



Hearing Conservation Programs

OBJECTIVES

The objectives of this large loss claim review are to:

- Examine a CIRMA Workers' Compensation (WC) loss resulting from prolonged noise exposure
- Discuss CIRMA's and other resources on reducing overall costs associated with hearing loss
- Develop specific risk management best practices to either prevent or mitigate future losses for members based on lessons learned

INCIDENT BACKGROUND

The injured employee is a 49-year old maintenance mechanic and has worked with the CIRMA Member Highway Department for 19 years. During a conversation with his supervisor, the injured employee noted that he had been having trouble with his hearing and was experiencing more frequent headaches recently. The supervisor acknowledged that the employee is exposed to loud noises throughout the course of his work and insisted that the employee get his hearing tested. Upon the direction of the supervisor, the employee sought audiometric testing, which found that the employee had 48.25% binaural hearing loss.

INCIDENT INVESTIGATION

- The injured employee is 49 years of age and has been working in the municipal Highway Department for 19 years.
- Prior to his employment with the municipality, the injured employee worked for a construction company for six (6) years.
- Throughout the injured employee's prior employment, he experienced baseline and annual audiometric testing due to his exposure to loud environments and tools. However, the injured employee was never offered audiometric testing, either at hire (baseline) or annually, by the municipality.
- Part of the injured employee's job description with the municipal Highway Department involved:
 - Assembling, installing, and maintaining mechanical systems, machinery and equipment.
 - Operating a variety of hand and power tools.
 - Complying with health and safety regulations.
- The municipality did not have a formalized Hearing Conservation program, determined by the following factors:
 - Investigation determined that the municipality did not assess the work areas in the Highway Department for hazards, including monitoring the environment, tools and machinery as to their noise exposure levels.

- The municipality did not offer baseline or annual audiometric testing to its employees.
- Employees were offered ear muffs and ear plugs, but there was no requirement to wear hearing protection throughout the course of the employee's normal business operations.
- The municipality did not have documentation indicating that employees had been trained on the OSHA Hearing Conservation standard or the personal protective equipment (PPE) provided by the municipality.
- The injured employee approached his supervisor, informing him that the injured employee was experiencing difficulty hearing and more frequent headaches.
- The injured employee's supervisor, acknowledging that the employee is exposed to loud noises throughout the course of his work, encouraged the injured employee to get his hearing checked by a physician.

INJURY AND DAMAGES

The injured employee followed his supervisor's advice and scheduled an appointment for audiometric testing. During the doctor's visit, it was discovered that the employee had 48.25% binaural hearing loss, requiring bilateral hearing aids. The injured employee filed a Workers' Compensation claim, as his doctor causally related his hearing loss to his job duties. After a thorough investigation by the CIRMA Workers' Compensation Claims team, it was determined that CIRMA was 100% liable for the work-related injury.

The total cost of this claim, including bilateral hearing aids, batteries, and partial permanent disability (PPD), equaled about **\$45,000**.

CONCLUSION

Hearing loss has been shown to negatively impact nearly every dimension of the human experience, including physical health, emotional and mental health, perceptions of mental acuity, social skills, family relationships, and self-esteem, as well as work and school performance. Twenty-two million Americans – or about 22 percent – are exposed to hazardous noise levels in the workplace.¹

Hearing conservation programs strive to prevent initial occupational hearing loss, preserve and protect remaining hearing, and equip workers with the knowledge and hearing protective devices nec-

¹ https://www.hearingloss.org/wp-content/uploads/HLAA_HearingLoss_Facts_Statistics.pdf

essary to safeguard themselves. Per OSHA standard 29 CFR 1910.95, employers are required to:

- Measure noise levels in the workplace
- Provide free annual hearing exams, hearing protection, and training
- Conduct evaluations of the adequacy of the hearing protectors in use (unless changes made to tools, equipment, and schedules result in worker noise exposure levels that are less than the 85 dBA)²

KEY RECOMMENDATIONS/ACTION ITEMS

CIRMA's Risk Management team is seeking feedback from the Risk Management Advisory Committee on the recommended best practices to prevent these incidents from occurring.

- Ensure that the employer administers a continuing, effective hearing conservation program, as described under OSHA standard **29 CFR 1910.95**, whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale or, equivalently, a dose of fifty percent [see **Appendix A** and **Table G-16a** within the OSHA standard].
- Consider developing and implementing a noise monitoring program when information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels.
- Establish and maintain an audiometric testing program in accordance with **OSHA 29 CFR 1910.95(g)(1)** by making audiometric testing available to all employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels at no cost to the employee. Testing should be offered within 6 months of an employee's first exposure at or above the action level (Baseline Audiogram) and annually thereafter.
- Ensure that hearing protectors are available to and worn by all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees.
- Regularly evaluate hearing protector attenuation for the specific noise environments in which the protector will be used [reference **Appendix B** of the OSHA standard **29 CFR 1910.95**].
- Train employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels annually on the following topics:
 - The effects of noise on hearing
 - The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care

- The purpose of audiometric testing, and an explanation of the test procedures
- Maintain an accurate record of all employee exposure measurements and trainings.
- Consider enrolling in the *Voluntary Compliance* program offered through CONN-OSHA, which can assist in monitoring environmental noise factors and review current plans.
- Consider utilizing the CIRMA E-learning platform to train employees on the general awareness aspect of the OSHA Hearing Conservation standard.

For more information on this topic, please contact your CIRMA Risk Management Consultant.

² <https://www.osha.gov/noise/hearing-programs>