

Occupational hearing loss

If you've been diagnosed with hearing loss, you may have some questions about whether your hearing loss is related to work.

Causes of hearing loss

There are many causes of hearing loss:

- **Aging.** Most people lose some ability to hear as they age. Age-related hearing loss is known as presbycusis.
- **Brain dysfunction.** Brain tumours or multiple sclerosis can lead to hearing loss.
- **Disease.** Certain diseases can result in hearing loss. For example, Ménière's Disease, a disorder of the inner ear that can affect hearing and balance, often results in hearing loss.
- **Prolonged exposure to excessive noise.** Loud music and noise from machinery are examples that can result in gradual hearing loss. This is also referred to as noise-induced hearing loss (NIHL).
- **Hereditary or genetic conditions.** Some hereditary conditions, like otosclerosis, an abnormal bone growth in the middle ear, can lead to hearing loss.
- **Infection.** Measles, mumps, scarlet fever or meningitis can lead to hearing loss.
- **Medications or chemical exposure.** Use of certain medications (e.g., antibiotics) or exposure to chemicals (e.g., solvents) may cause damage to the inner ear. This type of hearing loss is referred to as ototoxicity.
- **Trauma.** Injuries to the face and head such as a skull fracture or a ruptured ear drum may cause hearing loss.

Measuring hearing loss

Hearing loss is diagnosed by an audiologist or medical specialist with training in audiometry/hearing loss. They conduct a hearing test to measure hearing and the results are displayed on a graph, called an audiogram. The audiogram shows the softest sounds heard at different pitches. Noise levels and the amount of hearing loss are measured in units called decibels (dB).

When does WCB accept claims for hearing loss?

WCB may accept a claim for hearing loss when hearing loss has been confirmed and a worker has one of the following types of hearing loss:

- **Occupational traumatic hearing loss:** Sudden or acute hearing loss caused by a work accident (e.g., hearing loss due to a fracture at the base of the skull from a fall or an extreme pressure blast). WCB may accept claims for occupational traumatic hearing loss when the weight of evidence supports that the work accident was a necessary factor for the development of hearing loss.
- **Occupational chemically induced hearing loss:** Hearing loss as a result of exposure to toxins or chemicals in the workplace or medications prescribed for a compensable condition. WCB may accept claims for chemically induced hearing loss when the weight of evidence supports that the work exposure or the use of medications for a compensable condition was a necessary factor for the development of hearing loss.
- **Occupational noise-induced hearing loss (ONIHL):** The gradual loss of hearing due to prolonged exposure to excessive noise levels in the workplace. Not all workers who have experienced prolonged exposure to excessive noise at work develop hearing loss as a result of their exposure.

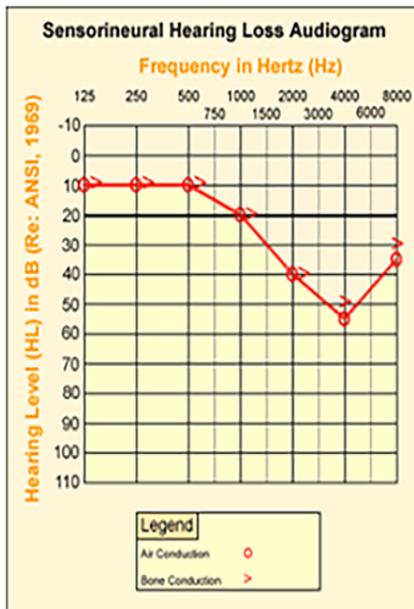
ONIHL can be prevented or lessened by limiting exposure to excessive noise at work and by the use of properly fitted hearing loss protection, such as earplugs and earmuffs.

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.
2. If so, WCB determines if the noise-induced hearing loss was caused by work.

How does WCB determine if a worker has noise-induced hearing loss?

When depicted on an audiogram, noise-induced hearing loss typically has a characteristic pattern of a dip 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: <https://www.osha.gov/otm/section-3-health-hazards/chapter-5#appendixi>

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.

If a worker has noise-induced hearing loss, how does WCB determine it was caused by work?

When a worker has noise-induced hearing loss and they report problems with their hearing 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 dB averaged over an eight-hour day, or equivalent (as set out in Alberta's current *Occupational Health and Safety Code*).

Does WCB accept tinnitus?

Tinnitus is a condition that sometimes accompanies hearing loss. It happens when sound is perceived even though there is no external source of the sound. It is often described as a ringing, rushing, buzzing or blowing sound in one or both ears. It can be occasional or constant.

WCB may accept tinnitus when all the following apply:

- The tinnitus has been confirmed by an audiologist or medical specialist with specific training in audiometry/hearing loss.
- The worker has an accepted claim for occupational noise-induced hearing loss, occupational traumatic hearing loss, or occupational chemically induced hearing loss.
- The worker used a hearing aid provided by WCB for a minimum of one year.
- The worker has a documented history of two or more consecutive years of tinnitus.

Your audiologist or medical specialist can help you

If you are uncertain whether your hearing loss may be related to work, your audiologist or medical specialist, with specific training in audiometry/hearing loss, is a good source of information. They can review your audiogram pattern and work history with you and/or recommend additional assessments or treatment for your condition.

How to submit a claim

If you think you have occupational traumatic hearing loss or occupational chemically induced hearing loss, complete a [Worker Report of Injury or Occupational Disease](#).

If you think you have occupational noise-induced hearing loss, complete the forms in the [hearing loss package](#).

Submit the completed report or forms, along with copies of all audiograms (past and current) to WCB.

Once received, a hearing loss adjudicator will review your claim and help you understand your eligibility for benefits and treatment. If the adjudicator is not able to accept your claim, they will suggest other sources of support.

