

WORKPLACE HEARING CONSERVATION

1. Overview and Purpose

Occupational noise is recognized as a significant potential health hazard in the workplace. Exposure to excessive noise levels may not seem obvious at the time but can lead to permanent and irreversible noise induced hearing loss over time. Christ the Redeemer Catholic Schools (CTR) recognizes the importance of protecting employees from hazardous noise exposure and ensuring compliance with the Alberta Occupational Health and Safety (OHS) Act, Regulation, and Code. The Workplace Hearing Conservation applies to all employees whose noise exposure reaches a Time Weighted Average (TWA) of 82 dBA

Employees may encounter hazardous noise from various sources, including:

- Musical instruments and ensemble rehearsals
- CTS construction tools and machinery
- Gymnasiums during classes, sports, assemblies, and events
- Pneumatic or Power Tools
- Grounds and facility maintenance equipment
- Learning Support Rooms where heightened student vocalization may occur

2. Legislation

The Alberta OHS Code establishes maximum sound levels to which an average employee may be exposed without adverse effects. No employee shall be exposed to noise above these limits without the implementation of appropriate engineering controls, administrative controls, or Personal Protective Equipment (PPE). A copy of the OHS Code Schedule 3, Table 1 (Occupational Exposure Limits -OEL- for Noise) is included at Appendix I

3. Employer Responsibilities

- 3.1 CTR must take all reasonable steps to ensure that employees are not exposed above OELs by implementing a hierarchy of controls, including elimination, engineering, and administrative strategies.
- 3.2 CTR must provide CSA approved hearing protection and training for all noise-exposed employees.
- 3.3 CTR must ensure that all noise-exposed employees undergo audiometric testing as required by the Alberta OHS code and maintains all required documents for statutory time periods.
- 3.4 CTR will ensure noise assessments are completed when conditions warrant and provide signage and verify that it has been posted on all entrances to areas determined to have noise levels equal or greater than 85 dBA.
- 3.5 CTR must review this program annually to implement changes in legislation and monitors annual hearing test trends to ensure adequate controls are in place.

4. Hazard Identification & Noise Exposure Assessment

- 4.1 Noise exposure monitoring is conducted to determine if hearing hazards exist, identify specific noise sources requiring controls, and evaluate the success of noise control efforts. Noise assessments are a mandatory step in the program and will be conducted whenever there is a change in equipment, process or controls that may affect the noise levels, when a concern is raised, or when there is reason to believe workers may exceed OELs.
- 4.2 Assessments will be arranged through the CTR Occupational Health & Safety Officer and must be conducted by a competent person who is trained in conducting noise exposure assessments, in accordance with the Alberta OHS code and the Canadian Standards Association (CSA).
- 4.3 If results of any monitoring equals or exceeds the action level (82 dBA) CTR will use the hierarchy of control to mitigate the noise. The hierarchy controls are as follows:
 - Elimination/Substitution:
 - Remove the source of noise or relocate employees to an area where they are not exposed. Substitute machines, tools, or equipment for ones that produce less noise.
 - Engineering:
 - Change of modify designs to work areas, equipment, ventilation, and systems to reduce the exposure noise. Install sound barriers, walls, or partitions to interrupt the noise path.

Enclose noisy equipment. Ensure a preventative maintenance program is in place to ensure machines remain lubricated and do not become louder due to wear and tear.

- Administrative Controls
 - Rotate employees through different tasks so that no single person is exposed to high noise levels.
- Personal Protective Equipment (PPE)
 - CTR will provide CSA approved hearing protection suitable for the level of exposure and instruction on its proper fit, care, use, and limitations. Employees must wear hearing protection in designated noise hazard areas.

5. Hearing Protection and Fit Testing

5.1 CTR will cover the cost of any hearing protection that is required for noise exposed employees.

Employees should use their division p-card for any approved out-of-pocket expenses, which shall be coded to the site-based budget.

