

WORK-RELATED HEARING LOSS

WHAT IS THE PUBLIC HEALTH PROBLEM?

- Millions of U.S. workers are exposed to potentially hazardous noise at work, and 9 million of them also are exposed to chemicals that can damage hearing.
- Of the 28 million Americans with hearing impairment, half suffer from noise-induced hearing loss.
- Occupational hearing loss is irreversible, yet it is 100% preventable.
- Many employers lack resources and strategies to control damaging noise levels.
- The widespread reliance on personal hearing protection has not been effective in preventing occupational hearing loss.

WHAT HAS NIOSH ACCOMPLISHED?

The National Institute for Occupational Safety and Health (NIOSH) has conducted research and widely disseminated scientific guidance for the prevention of noise-induced hearing loss. NIOSH research and guidance has provided the scientific basis for U.S. national workplace standards to prevent noise-induced hearing loss among miners and employees of other industries.

Examples of program in action:

- Recent NIOSH research identified that the laboratory rating method for personal hearing protection often overestimates the protection provided to workers. Based on those findings, the American National Standards Institute endorsed new test methods. As a result, ratings advertised on personal hearing protection will now reflect the level of protection the devices provide in real-world settings versus those in testing laboratories.
- NIOSH recently completed a cooperative research effort with the Nevada Mining Association to assess the effectiveness of engineering noise controls on operating mine equipment in several underground metal mines. The research study is the first of its kind. Findings are being used by industry and government to improve the working conditions of the mining workforce.
- Under a cooperative agreement, NIOSH is developing a computer-based system that will assist in tracking hearing conservation data among workers (e.g., noise exposure levels, use of hearing protection, and medical histories). The completed electronic system will be usable in most occupational safety and health situations. Coalition partners for this initiative include automobile industry employers and workers, acoustic consultants, and computer software experts.

WHAT ARE THE NEXT STEPS?

NIOSH is working with the National Institutes of Health and other organizations to promote widespread use of improved protections against hearing loss. New efforts regarding noise control research will focus on workers at high risk in the construction and mining industries.

Additional information is available at www.cdc.gov/niosh/topics/noise. For more information on other NIOSH programs, visit www.cdc.gov/niosh/docs/pib/. March 2004

