

US DEPARTMENT OF DEFENSE BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Threat Analysis

Development of Blast Overpressure Exposure Threshold Guidelines for Commanders

The Naval Medical Research Center (NMRC), with funding from the USAMRMC, is developing and testing environmental sensors for detecting blast overpressure intensities. Investigators led the effort to determine blast overpressure sensor requirements for the Army breacher, artillery, and mortar communities. Also resulting from this work is the characterization of the annual overpressure exposure profiles for M119 Artillery, M81 Mortar, and M120 Mortar crews. Continuing work will address the acute effects of blast exposure in military and law enforcement personnel. This program is designed to develop blast-exposure guidelines for DoD communities routinely exposed to blast events. These guidelines will be the first to provide decisional support to commanders in the form of thresholds that will inform them when Service Members have reached the safety limit of exposure that would put them at risk for long-term mTBI-related medical conditions.