

Audiogram

Employers performing audiograms are doing so as a part of a comprehensive health surveillance program, aimed at promoting a safer workplace where audiometric testing contributes to a part of an overall fitness assessment. Monitoring the effects of workplace exposure and ensuring legislative compliance is best achieved through a comprehensive health surveillance program including audiometric testing.

INTRODUCTION

Noise induced hearing loss is the leading non-fatal occupational disease claim for the last decade. Not surprisingly, many Canadian employers are legislated to monitor the effects of workplace noise through audiometric testing.

Typically, monitoring using audiometric testing is done once prior to entry into the workplace as a baseline, periodically at the recommended industry rate or as outlined by the legislative requirements of the province, and finally at the exit from the workplace. [1,2,3,4,12]

Most employers consider monitoring using audiometric testing for hearing loss to be a measure solely intended to maintain legislative compliance. They overlook important safety benefits of such monitoring, such as assessing the effectiveness of noise exposure management systems and identifying individuals with hearing limitations, which can sometimes lead to serious incidents.

OVERVIEW

The audiogram with physician review is a turnkey choice for employers interested in complying with legislation. Additional benefits are hiring or transferring employees between provinces, and maintaining medical records confidentially for the required length of time. The goal of the audiogram is to assess the effectiveness of hearing protection, the degree of hearing loss related to exposure to noise, and any non-occupational illness that might affect hearing.

The audiogram offered by CannAmm takes twenty minutes to half an hour to complete and consists of five parts:

- Part 1: Consent for release of clinical information both past and present.
- Part 2: Documentation of a comprehensive noise exposure history and current hearing status, including a check for recent loud noise exposure and a physical examination of the ear.
- Part 3: Technician testing at six different frequencies at various decibel levels (loudness).
- Part 4: CannAmm's trust through physician review of the history and clinical information to determine testing status and provide intervention when required.
- Part 5: Secure and confidential reporting of the final testing status to the authorized company representative.

The technician performing audio testing must be trained by an agency acceptable to the province in which the test is performed, where applicable. For example, in Alberta, Occupational Health and Safety is the agency responsible to enforce the Alberta Occupational Health and Safety Act. The act specifies the training requirements of the technician and mandates that the technician must work in consultation with a physician, audiologist, or occupational health nurse.^[10]

SAFETY

The main purpose of introducing audiometric testing into a workplace is to identify any immediate hearing limitations that may present a risk to individuals operating in safety-sensitive roles or environments where hearing is an essential requirement of safe work.

The goal of the assessment is to "determine whether an individual is fit to perform his or her job without risk to himself or others." [10]

LEGISLATIVE AND CONTRACTUAL COMPLIANCE

Audiometric testing is well established as a mechanism for exercising due diligence in noisy work environments. The following table summarizes federal and provincial exposure limits, along with each province/territory's legislated testing requirements. [8,9,10,11,12]

CANADIAN LEGISLATED WORKPLACE NOISE EXPOSURE LIMITS & MANDATED AUDIOMETRIC TESTING REQUIREMENTS

Jurisdiction	Continuous	Noise	Impulse/Impact Noise		OHS Mandated	References
	Maximum Permitted Exposure Level for 8 Hours: dB(A)	Exchange Rate dB(A)+	Maximum Peak Pressure Level dB(peak)	Maximum Number of Impacts	Audiogram Summary [12]	
Canada (Federal)	87	3	-	-	OHS regulations do not require audiometric testing.	Canada Labour Code, Part II, (R.S.C. 1985, c. L-2); Canada Occupational Safety and Health Regulations (SOR/86-304), Section 7.4(1)(b)
British Columbia	85	3	140	-	Testing is required within 6 months of employment and every 12 months after baseline (first test). Testers must be board-authorized. Records must be retained as long as worker is employed (OHS Regs., Sec. 7.8).	Workers Compensation Act; Occupational Health and Safety Regulations (BC Reg 296/97 as amended), Section 7.2 (B.C. Reg. 382/2004, s.1)
Alberta	85	3	-	-	Baseline testing is required within 6 months of employment. Second test is required 12 months after baseline. Testing is required every 24 months thereafter. Records must be retained for 10 years minimally. (OHS Code, 2006, Sec. 223).	Occupational Health and Safety Code, Section 218, Table 1 of Schedule 3; also see Tables 16.1 and 16.2 (p.16-9) of OHS Code Explanation Guide Table 1 and Table 2
Saskatchewan	85	3	-	-	Testing is required once every 24 months. (OHS Regs., Sec. 113(3), (4) and (5))	Occupational Health and Safety Act, 1993 (R.R.S.c.0-1.1, r.1); Occupational Health and Safety Regulations, 1996 Part VIII, Section 113 (1)
Manitoba	85	3	-	-	Testing is required within 70 days of excessive noise exposure and every 12 months after baseline (first test).	Workplace Safety and Health Act [R.S.M. 1987, c. W210]; Workplace Safety and Health Regulations (Man. Reg. 217/2006) Part 12

