Compliments of Chicago Safety Institute

Sounds crazy! Noisy work? Most construction workers lose a lot of their hearing. Your business is more safe than most yet still we have to be careful and it's your company policy to prevent hearing loss. 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. Also protect yourself at home or in the car from noise like turn down that 150 Watt Power Booster on your favorite tunes enjoy the music not the waves vibrating your head and delicate ear drums!

Exposure Levels

Noise levels are measured in decibels (dBA). Usually the A Scale we hear in that range. 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 or if you don't hear as well when you leave as when you arrived and that could be a temporary threshold shift.

Most construction noise comes from equipment like a vacuum truck. At the source it can be as loud as any of the following. So stand close enough to operate but at a distance when you can and use your hearing protection. Do not put dirty or oily hearing protection in your ears get another set. These decibel levels have been measured¹:

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.

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 when you get your physicals and baseline physicals for perforated ear drums.
- Measure the noise on site or get the Manufacturers specifications on the machine or Vacuum trucks.

You Should Know

Many workers don't want to use hearing protection or forget to grab an extra set of ear plugs. 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. (Check with your Supervisor for the right ear plug)

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