



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Risk Assessment and Surveillance

The Blast Gauge to Record Overpressure

The US Army's PM SPIE Program Office is sponsoring and conducting R&D supporting the Blast Gauge, which is a set of small, lightweight sensors that record blast overpressure. Blast Gauge sensor technology is placed on the top of the non-firing shoulder, near the middle of the chest, and on the back of the helmet retention system. The goal of the Blast Gauge is to gather data to determine a correlation between blast overpressure and mTBI or other injuries. Overpressure data recorded by the Blast Gauge is categorized into one of three mTBI risk levels (i.e., green, amber or red) for potential referral for medical evaluation. Additionally, soldiers can check their overpressure exposure level at any time using a button press. Blast Gauge data are downloaded in theater and provided to the JTAPIC Program for analysis and correlation with Service Member medical records to determine the effect of blast overpressure on health outcomes.