

HEARING CONSERVATION PROGRAM (HCP)

PURPOSE

The hearing conservation program is intended to protect DPCDSB employees from noise-induced hearing loss and allow the Board to take early preventative and control measures.

INTRODUCTION

Excessive sound levels can result in permanent hearing loss, create physical and psychological stress and interfere with communication. Noise induced hearing loss is permanent and develops from months or years of excessive exposure. The hearing loss depends on how loud the noise is and the duration of the exposure.

COMPONENTS

This hearing conservation program includes provisions for:

- Sound level Monitoring
- Audiometric Testing
- Employee Training
- Record keeping
- Controls
- Hearing Protection Devices

SCOPE

This program applies to DPCDSB employees that are potentially exposed to excessive noise levels.

Legislation and Standards:

Noise exposure standards are established by the Ontario Ministry of Labour and are given in Regulation 851, Industrial Establishments, Section 139 made under the Occupational Health and Safety Act. Regulation 851 was amended by Regulation 565/06. As of July 1, 2007, every employer shall ensure that no worker is exposed to a sound level greater than an equivalent sound exposure level of 85 dBA, Lex8. The regulation requires that every employer take all measures reasonably necessary in the circumstances to protect workers from exposure to hazardous sound levels. Engineering controls should be considered first before implementing a personal protective equipment program.

The following standards are also utilized in this program:

CSA Standard Z94.2-94 Hearing protectors

CSA Standard Z107.56-06 Procedures for the Measurement of Occupational Noise Exposure.

Sound Level Monitoring:

The Board's Health and Safety Department arranges for or conducts sound level monitoring to determine if hazardous noise levels exist. Additionally, any request for noise monitoring should be placed with the Health and Safety Department. Sound level monitoring shall be done by performing noise surveys and/or dosimetry and by following accepted sampling methods as described in the CSA Standard Z107.56-06.

Audiometric Testing of Hearing:

All employees who work in areas where steady state or continuous noise levels are at or above 85 dBA are required to participate in audiometric testing. Audiometric testing measures the individual's hearing ability and acuity. It can identify hearing threshold shifts in noise exposed employees during their employment. This allows for early detection of noise induced hearing loss.

The Health and Safety Department arranges for audiometric testing for employees. All employees to whom the HCP applies will have initial baseline audiometric testing performed and thereafter testing will be done every two years unless otherwise recommended.

The audiograms are medical documents and as such must be kept in the Health Promotion and Wellness Department at the Board.

New employees who work in identified noisy areas shall have a baseline audiogram performed as soon as possible after being hired. The audiogram will be obtained by a certified audiometric technician under the direction of an audiologist or MD.

All employees who undergo audiometric testing will also receive a confidential statement explaining their results.

Training:

All employees to whom this program applies will receive information and training in:

- a) the effects of noise on hearing
- b) use and maintenance of hearing protection
- c) hearing testing
- d) sound level monitoring
- e) their roles and responsibilities under this HCP

Additionally, the Health and Safety Department or designate may conduct training in the form of a group presentation, by handouts, video or online computer based training on the hearing protection program and/or its components.

Noise Controls:

Controls are measures taken to reduce a worker's exposure to noise and/or to reduce noise levels.

Engineering Controls:

Engineering controls are the measure of first choice for noise reduction. If practical, noise levels should be reduced by these control methods. Some examples of engineering controls are:

- noise source enclosure or enclosure of receiver
- substitution with less noisy equipment
- maintenance of equipment and machines
- acoustical treatment of walls, floors and ceilings

Administrative Controls:

Administrative controls are administrative changes in the work schedule or process so that an employee's exposure and duration of noise exposure is reduced.

Examples of administrative controls are:

- changing a job schedule
- selecting/specifying lower noise sources during purchasing
- producing procedures to control noise hazards
- posting of warning signs (see Appendix A)

Hearing Protection Devices:

The preferred methods for reducing noise exposure are engineering and administrative controls. However, where the noise exposures may exceed the permissible dose, then hearing protection must be worn.

The hearing protection device provided shall comply with CSA Standard Z94.2. The hearing protector acts as a barrier and reduces the amount of sound transmitted to the ear. There are many variables involved in the selection of appropriate hearing protection such as:

- attenuation required
- work environment
- frequency of exposure to noise

The Health and Safety Department shall recommend to employees /departments the appropriate hearing protection to be worn.

Record Keeping:

Records of noise exposure and sound level measurements will be kept by the Board in the Health and Safety Department and JHSC. Copies of these measurements shall be sent to the pertinent School/Department. The Health Promotion and Wellness Department shall keep copies of all audiometric tests as they are medical records. All reports shall be maintained according to confidentiality principles.

RESPONSIBILITIES

Employee:

- to report noise related concerns to their Supervisor as outlined by the Internal Responsibility System
- to participate in the HCP
- to wear hearing protection where required
- to participate in training

Supervisor/Principal:

- to provide instruction to staff relating to noise issues
- to implement any recommended controls within their means
- to follow-up on employee concerns
- to enforce the use of personal protective equipment

Health and Safety Department:

- to provide advice relating to audiometric testing concerns or hearing protective equipment
- to assist where required with the training component and/or provide training materials
- to monitor information on legislation
- to monitor, audit, update and continuously improve the program and the hearing conservation practices in the schools/sites
- to arrange for noise assessments
- to communicate the hearing conservation policy to employees, supervisors and sites
- to provide/make available hearing protectors, as deemed appropriate and necessary

Health Promotion and Wellness Department:

- to maintain and monitor staff audiograms and report changes to the Health and Safety Department

The Board:

- to establish and approve the HCP under the Board's Health and Safety policy
- to fulfill their responsibilities as an employer under the Occupational Health and Safety Act
- to provide resources to support the mandate of the HCP

Joint Health and Safety Committee:

- to assist with the communication of hearing protection practices
- to promote hearing conservation objectives and policy
- to assist in updating the HCP

DEFINITIONS

ACGIH: American Conference of Governmental Industrial Hygienist. ACGIH is a private, non profit corporation whose members are industrial hygienists and other occupational health and safety professionals dedicated to promoting health and safety in the workplace. Most Canadian jurisdictions, including the federal government and many international regulatory agencies consider the ACGIH recommended limits in the process of establishing their respective regulated limits.

Decibel: The unit of sound measurement is the decibel. The scale of sound intensity (the loudness of a noise) is logarithmic, not linear.

dB_A: means a measure of sound level in decibels using a reference sound pressure of 20 micro pascals when measured on the A weighting network of a sound level meter

Lex₈: is the equivalent sound exposure level in 8 hours

CSA: Canadian Standards Association. The CSA is a not for profit member based association serving business, industry, government and consumers in Canada and the global market place. The CSA develops standards that address real needs such as public safety and health.

Equivalent sound Exposure Level: is the steady sound level in dBA which if present in a workplace for 8 hours in a day would contain the same total energy as that generated by the actual and varying sound levels to which a worker is exposed in his or her total work day determined in accordance with the formula set out in subsection 2 of the regulation, O. Regulation 565/06.

Appendix A

This is an example of a warning sign posted at the approach to a shop area in a school.

