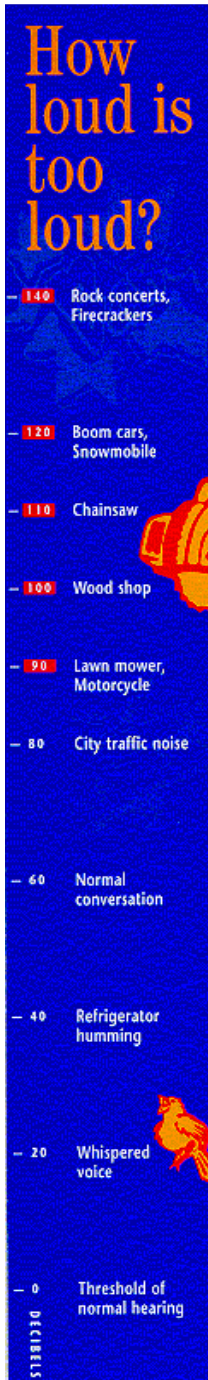




Shop Safety Tips

Noise Induced Hearing Loss



Question: What is painless, odorless, tasteless, invisible, and toxic?

Answer: Noise Induced Hearing Loss (NIHL)

NIHL can be caused by a one-time exposure to loud sound as well as by repeated exposure to sounds at various loudness levels over an extended period of time. The loudness of sound is measured in units called decibels. (A unit that measures the intensity or loudness of sound) For example, normal conversation is approximately 60 decibels, a running belt sander is 93 decibels, and city traffic noise can be 80 decibels. Sources of noise emitting sounds from 120 to 140 decibels are dangerous, however sounds of less than 80 decibels, even after long exposure, are unlikely to cause hearing loss.

Exposure to harmful sound levels over time causes damage to the sensitive hair cells of the inner ear as well as the hearing nerve. These structures can be injured by two kinds of noise: loud impulse noise, such as an explosion, or loud continuous noise over time, such as that generated in a woodworking shop.

What are the effects of NIHL?

Impulse sound can result in immediate hearing loss that may be permanent. The structures of the inner ear may be severely damaged. This kind of hearing loss may be accompanied by tinnitus (a ringing, buzzing, or roaring in the ears or head) which may subside over time. Hearing loss and tinnitus may be experienced in one or both ears, and tinnitus may continue constantly or occasionally throughout a lifetime. Continuous exposure to loud noise also can damage the structure of the hair cells, resulting in hearing loss and tinnitus. Exposure to impulse and continuous noise may cause only a temporary hearing loss. If the hearing recovers, the temporary hearing loss is called a temporary threshold shift. The temporary threshold shift largely disappears 16 to 48 hours after exposure to loud noise.

Both forms of NIHL can be prevented by the regular use of hearing protectors such as earplugs or earmuffs.

NIHL can be prevented

NIHL is preventable. Woodworkers should understand the hazards of noise in the shop and how to practice good health in everyday life.

- Know which tools have noise levels that can cause damage (those above 90 decibels).
- Wear earplugs or other hearing protective devices when working in the shop. (earplugs and earmuffs are available at hardware stores)
- If you have concerns regarding your hearing, see a healthcare professional