

Abstract

This study is expanding an existing study titled, "The Effect of Military Noise Exposure on Tinnitus and its Outcomes in Recently-Discharged Veterans Seeking VA Health Care." The existing study is less formally referred to as the Noise Outcomes In Servicemembers Epidemiology (NOISE) study. The primary objective of the NOISE Study is to obtain initial data to address the etiology, prevalence, and effects of tinnitus and hearing loss among newly-discharged military Veterans who are seeking VA services.

The NOISE Study is being expanded to an additional study site in San Antonio, Texas. The Hearing Center of Excellence (HCE) is staffing the site and overseeing all study activities, which will be carried out at the San Antonio Military Health System (SAMHS). Active duty military servicemembers will be recruited from the Brooke Army Medical Center (BAMC) and Wilford Hall Ambulatory Surgical Center (WHASC). Active duty participants will enroll in the study and undergo testing at BAMC and/or WHASC.

The inclusion of active military members provides noise exposure data during, rather than following, military service. Participants' noise exposure history will be updated every year through the end of their service and following their service, for as long as the study is funded. While it might be expected that the noise exposure history of active duty military servicemembers would resemble that of recently-discharged Veterans, no data support this assumption. The data obtained from active military participants will allow analyses to determine if differences exist in reported noise exposure during military service compared to after leaving military service. If such differences exist, they might be attributed to the recall of more recent events while in the military, while such recall may not be as accurate following discharge. Obtaining an accurate history of noise exposure is essential, and the addition of active military to this study will help to determine the most accurate means of obtaining this information.

By conducting this epidemiology study, we will collect cross-sectional data allowing us to investigate the relationships between military noise exposure and these debilitating health problems. This study will provide the foundation for a longitudinal database, which will provide a better understanding of the causes of tinnitus and other hearing-related problems among military Veterans. Additionally, this study responds to the congressionally mandated Institute of Medicine report called, "Noise and Military Service: Implications for Hearing Loss and Tinnitus" that recommends research be conducted to document Veterans' military noise exposures immediately following discharge from service and perform follow-up evaluations in order to determine the effects of military versus post-military noise exposures on early- and delayed-onset tinnitus and hearing loss.