Indiana University Office of Environmental Health & Safety Management

Noise & Hearing Conservation Factsheet

Approximately 30 million workers are exposed to hazardous levels of noise on the job. Another 9 million are at risk for hearing loss from other agents such as solvents and metals.

- Noise induced hearing loss is caused by damage to the hair cells found in the inner ear. Hair cells are small sensory cells that convert the sounds we hear (sound energy) into electrical signals sent to the brain.
- Once damaged, our hair cells cannot grow back, causing permanent hearing loss.

- The Cost of Losing Your Hearing
  When you lose your hearing, there is a loss to your quality of life. Untreated hearing loss may:
  - Strain relationships with family, friends, and/or co-workers.
  - Stop you from doing the things you enjoy.
  - Impact your earning power on the job.
  - Reduce your ability to understand what people are saying.

- Preventing Hearing Loss
Although hearing loss is a common effect of aging, some Americans are starting to lose their hearing earlier as a result of exposure to noise, noise-induced hearing loss. **Noise-induced hearing loss is 100% preventable.**

- Wear hearing protection such as ear plugs and earmuffs when being exposed to levels of noise over 85 decibels (dB) for extended periods of time. (Look for the NRR rating to know the approximate dB reduction the ear protection provides.)

- A quick reference for levels of noise:
  - 60 dB—Normal conversation
  - 80 dB—Alarm clocks
  - 90 dB—Hair dryers, blenders, and lawn mowers
  - 100 dB—MP3 players at full volume
  - 110 dB—Concerts, car racing, and sporting events
  - 120 dB—Jet planes at take off
  - 130 dB—Ambulances and fire engine sirens
  - 140 dB—Gun shots, fireworks, and custom car stereos at full volume

For more information contact:
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Source: American Academy of Audiology