

Noise Induced Hearing Loss (NIHL)



An introduction
to Safetree™

safetree.nz

Noise Induced Hearing Loss (NIHL)

Forestry sites, especially harvesting operations, are extremely noisy. Tooters, saws, machinery, etc, mean NIHL is a very real risk if hearing protection isn't worn, or it's worn incorrectly.

NIHL is:

- ▶ **Progressive** – hearing is usually lost over time, but can be lost in one explosive event
- ▶ **Permanent** – once hearing is gone, nothing can bring it back
- ▶ **Preventable** – good hazard management, including PPE, will prevent NIHL.

Steps to PREVENT NIHL in forestry operations:

- ▶ Always use hearing protection correctly:
 - ▷ Wear the right kind of hearing protection for your job – most forestry operations require Class 5 hearing protection
 - ▷ Use earmuffs with built-in radio telephone speakers if you have to communicate
 - ▷ Don't wear earmuffs over beanies or hoodies as sound will leak in
 - ▷ Inspect earmuffs regularly for any sign of damage or wear and tear, especially torn muff seals from hard hats
 - ▷ Wear earmuffs or ear plugs whenever doing a job that requires them – taking them off for a minute here and there could add up to NIHL.
- ▶ Skid workers and tree fallers are exposed to the most noise:
 - ▷ Skid workers must wear hearing protection when within 20 metres of a chainsaw, disk cutter or logging machines
 - ▷ Tree fallers must wear it whenever using a chainsaw or standing next to someone using a chainsaw
- ▶ Breaker outs must wear hearing protection when using a chainsaw or driving tractors.
- ▶ For machine operators:
 - ▷ Keep the cab door closed as an open door doubles the noise exposure, but be aware that hearing damage can still happen inside a closed cab
 - ▷ Mount the tooter as far up the tower as possible as they are a major source of damaging noise
- ▶ Work away from operating machinery as much as possible. If you must work within 20 metres of working machinery, use hearing protection.

Noise Induced Hearing Loss (NIHL)



An introduction
to SafetreeTM

safetree.nz

Noise Induced Hearing Loss (NIHL)

How loud is too loud? Anything louder than normal street traffic noise (85 decibels–140 decibels at peak level) in an eight-hour period can damage hearing over time. The louder the noise, the quicker hearing will be damaged.

How is hearing damaged? Tiny hairs in the inner ear pick up sound waves. The waves make the hairs vibrate, sending signals to the brain, which interprets them into recognisable sounds. Loud noise makes the hairs vibrate too much and they become damaged and can't pick up sounds anymore. Nothing can restore the hairs once they're damaged.

What does hearing loss mean for me? Trouble talking to friends and family, listening to music, watching a movie, etc. You will also have trouble continuing to work in forestry because you can't hear safety instructions. Hearing aids have only limited benefit.

How fast can hearing damage happen? Daily exposure to very loud noise can cause permanent hearing damage, even if it's for just a few minutes each day. Hearing can also be damaged in one very loud event.

Whose responsibility is it to reduce noise and protect my hearing? Legally it's your employer's but we are all responsible for safety. Only you can be ultimately responsible for making sure you wear your hearing protection, and wear it properly, whenever you need it.

What should I do if I think my hearing is already affected? See your doctor. As with any condition, the sooner you seek help the better.

| Noise source | Impact on hearing without protection |
|--------------------------|--------------------------------------|
| Chainsaw (104–109dBA) | 1 to 7 minutes to damage hearing |
| Disk Cutter (100–109dBA) | 1 to 15 minutes to damage hearing |
| Bell Logger (99–100dBA) | 15 minutes |
| Hauler (76–96dBA) | 30 minutes |
| Waratah (76–96dBA) | 30 minutes |
| Loader (76–96dBA) | 30 minutes |