



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Facial, Hearing, and Visual Injuries

Safe-Use Restrictions for Weapons and Improving PPE for Impulse Noise Protection

To reduce the risk of noise-induced hearing loss for Service Members, the Army Hearing Program (AHP) Noise Control Engineer provided safe-use restrictions for new weapons and weapon systems introduced into the Army's arsenal. In FY15, the AHP Noise Control Engineer conducted health hazard assessments for approximately 24 new materiel items and provided risk mitigation requirements, including PPE requirements and use restrictions, for safe use of the new materiel. The AHP Noise Control Engineer also prepared and instituted both Web-based and face-to-face programs to train industrial hygienists on the proper techniques for measuring and evaluating impulse noise, which are critical for properly assessing injury risk. The AHP also participated in several activities aimed at improving PPE for impulse noise protection. The AHP participated in a project with ARL Human Research and Engineering Directorate to continue developmental work on the hearing protection module for the AHAAH model. This capability enables the evaluation of impulse noise when hearing protection is worn using the AHAAH electroacoustic model of the ear and predicts the reduction of impulse noise at the ear afforded by all forms of hearing protection. The AHP consulted with PEO Soldier to make the Tactile Communication and Protective System non-radio hearing protection a Program of Record in FY15. The Tactile Communication and Protective System is a device that offers hearing protection while maintaining situational awareness by attenuating loud sounds without attenuating quieter sounds.