The audiologist’s role in preventing noise-induced hearing loss  
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Course Abstract

It has been estimated that over 100 million Americans are exposed to routine noise levels high enough to cause hearing loss. Noise at work and in everyday life not only poses a threat to hearing, but may also be associated with general health problems such as sleep disturbance, stress, hypertension, heart disease, and even injuries. Research shows that children as well as adults are exposed to significant noise hazards on a routine basis. Of special concern is speculation that children may be more susceptible to the effects of noise than previously thought. Despite its pervasiveness in our everyday lives, noise rarely receives much attention in federal and state public health agendas. Audiologists have an important role to play in managing this prevalent hazard among people of all ages.

The presenter will describe the magnitude of noise exposures associated with common sources of non-occupational noise. Many recreational activities are associated with high sound levels, such as hunting/target shooting, using power tools, operating motorized vehicles such as motorcycles, snowmobiles, and ATVs, listening to loud music, and attending noisy sporting events. Actual risk to hearing is based in great part on individual susceptibility (not readily quantifiable with the current state of the art). More quantifiable factors that influence hearing risk include the level of the sound and the duration and frequency of exposure (how loud, how long, and how often). Risk criteria for hearing damage are based on the concept of increased risk with increased dose, a function of the how loud and how long part of the equation. The presenter will define relevant exposure guidelines for occupational vs. community noise, including appropriate techniques for measuring and understanding in-ear noise exposures related to personal music players. Participants will also learn practical and feasible ways to integrate hearing loss prevention into clinical service delivery and community outreach activities.

RECOMMENDED READING


**WEBSITES/ORGANIZATIONS**

Council for Accreditation in Occupational Hearing Conservation (CAOHC)  
[www.caohc.org](http://www.caohc.org)

Dangerous Decibels  
[www.dangerousdecibels.org/](http://www.dangerousdecibels.org/)

National Acoustic Laboratories, Commonwealth Department of Human Services, Australia  

NASA Glenn Research Center, Acoustical Testing Laboratory  
[www.grc.nasa.gov](http://www.grc.nasa.gov)

National Hearing Conservation Association (NHCA)  
[www.hearingconservation.org](http://www.hearingconservation.org)

National Institute for Occupational Safety and Health (NIOSH)  
[www.cdc.gov/niosh](http://www.cdc.gov/niosh)

Noise Pollution Clearinghouse  
[www.nonoise.org](http://www.nonoise.org)

Wild Sanctuary  
[www.wildsanctuary.com](http://www.wildsanctuary.com)