



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Injury Models

Pelvic Model with Multi-Sensory Data Acquisition

Quantitative modeling of sensor data allows researchers to understand the risk of injury following blast events, and contributes to the development of PPE to mitigate those risks. Researchers at Physical Optics Corporation (POC), sponsored by USAARL and USAMRMC, are developing a multisensory pelvic region ATD to predict potential blast injury to the pelvic, abdominal, and genital areas. POC has developed a prototype multi-sensory ATD that measures acceleration, pressure, strain, and temperature associated with blast. Quantitative modeling of the data is being used to refine the system design. This research is intended to contribute to the development of PPE for the pelvic region against IEDs and dismounted complex blast injury.