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Ontario	85	3	-	-	OHS regulations do not require audiometric testing.	Occupational Health and Safety Act [R.S.O. 1990, c. 1]; Industrial Establishments (R.R.O. 1990, Reg 851), Section 139
Quebec	90	5	140	100	OHS regulations do not require audiometric testing	Act Respecting Occupational Health and Safety [R.S.Q., c.2.1]; Regulation respecting Occupational Health and Safety (O.C.885-2001), Division XV, Sections 130-141
New Brunswick	85	3	140	-	OHS regulations do not require audiometric testing.	Act Respecting Occupational Health and Safety [R.S.Q., c.2.1]; Regulation Respecting Occupational Health and Safety (O.C.885-2001), Division XV, Sections 130-141
Nova Scotia	85	3	140	100	OHS regulations do not require audiometric testing.	Occupational Health Regulations (N.S. Reg. 112/76), Section 4 (references ACGIH TLVs, as updated annually)
Prince Edward Island	85	3	-	-	OHS regulations do not require audiometric testing.	Occupational Health and Safety Act General Regulations (E.C. 180/87), Part 8, Section 8.1 (references ACGIH TLVs, as updated annually)
Newfoundland and Labrador	85	3	-	-	OHS regulations do not require audiometric testing.	Occupational Health and Safety Act Occupational Health and Safety Regulations (C.N.L.R. 1165/96), Section 50 (references ACGIH TLV, as updated annually)
Northwest Territories	85	5	140	100	OHS regulations do not require audiometric testing.	Safety Act General Safety Regulations (RRNWT 1990, c. S-1, R-028-93 as amended), Section 30 and 31, Schedule A, Table 1
Nunavut	85	3 or 5*	140	-	OHS regulations do not require audiometric testing.	Safety Act General Safety Regulations (RRNWT 1990, c. S-1), Section 30 and 31, Schedule A, and Mine Health and Safety Regulations (R-125-95, Section 9.19-9.26, Schedule 5)
Yukon Territories	85	3	140	90	Testing is required within 6 months of employment and every 12 months after baseline (first test). Records must be retained as long as worker is employed (OHS Reg., Sec. 6)	Occupational Health and Safety Act Occupational Health Regulation (O.I.C. 1986/164), Section 4

Employers operating across multiple provinces are required to comply with the strictest provincial requirement, in order to allow compliant transfer of employees between operating locations.

Employers who proactively take steps to address noise exposure achieve greater fiscal success and operational stability, and promote a culture of productivity and safety. [4,5,6,7]

MEDICAL EXAM DELIVERABLES

Deliverables	CannAmm	Comparable
Compensable Claim Mitigation Documentation of recent noise exposure Documentation of prior workplace claims Baseline: availability of records for future claims	✓	
Safety – Mitigation of Workplace Incidents Identify noise-induced hearing loss Identify non-occupational illness inducing hearing loss	✓	
 Defensibility Test designed to meet or exceed provincial requirements Record retention in accordance with the OHS requirements, College of Physicians and Surgeons, and Ministry of Labour by province, whichever is greatest 	✓	
Privacy Personal Information Protection Act Personal Information Protection and Electronic Documents Act Canadian Standards Association's Model Code for Protection of Personal Information	✓	
National Availability Standardized documentation exceeds all provincial requirements Each audiogram is quality assured Testing is available coast to coast	✓	
One-Stop Shopping Book multiple tests with just one request Optionally combine with drug and alcohol testing Call or book online	✓	
Result Management Facilitation of medical treatment Health advice letters Direct employer contact on critical matters	✓	
Trusted Conclusions Accountability to Canadian medical standards Exam performed by OHS qualified technicians Physician determination of final test status	✓	

REFERENCES

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