

Best Practice Briefing

No.: BP11-0003

Title: The Full Benefits of Hearing Protection

Event: LBNL Event

Event Date: 12/21/2011

Category: ES&H - Construction Safety, Shop Safety, Noise

Best Practice:

The best way to protect your hearing is to consistently use hearing protection whenever noise levels are above 85 dBA, irrespective of exposure duration. Hearing protection must be used all the time when working in high noise areas to get the full benefit.

Discussion

Everyone knows that exposure to high noise levels can cause hearing loss, but how do you know when noise levels are in the range that might be detrimental to your hearing? In general, noise may be at a hazardous level anytime that you must raise your voice to communicate with someone three feet away.

Even when exposure to high noise levels is of short duration, such as the brief use of compressed air to clean off equipment or during brief entry into a noisy mechanical space, hearing protection should be worn. Over time, unprotected short duration exposures to high noise levels can contribute to hearing loss. While hearing aid technology has improved in recent years, it cannot restore your hearing to its pre-damaged state. Hearing loss associated with both occupational and non-occupational noise exposure is totally preventable.

When hearing protectors are removed in high noise environments, even for short periods of time, it greatly reduces their overall effectiveness. The attached table, which comes from the Canadian Center for Occupational

Health and Safety, illustrates the maximum protection provided by an ideally fitted 100% efficient hearing protector under a non-continuous use situation. For instance, if the hearing protector is removed for 5 minutes in an 8-hour shift of continuous noise, the maximum protection afforded by the hearing protector would drop from 30 dB to 20 dB. Hearing protection must be used all the time when working in high noise areas to get the full benefit.

Contact the Industrial Hygiene Group to evaluate noise levels in your work area if you suspect there may be a noise hazard present.

Uploaded documents/attachments:

[Maximum protection provided.pdf](#)

[Give feedback for this briefing](#)

For other lessons learned and best practices, go to [Lessons Learned and Best Practices Library](#)
