

Non-Occupational Noise - Quantifying Noise Exposures



Along with researchers at the University of Kansas, CavCom's Dr. Susan Cooper has published a new method for quantifying noise exposures both on and off the job. Published in the *Journal of the American Academy of Audiology*, this detailed, task-based analysis tool results in an annual noise exposure value based on time and duration of exposures throughout the previous year.

The evaluation tool is a self-administered Noise Exposure Questionnaire (NEQ), which takes approximately 10 minutes to complete. Individuals are asked to recall noisy activities during the past year, including routine activities and any that are seasonal or infrequent (e.g., hunting, snowmobiling, attending music concerts or sporting events). Answers to the NEQ are then used to compute an annual noise exposure (ANE) value.

Current case history tools typically focus on whether a person participates in noisy activities but do not quantify the time spent in these activities. In the new ANE approach, both occasional and routine/daily exposures are combined to produce an overall noise exposure estimate. It is the combination of sound level and duration that increases risk: **how loud, how long, and how often**. These tools can be used by hearing conservation professionals to focus hearing loss prevention efforts toward those individuals at greatest risk on or off the job.

For a copy of the questionnaire, contact [Dr. Susan Cooper](#)

To learn more:

Johnson, Cooper, Stamper & Chertoff (2017). [Noise Exposure Questionnaire: A Tool for Quantifying Annual Noise Exposure](#), *Journal of the American Academy of Audiology*

[Noise Pollution Update](#), CavCom *SoundBytes*

[Understanding Noise Exposure Limits: Occupational vs. General Environmental Noise](#). NIOSH Science Blog, February 8, 2016.