



NOISE Study Team Members: (left to right) top row: Brandon Smith, BS; Wendy Helt, MA; Leslie Grush, AuD; Leah Barger, BSPH; Emily Thielman, MS; Aneka Sonstroem, BA; Jim Schultz, AuD; Samrita Thapa, MPH; bottom row: Sarah Theodoroff, PhD; Kelly Reavis, PhD; James Henry, PhD; and Susan Griest-Hines, MPH.

Happy 2022 from the NOISE Study Team!

Our team is so grateful for your continuing participation in the NOISE Study. Your data helps us answer important scientific questions about the relationships between military exposures (like loud noise, chemicals, blasts, and TBI), hearing loss, tinnitus, and physical and mental health. Our research findings are critical for future efforts to improve hearing health in Service members and Veterans.

In February, the NOISE Study will begin its 8th year of data collection! We're really interested in the possible long-term effects of military exposures, so we hope to keep collecting data from our group of Veterans and Service members for 20 years or longer. Thanks for sticking with us!

Best regards,



James Henry and the NOISE Study team

Coming soon:

- Text reminders for appointments and questionnaires!
- Required re-consent (see "Why Reconsent?" below)

Why Reconsent?

The NOISE study recently received additional funding from a VA grant to continue our research. Because this is a different funding source than we had before, we were required to set up new administrative documents, and we are required to get your consent to provide data under this new funding. Completing the re-consent process allows you to continue to help us answer our scientific questions on the long-term effects of military exposures. If you have not re-consented, please contact our study team to do so by March 1, 2022.



New phone number?



New email?



New address?

If you have updated contact information, please let us know! Call (503) 220-8262 ext. 55949.

Site Updates

NOISE to add third study site in Southern California!

This new site will be in conjunction with the Naval Medical Center San Diego, Marine Corps Air Station Miramar, and Naval Hospital Camp Pendleton and will help the study reach more Navy and Marine Corps Service members. Set-up for the site will begin in 2022.



At the Portland site:

630  participants are enrolled

82% have returned follow-up data

1405 sets of annual questionnaires have been received!

At the San Antonio site:

397  participants are enrolled

75% have returned follow-up data

608 sets of annual questionnaires have been received!

What We're Learning

As always, the NOISE study team has been busy analyzing data to understand how military exposures affect Service members and Veterans! Here are some of our recent findings.

Baseline NOISE data

An analysis of the first 690 participants enrolled in the NOISE Study showed 8% of this sample had hearing loss in the low frequencies, 20% had hearing loss in high frequencies, 39% had hearing loss in extended high frequencies, and 53% reported tinnitus.

Exposure to blasts in the military

Service members and Veterans with blast exposure had a higher prevalence of both probable PTSD and self-reported hearing difficulty than those who were not blast exposed. Compared with participants without blast exposure, those with blast exposure had twice the prevalence of self-reported hearing difficulty; PTSD appears to play a role in this association.

Linking DoD Hearing Conservation data to NOISE data

The NOISE Study recently linked audiometric data, collected from military personnel as part of a DoD hearing conservation program, to data describing demographic and military-service characteristics obtained from individuals enrolled in the NOISE Study. We analyzed this data to determine how their hearing thresholds changed over time. Changes in hearing were found to vary by service branch and level of military occupational noise exposure.

Sharing our Findings with the Scientific Community

So far, the NOISE Study has published 13 articles in peer-reviewed scientific journals. Here are a few recent publications:

Griest-Hines, S. E., Bramhall, N. F., Reavis, K. M., Theodoroff, S. M., & Henry, J. A. (2021). **Development and initial validation of the Lifetime Exposure to Noise and Solvents Questionnaire in US Service members and Veterans.** *American Journal of Audiology*, 1-15. https://doi.org/10.1044/2021_AJA-20-00145

Henry, J. A., Griest, S., Reavis, K. M., Grush, L., Theodoroff, S. M., Young, S., ... & Carlson, K. F. (2021). **Noise Outcomes in Servicemembers Epidemiology (NOISE) Study: Design, methods, and baseline results.** *Ear and Hearing*. <https://doi.org/10.1097/AUD.0000000000000974>

Schultz, J., Cline, J., Griest, S., Grush, L., Henry, J.A. (2020). **NOISE Study: Examining hearing loss, tinnitus in the U.S. military.** *The Hearing Journal*, 73(7), 42-44. <https://doi.org/10.1097/01.HJ.0000689448.28258.92>