



US DEPARTMENT OF DEFENSE

# BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## Threat Analysis

### NHRC Data and Analysis Support to the JTAPIC Program

The 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. 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 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, and strike point) are matched to the injury profiles. This mapping of medical to tactical data allows vehicle and personal protective equipment developers to design targeted modifications to improve vehicles and personal protective equipment, 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 2015, there were 28 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 2015, NHRC provided analysis for 10 products.

The immediate availability of medical data and the provision of analysis allows the intelligence community to monitor the effectiveness of the insurgency threat's evolution. This permits rapid responses to identify and defeat new and emerging threats—directly reducing casualty rates. Because casualty medical data are mapped to tactical data, the DoD vehicle and PPE development communities can directly target materiel designs and enhancements to those threats and injury types producing the most serious and debilitating injuries. This allows the minimum amount/weight of PPE to be worn because body coverage required is precisely targeted.