

# Construction Noise

## Hazard Alert



Most construction workers lose a lot of their hearing. You lose hearing slowly, so you may not notice. But if you can't hear, you may be in danger on the job.

Noise doesn't just hurt your hearing. You can also get tinnitus, a ringing sound in your ears. Too much noise can make you tired and nervous. It can raise your blood pressure and add stress that can help lead to heart disease.

### Exposure Levels

Noise levels are measured in decibels (dBA). We talk at about 70 decibels. Decibels are measured on a scale like the one for earthquakes. So when the decibels go up a little, the noise goes up a lot. 73 decibels is 2 times as loud as 70. OSHA has rules about how long you may be exposed to a noise level, before you must wear hearing protection:

Allowed to be unprotected	At this noise level
Up to 8 hours	90 decibels
Up to 4 hours	95 decibels
Up to 1 hour	105 decibels

When the noise is 95 decibels, OSHA says you may work with no hearing protection for only 4 hours. Even so, this noise level is not safe; 1 in 5 people exposed regularly to 90 decibels (as OSHA allows) will lose some hearing. Short, very loud (impact) noises can do the most harm.

**If you have to raise your voice for someone 3 feet away to hear you, the site may be too noisy and you need hearing protection.**

Most construction noise comes from equipment. These decibel levels have been measured:

Equipment	decibels	Equipment	decibels
Pneumatic chip hammer	103-113	Earth Tamper	90-96
Jackhammer	102-111	Crane	90-96
Concrete joint cutter	99-102	Hammer	87-95
Portable saw	88-102	Earthmover	87-94
Stud welder	101	Front-end loader	86-94
Bulldozer	93-96	Backhoe	84-93

The noise levels change. The noise from an earthmover is 94 decibels from 10 feet away. The noise is only 82 decibels if you are 70 feet away. A crane lifting a load can make 96 decibels of noise; at rest, it may make less than 80 decibels.

*(Please turn the page.)*

## Protect Yourself

Try to do five things:

- **Make the workplace quieter.** Ask contractors to buy quieter models when they buy new equipment. Good maintenance, new mufflers, and other changes can make a difference too. Put sources of loud noise, like compressors and generators, as far away from the work zone as possible. Also, plywood or plastic sheeting set up around machinery can shield noise.
- **Cut the time you spend around loud noises.** Ask to have workers rotated from noisy jobs to quieter jobs, if possible. Take rest breaks away from noisy spots.
- **Wear protective equipment.** OSHA says, if changes the contractor makes do not get noise levels low enough, you must wear hearing protection.\* And you should be trained to use it.

Use hearing protection that is easy to put on and take off. Some hardhats have earmuffs for hearing protection that can be lifted out of the way when you don't need them. Some ear plugs have neckbands so you don't lose them if you take them off.

- **Have your hearing checked each year.** Ask for at least a standard pure-tone test. Tell them your work is noisy, so they will know you may have lost some hearing.
- **Measure the noise on site.** Your local union can buy a low-cost sound meter.

## You Should Know

Many workers don't want to use hearing protection. They are afraid they won't hear warning signals, like backup alarms. But some new protectors can let in voices and block other noises. You may not need the hearing protection designed for the loudest noises – just something comfortable that lets you hear talking and takes away some of the noise around you.

**For more information,** call your local union, the Center to Protect Workers' Rights (CPWR) (301-578-8500 or [www.cpwr.com](http://www.cpwr.com)), the National Institute for Occupational Safety and Health (1-800-35-NIOSH or [www.cdc.gov/niosh](http://www.cdc.gov/niosh)), or OSHA (1-800-321-OSHA or [www.osha.gov](http://www.osha.gov)). Or go to [www.elcosh.org](http://www.elcosh.org).

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\*The OSHA standard (1926.52) says it "shall be provided."