



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Blast Exposure Analysis

Naval Health Research Center Data and Analysis Support to the Joint Trauma Analysis in the Prevention of Injuries in Combat (JTAPIC) Program

The Naval Health Research Center (NHRC) is intimately involved in supporting the JTAPIC Program through the provision of the coded injury information that is associated with each combat event where a Service Member is injured. The NHRC provides a weekly analysis of all combat casualties occurring in the previous seven days during overseas contingency operations to the JTAPIC Program Office. For each wounded Service Member, the medical data obtained from NHRC's Expeditionary Medical Encounter Database (EMED) is thoroughly reviewed at NHRC and a clinical profile is developed describing a casualty's injury characteristics. Each casualty's injuries are then coded on various diagnostic and injury severity taxonomies by registered nurses. In addition to injury analyses conducted at NHRC, these detailed clinical profiles are then made available to the JTAPIC partnership for additional analysis where tactical data (such as weapon type, explosive weight, strike point) are matched to the injury profiles. This mapping of medical to tactical data allows vehicle and personal protective equipment (PPE) developers to design targeted modifications to improve vehicles and PPE, thereby reducing the frequency and severity of injury. Because of the common requirement for medical data, NHRC participates in nearly every JTAPIC partnership analysis. In FY16, there were 21 JTAPIC products that used medical information provided by NHRC. In addition to supplying coded medical data, NHRC actively participates and produces medical analysis products for JTAPIC. During FY16, NHRC provided analysis for six products and acted as lead organization on three. The immediate availability of medical data and the provision of analysis allow the intelligence community to monitor the effectiveness of the insurgency threat's evolution and permits rapid responses to identify and defeat new and emerging threats—directly reducing casualty rates.

