



# **Occupational hearing loss**

If you have employees who work in noisy environments, you may have questions about how WCB-Alberta makes decisions to accept claims for hearing loss, what you can do to prevent hearing loss and to ensure WCB has the information needed to make decisions on hearing loss claims and how hearing loss claims costs impact your experience record.

#### Noise exposure at work

In Alberta, the occupational exposure limit for noise is 85 dBA averaged over an eight-hour day. There is a low risk of hearing loss at exposure levels below this limit, but the risk increases significantly as exposures rise above this.

Because the occupational exposure limit is based on average exposure per day, an employee can be exposed to noise levels higher than 85 dB for limited periods as long as the average exposure over eight hours does not exceed 85 dB.

Continuous noise exposure tends to be more damaging than interrupted exposure to noise, which permits the ear to have a period of rest and recovery. Noise exposure can be reduced through the use of a variety of hearing protection devices such as earplugs and earmuffs.

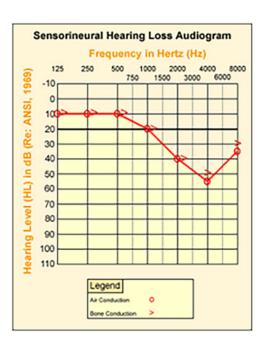
Prolonged exposure to excessive noise at work can lead to the development of occupational noise-induced hearing loss (ONIHL), which is the gradual loss of hearing due to prolonged exposure to excessive noise in the workplace.

WCB uses a two-step process to determine if a worker has ONIHL:

- 1. WCB determines if the evidence supports that a worker has noise-induced hearing loss (NIHL).
- 2. If so, WCB determines if the noise-induced hearing loss was caused by work.

# Determining if a worker has noise-induced hearing loss (NIHL)

When depicted on an audiogram, NIHL typically has a characteristic pattern of a dip at certain frequencies followed by improvement in hearing. This is often referred to as a notch. When a notch is present, this demonstrates a worker has noise-induced hearing loss.



Source: <a href="https://www.osha.gov/otm/section-3-health-hazards/chapter-5#appendixi">https://www.osha.gov/otm/section-3-health-hazards/chapter-5#appendixi</a>

When the audiogram does not show a notch, WCB considers whether the weight of medical evidence supports that prolonged exposure to excessive noise was a necessary factor for the development of the hearing loss.

### **Determining if NIHL was caused by work**

When a worker has NIHL and reported problems with this to a medical professional (such as an audiologist, physician, etc.):

- Within 12 months of when they last worked in a job that involved prolonged exposure to excessive noise, WCB presumes the noise-induced hearing loss is due to work, unless there is evidence to the contrary.
- More than 12 months after they last worked in a job that involved prolonged exposure to excessive noise, WCB considers whether the weight of evidence supports that prolonged exposure to excessive noise at work was a necessary factor for the development of noise-induced hearing loss.

**Prolonged exposure** means a minimum of two years of work exposure to excessive noise within Alberta or Saskatchewan,



or while entitled to WCB-Alberta coverage while working outside of Alberta.

**Excessive noise** means exposure higher than 85 decibels averaged over an eight-hour day, or equivalent (as set out in Alberta's current Occupational Health and Safety Code).

#### Claims costs and access to information about the claim

If WCB accepts a claim for ONIHL and determines ONIHL:

- Was caused by work with multiple employers, the costs of the claim are charged to the industries in which the worker experienced prolonged exposure to excessive noise. Because the claims costs are not charged to the employers' experience records, the employers do not have a direct interest in the claim so information about acceptance of the claim, benefits paid, etc., is not shared with the employers.
- Was caused by work with one employer, the costs of the claim are charged to that employer's experience record. Because the claims costs are charged to the employer's experience record, the employer has a direct interest in the claim so information about acceptance of the claim, benefits paid, etc., is shared with the employer.

## You can help by arranging for your employees to have regular audiograms

Hearing loss can be caused by many factors such as aging, brain dysfunction, diseases, prolonged exposure to excessive noise, hereditary or genetic conditions, infections, medications, chemicals and traumatic injuries. Because of this, it can be difficult to determine if hearing loss is due to exposure to noise at work or something else. Additionally, the longer it takes to diagnose hearing loss after someone retires or leaves a noisy job, the harder it is to determine the cause of the hearing loss.

Regular hearing tests (audiograms) completed during a worker's employment are the best way to determine if noise at work contributed to hearing loss. To ensure there's a clear picture of how noise at work affected hearing, employers should:

Arrange for employees to have an audiogram within six months of the date of hire.

- Schedule another audiogram 12 months after the first
- Continue with audiograms every two years after that.
- Arrange for an audiogram to be completed when an employee stops working or retires. This helps show what their hearing loss was (if any) at the time their work-related noise exposure ended.

#### Other types of hearing loss

WCB may also accept claims for other types of hearing loss, including:

- Occupational traumatic hearing loss: Sudden or acute hearing loss caused by a work accident (e.g., a hearing loss due to a fracture at the base of the skull from a fall or an extreme pressure blast).
- Occupational chemically induced hearing loss: Hearing loss because of exposure to toxins or chemicals in the workplace or medications prescribed for a compensable condition.

WCB may accept claims for traumatic hearing loss and chemically induced hearing loss when the weight of evidence supports that the work accident, work exposure, or the use of medications for a compensable condition was a necessary factor for the development of confirmed hearing loss.

# When in doubt, please call us

Your WCB hearing loss adjudicator is a great resource for helping you navigate a hearing loss claim. We care about your employee's well-being and will work with them, the treatment provider and you throughout the recovery process.





