



US DEPARTMENT OF DEFENSE

# BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## Protective Equipment

### The AHP USAPHC: Providing Safe Use Restrictions for Weapons, and Improving PPE for Impulse Noise Protection and Improving Data Taking Skills

To reduce the risk of noise-induced hearing loss for Service Members, the AHP provided safe use restrictions for new weapons and weapon systems introduced into the Army's arsenal. In FY14, the AHP conducted health hazard assessments for approximately 25 new materiel items and provided risk mitigation requirements, including PPE requirements and use restrictions, for safe use of the new materiel. The AHP 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 is 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 USARL's Human Research and Engineering Directorate to develop a new hearing protection module for the AHAH model. This new capability enables the evaluation of impulse noise when hearing protection is worn using the AHAH electroacoustic model of the ear and predicts the reduction of impulse noise at the ear afforded by all forms of hearing protection. The AHP also consulted on several PPE projects that are characterizing requirements for impulse noise attenuation, speech intelligibility, and auditory situational awareness. The AHP consulted with the acquisition and auditory research community to define the hearing protection technology capabilities that best meet Service Members' needs; today's devices are significantly better than those of the previous generation and are more accepted for use by Service Members. Additionally, the AHP consulted with PEO Soldier to make the TCAPS of hearing protection a Program of Record in FY14. TCAPS is a device that offers hearing protection while maintaining situational awareness by attenuating loud sounds without attenuating quieter sounds. AHP is working to acquire a second radio-less version of the TCAPS.