

Hearing Protection Toolbox Talk

Control noise at the source, limit the time people are exposed, and wear the right hearing protector correctly every time the site plan requires it. Hearing protection is the last line of defense, not permission to ignore a noisy tool or machine.

English safety review completed by Ben Sleeman, Credentialed safety reviewer; professional US construction-Spanish review completed by Ben Sleeman, Credentialed safety reviewer.

READ ALOUD (ABOUT 5 MINUTES)

Today's rule is simple: control jobsite noise at the source, keep exposure time down, and wear the right hearing protector correctly every time the site plan requires it. Hearing protection is not permission to ignore a noisy machine. Noise-induced hearing loss is permanent, often develops gradually, and can make it harder to understand instructions, hear alarms, or follow a family conversation.

This is a construction problem, not just a factory problem. NIOSH's construction surveillance page, updated in April 2026, reports that about 37% of construction workers were exposed to hazardous noise in the previous year, using 2023 data. Among noise-exposed construction workers whose hearing was tested in 2010 through 2019, about 23% had hearing impairment serious enough to make speech harder to understand.

Be precise about the numbers. Eighty-five dBA is not a universal federal OSHA legal limit for construction. It is NIOSH's recommended exposure limit when averaged over eight hours. Federal OSHA's construction rule uses Table D-2: 90 dBA for eight hours, 95 dBA for four hours, and 100 dBA for two hours, with shorter permitted durations as noise rises. Different noisy periods during the day add together; starting a different tool does not reset the exposure clock. An employer or project may use a more protective rule, and that rule must be followed.

Do not rely on your ears to measure exposure. Having to raise your voice to speak to someone about three feet away, ringing after a task, or sounds seeming dull at the end of the shift are warning signs, but they do not replace a sound-level meter or dosimeter. Before noisy work starts, identify who may be exposed, where the noise zone begins, and whether nearby trades will also be affected.

Start with the source. Choose a quieter tool or process when feasible. Maintain blades, bearings, mufflers, and compressed-air equipment. Move generators and compressors away from the crew. Use barriers, enclosures, isolation, or remote operation where they fit the task. Schedule noisy work and limit access so people who do not need to be there are not exposed. Administrative controls such as limiting duration can help, but simply moving the same exposure from one worker to another is not a complete solution.

Then select protection for the measured exposure, the task, and the other PPE being worn. Foam plugs must be inserted correctly. Earmuff cushions must seal around the ear; hair, hard-hat hardware, and safety-glass temples can break that seal. The Noise Reduction Rating on a package is a laboratory value, not a promise of the protection each worker receives. Individual fit testing is the best check. Plain cotton is not hearing protection, and consumer noise-canceling headphones are not occupational hearing protectors unless they are designed and labeled for that use.

Protection must also work with communication. Never remove a plug inside a noise zone just to hear a question. Move to a quiet area or use an approved communication system. If protection prevents you from hearing an alarm or required signal, stop and report the problem so the work plan or protector can be changed. Do not solve it by working unprotected.

Report ringing, muffled hearing, ear pain, a change in hearing, damaged noise controls, or a protector that will not fit. Participate in the site's hearing conservation program and hearing tests when provided. Before today's loudest task begins, every person should know the noise zone, the controls, the required protector, and who to contact when something changes.

INCIDENT EXAMPLE

Documented exposure case - NIOSH Health Hazard Evaluation 2003-0209-3015, Diversified Roofing Inc., Phoenix, Arizona: NIOSH evaluated roof crews cutting and installing concrete roofing tile. Eight full-shift personal noise samples were collected. All eight exceeded the NIOSH recommended exposure limit, and three exceeded OSHA's permissible exposure level. Investigators observed no employees wearing hearing protection; only two workers reported using it. NIOSH recommended a hearing-loss-prevention program and protection for everyone on the roof while saws were operating, with devices chosen for the intermittent noise. This was a documented exposure evaluation, not a reported hearing-loss injury, and it does not prove that a particular worker lost hearing.

CONTROLS TO COVER

- Assess expected full-shift exposure before noisy work and re-evaluate when tools, locations, or nearby operations change.
- Use quieter equipment or methods, maintain noise controls, and isolate, enclose, or move the source where feasible.
- Mark noise zones, limit unnecessary entry, and plan task duration or rotation without merely transferring the same exposure.
- Select hearing protectors for the measured exposure, required communication, and compatibility with hard hats, eye protection, and respirators.
- Train each worker to inspect, insert, seal, clean, and replace the chosen protector; use individual fit testing where available.
- Stop and report ringing, muffled hearing, communication problems, damaged controls, or a protector that will not fit properly.

CREW DISCUSSION

1. Which tools or operations will create our highest noise exposure today, including exposure to nearby crews?
2. What engineering or work-practice controls can we put in place before relying on hearing protection?
3. Where does the noise zone begin, what protector is required, and how will we communicate without removing it?

QUICK QUIZ

1. Is 85 dBA a universal federal OSHA construction legal limit?
No. It is NIOSH's eight-hour recommended exposure limit. Federal construction requirements use OSHA Table D-2, while an employer or project may adopt a more protective rule.
2. What should you do if you cannot hear a required alarm or signal while wearing protection?
Stop work and report it so the communication method, work plan, or properly selected protector can be corrected. Do not continue unprotected.
3. Do ordinary consumer noise-canceling headphones count as hearing protection?
Not unless they are designed, tested, labeled, and selected as occupational hearing protection for the exposure.

Reference: 29 CFR 1926.52, 29 CFR 1926.101, and 29 CFR 1926.95(c) - NIOSH reported in April 2026 that about 37% of construction workers were exposed to hazardous noise in the previous year, based on 2023 data. It also reported that about 23% of noise-exposed construction workers tested in 2010-2019 had material hearing impairment.

Sources: OSHA: 29 CFR 1926.52 Occupational noise exposure; OSHA: 29 CFR 1926.101 Hearing protection; OSHA: 29 CFR 1926.95 PPE design and proper fit; OSHA: Effective hearing conservation program elements for construction; OSHA: Noise-canceling headphones interpretation; NIOSH: Construction noise and hearing statistics; NIOSH: Provide hearing protection; NIOSH HHE 2003-0209-3015: Diversified Roofing Inc.

Toolbox Talk Sign-In Sheet

Attendance record for the talk above. Reviewers (OSHA, GC, ISNetworld/Avetta) expect topic, date, presenter identity, and attendee signatures.

Project / location

Date and time

Topic: Hearing Protection Toolbox Talk

Presenter (print)

Presenter signature

NAME (PRINT)	COMPANY / TRADE	SIGNATURE

Concerns raised and follow-up actions (owner, due date)