5.2 There are two common types of hearing protection devices that will be available to noise exposed employees such as earplugs (including custom-moulded) and earmuffs.

5.3 Custom-moulded earplugs are purchased and supplied through the audiometric testing company suggested by CTR and are expected to last three to five years.

5.4 Music listening devices, headphones, earbuds, swimmer earplugs and hearing aids are not permitted as proper hearing protection.

5.5 CTR will provide instruction and verification in accordance with CSA Standard Z94.2-14 regarding the proper fit, care, use, and limitations of this equipment to ensure it remains effective. Employees must demonstrate an understanding of how to use and care for their protection.

5.6 The principal or supervisor will be responsible for monitoring staff to ensure equipment is being worn in the designated noise hazard areas.

6. Training Requirements

All new or present employees, who will be working in a noise-exposed area of the workplace, shall be trained by the appropriate supervisor / consultant so they have a clear understanding of noise and its effects as well as knowledge about how to prevent hearing loss. Retraining should occur when:

- New work processes or equipment is introduced into the school or workplace.
- New hearing protection equipment is purchased.
- There are changes in legislation.

7. Audiometric Testing

7.1 All noise-exposed employees must undergo audiometric testing as per the OHS Code:

- Baseline test as soon as reasonably practicable, but not later than 6 months of designation
- Periodic test not more than 12 months after baseline
- Every second year thereafter while exposure continues

7.2 A certified audiometric technician or audiologist must conduct testing. CTR's benefit plan covers testing, and employees shall use their division p-card for any out-of-pocket expenses, which shall be coded to the school designated department GL Code. An employee who undergoes testing is deemed to be at work during the time spent traveling to, and undergoing, the test.

7.3 Employees with "abnormal" or "abnormal shift" results will be informed and referred for medical follow-up.

7.4 Test results shall be sent to the Occupational Health and Safety Officer.

8. Communication and Record Keeping

8.1 CTR will send out communication via email indicating areas designated as excessive noise level areas. If noise levels cannot be reduced to below the noise level exposure limits, OH&S will supply and post visible warning signs. When signs are posted, employees must wear appropriate ear protection.

8.2 All records for this program will be kept by the Human Resources department and the Occupational Health and Safety Officer. Audiometric testing shall be kept on file for the duration of the employment, plus 10 years. Noise Exposure Assessments will be kept on file for 3 years from the date of assessment. Education and training records will be kept in the employees e docs on Atrieve, and records of control measures will be kept in Asset Planner.

9. Implementation

To begin implementation, Principals or non-school based supervisors shall:

- Identify if excessive noise is present at the school or workplace, through discussions with employees and, if necessary, request a formal noise assessment through the Occupational Health and Safety Officer.
- Facilities Department, OH&S and Principals or non-school based supervisors will develop action plans for reducing noise at the source by identifying situations where improvement can be made by using the hierarchy of controls as referenced in section 4.3.

10. Ongoing Activities

Principals or non-school based supervisors are responsible for ongoing activities, including monitoring employees to see if hearing protection equipment is being worn as required, ensuring preventive maintenance programs are followed, and conducting an annual review of Workplace Hearing Conservation with employees.

Appendix I

Occupational Exposure Limits for Noise (Schedule 3, Table 1 – OHS Code)

Exposure Level (dBA)	Exposure Duration
82	16 hours
83	12 hours and 41 minutes
84	10 hours and 4 minutes
85	8 hours
88	4 hours
91	2 hours
94	1 hour
97	30 minutes
100	15 minutes
103	8 minutes
106	4 minutes
109	2 minutes
112	56 seconds
115 and greater	0

Noise Level Examples

Level (dBA)	Example	Level (dBA)	Example
65	Normal Speaking	99	Siren
75	Average Factory	100	Chainsaw
86	Lawn Mower	105	Router
92	Compressor	119	Car Horn
95	Bandsaw		