit testing record and acknowledge training on the use of the respirator; and keep their fit testing card for future reference as proof of fit testing.

6.0 PROGRAM EVALUATION AND QUALITY IMPROVEMENT

N95 Fit testing policy and procedures will be reviewed and approved by Human Resources in consultation with the Joint Health and Safety Committees and other stakeholders as required. Quality improvement plans will be developed based on the program evaluation and successes will be acknowledged.