HEARING CONSERVATION PROGRAM
Prince Edward Island Government Departments

INTRODUCTION:

The Government of PEI is committed to providing a healthy and safe work environment for our employees and to preventing occupational illness and injury in our workplaces. In October 2008 government proclaimed new Occupational Health and Safety Noise regulations which are intended to protect all employees from noise which may result in permanent, irreversible hearing loss**.**

In response to these new regulations the Public Service Commission Occupational Health & Safety has developed this Hearing Conservation Program to assist departments to move forward and implement the required legislation.

Hearing conservation is an important aspect of the overall health and safety program. Workplace noise can cause hearing loss, create physical and psychological stress, and contribute to accidents by making it difficult to communicate.

Fortunately, noise exposure can be controlled. Every effort is made to use quieter processes, machinery, and equipment. When workable engineering controls do not reduce the noise level to or below 85dBa which is required by the *P.E.I. Occupational Health & Safety Act* General Regulations 8.3, proper hearing protection must be used. Also, all employees exposed to noise levels above 85 dBa need to be included in a hearing conservation program. There are many reasons for providing an effective hearing conservation program, including:

- protecting the organization's most important resource - its employees,
- providing a safe and healthful workplace, and
- complying with the *P.E.I. Occupational Health & Safety Act* General Regulations.

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Management, supervisory, and employee commitment to hearing conservation and a positive attitude are important aspects of the overall hearing conservation program. The key elements of the organization's hearing conservation program are:

1. Noise measurements
2. Education & Training
3. Engineering and administrative noise exposure control
4. Hearing testing and follow-up

5. Posting of noise hazard areas

6. Personal hearing protection

7. Annual Program Review

NOISE EXPOSURE MEASUREMENT:

The success of the department's hearing conservation program depends on an accurate knowledge of the existing noise environment. Workplace surveys define areas within acceptable guidelines for noise exposure and those areas where potentially harmful noise exposure exists. Effective noise exposure measurement prevents possible loss of hearing by detecting work areas where employees must wear hearing protection.

An employer shall ensure that a worker's noise exposure does not exceed any of the following noise exposure limits as outlined in 8.3 of the *P.E.I. Occupational Health & Safety Act* General Regulations.

Exposure Level (dBa)	**Exposure duration**
80	24 hours
82	16 hours
85	8 hours
88	4 hours
91	2 hours
94	1 hour
97	30 minutes
100	15 minutes
103	7.50 minutes
106	3.75 minutes
109	1.88 minutes
112	94 minutes
115 and greater	0

Noise measurements need to be conducted where an employee is exposed to noise at the workplace of the employer in excess of any noise exposure limit or an employer or employee has reason to believe that the employee may be exposed in excess of any noise exposure limit.

The measurement is to be repeated if there is a change in the equipment or process that may affect the exposure level, or the exposure duration, at the workplace.

Procedure:

To initiate this process, it is requested that employers:

1. (a) Complete an assessment of all equipment - assess your work areas for possible equipment that may be above recommended noise levels.

(b) Do noise testing of this identified equipment

Noise dosimeters and sound level meters used in the noise exposure measurements shall meet the requirements of ANSI Standard S1.25-1991

and

Noise exposure measurements shall be performed in accordance with the CSA Standard Z107.56-06.

2. Review job descriptions of all employees who work with/near noise.

(a) Identify the equipment they work with

(b) Determine how many hours per shift they work with the equipment

(c) Determine employee's status; e.g., partime/fulltime/casual

3. Take the results of noise testing and employees' exposure time to calculate noise exposure limits.

Additional monitoring should be conducted whenever changes in work practices or methods occur including the addition of new equipment or a change in the workplace layout as these changes may impact workplace noise exposures.

<u>High Exposure Areas or Jobs</u>

Based on the results of the noise exposure measurements, the areas/jobs that have been identified as "above noise exposure limits" (exceeds 85 dBa) are required to have a hearing conservation program in place including audiometric testing, hearing protection, engineering/administrative noise controls, signage, education and training.

4. Personal Hearing Protection

Until such time as engineering and/or administrative controls can be put in place to reduce the amount of noise exposure to or below the allowed limits, appropriate

personal hearing protective devices should be made available and issued to employees working in "High Exposure" jobs or areas. It is recognized that the use of these devices is considered a temporary solution to the problem of overexposure until feasible controls can be implemented.

All supervisors/managers must enforce hearing protection requirements.

The employer is responsible for ensuring that the hearing protection meets the requirements of CSA Standard Z94.2-02, Hearing Protection Devices – Performance, Selection, Care, and Use.

*Results above 85 dBa indicate areas where hearing protection is "required" and the employer is required to investigate options for engineered noise control to reduce the noise exposure of employees to or below the noise exposure limit.

5. Hearing Tests

The objective of this hearing conservation program is the preservation of the hearing of employees. In order to achieve this goal, an effective audiometric testing program should be implemented.

The employer shall ensure that employees who are exposed to noise that exceeds the noise exposure limit are given

a. An initial hearing test (baseline). This should be done without delay after employment starts, but not later than 6 months after the start of employment: and

b. A hearing test once a year after the initial test.

The hearing tests shall be administered by an audiologist or a person who is certified to conduct audiometric testing. The employer shall be responsible for paying for the hearing tests.

6. Signage

It is required that warning signs be posted in “High Exposure” areas.

The success of the hearing conservation program with regard to each individual employee is evaluated by comparing annual audiograms to the baseline audiogram. This procedure, among others, helps to determine the effectiveness of the hearing protection program and, as a result, ensures the protection of employees' hearing.

EMPLOYEE EDUCATION:

All employees working in "High Exposure" areas or jobs need to be educated and trained on the following topics:

• Effects of noise on hearing

- Purpose of hearing protection
- Advantages and disadvantages of various types of hearing protection
- Use of specific hearing protection provided to the employee
- Proper use, selection, fit, and care of hearing protection
- Purpose and procedures of audiometric testing

Once the initial process is completed, the employer needs to look at:

ENGINEERING AND ADMINISTRATIVE NOISE CONTROLS:

Government recognizes the desirability of controlling the existing noise levels by engineering and/or administrative controls. Therefore, the feasibility of such controls must be carefully considered including possible redesign of existing machinery, the building of partial or total enclosures, and other engineered noise control procedures for reducing the existing noise levels. Due to the complexity of some machinery used and in view of economic limitations, some noise levels may not be able to be reduced to below acceptable limits.

Within the limitation of work schedules and employee skills, administrative controls must also be considered. Where feasible, over-exposed employees should be rotated to other areas or jobs having noise levels below the required levels. In addition, operational procedures should be modified as necessary so that during any one twenty-four hour period the allowed exposure times will not be exceeded.

Engineering and administrative controls must be considered and implemented where feasible on a continuing basis.

RECORDKEEPING:

The employer is responsible for maintaining noise exposure measurement records.

The employer is responsible for maintaining hearing test results for all employees working in "High Exposure" jobs or areas.