

LOSS CONTROL DATA GUIDE

## Noise Control

Noise-induced hearing loss is a significant work-related injury. Recent estimates show that between 7 and 10 million persons work at sites where the noise level presents an increased risk of hearing loss. Of these workers, about 1.6 million already have at least mild hearing loss, 1.1 million have measurable hearing loss, and 0.5 million have moderate to severe hearing loss.

The Occupational Safety and Health Administration (OSHA) adopted the Hearing Conservation Amendment (29 CFR 1910.95) in 1983 to protect workers from the adverse effects of exposure to excessive levels of constant, intermittent, and/or impact noise. The Amendment requires that, once an excessive noise exposure level (equal to or exceeding an 8-hour time-weighted average action limit of 85 dBA) is identified, the employer must reduce worker exposure to the permissible exposure limit (90 dBA or less) by implementing engineering or administrative controls, or a combination of both.

Since every noise exposure can be broken down into 3 parts:

1. source which generates noise
2. path along which noise travels
3. receiver; the person exposed to the noise

it follows that noise exposure can be eliminated/reduced/controlled by taking appropriate action at either the noise source, along the noise path, or at the receiver.

Specific noise control measures include:

### At the noise source

- Eliminate the noisy machinery/equipment or process
- Substitute with less noise machinery/equipment or process
- Alter or change the machinery/equipment or process to reduce the amount of noise generated
- Enclose/isolate the noisy machinery/equipment or process

### Along the noise path

- Increase the distance between the noisy machinery/equipment or process and the exposed workers
- Place shielding between the noisy machinery/equipment or process and the exposed workers
- Provide sound-absorbing/deadening material along the noise path

### At the receiver

- Enclose/isolate the exposed workers
- Provide personal protective equipment (full-head enclosures, ear muffs, ear plugs, etc.) to exposed workers
- Rotate workers to reduce worker exposure time
- Modify noisy machinery/equipment or process work schedules to reduce worker exposure

For additional information of the OSHA Hearing Conservation Amendment, refer to Loss Control Data Guide F.13407E, "Highlights of Federal Hearing Conservation Program".

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to imply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.