



US DEPARTMENT OF DEFENSE
BLAST INJURY RESEARCH PROGRAM
COORDINATING OFFICE

Health Outcomes Following Extremity Trauma

Long-term Quality of Life (QOL) Outcomes in Injured Tri-Service Service Members: The Wounded Warrior Recovery Project

The long-term effects of blast-related injuries and diagnoses are not well understood. To better understand the consequences of these combat injuries on Service Members' long-term health and readiness, the Naval Health Research Center (NHRC) in San Diego, California, is longitudinally assessing clinical, rehabilitative, and QOL outcomes in injured Service Members. This project, named the Wounded Warrior Recovery Project (WWRP), is being conducted with funding support from the Navy Bureau of Medicine and Surgery (BUMED) under the Wounded, Ill, and Injured (WII) Program and the Department of Defense (DoD)/Department of Veteran Affairs (VA) Extremity Trauma and Amputation Center of Excellence (EACE). Each of the more than 55,000 Service Members injured in Iraq and Afghanistan beginning in October 2001 is currently being contacted and invited to participate in WWRP. WWRP is a 15-year, longitudinal, prospective, population-based survey study of injured Service Members, with surveys being administered every six months to gauge physical health, mental health, and QOL outcomes. To date, 4,235 injured Service Members have provided informed consent and enrolled in the study and over 13,000 surveys have been collected. Approximately 79 percent of respondents were injured in a blast event (Table 1). In all respondents, injuries to the head and spine are associated with worsened psychosocial outcomes. Future follow-up surveys will integrate more specific measures of interest, including pain and social support, and prosthetic use/satisfaction in the amputee population. These discrete measures may provide insight into the nexus between QOL and specific target areas of concern, as well as focus on severe blast injuries. This study is being conducted predominantly online, with supplemental telephone and paper surveys for those Service Members who cannot respond online. The project's public facing website can be viewed here: www.wwrecoveryproject.org.

WWRP is the first and only initiative to longitudinally study injured Service Members and examine their long-term physical health, mental health, and QOL outcomes after combat injury. By assessing long-term QOL outcomes, NHRC, EACE, DoD, and VA can evaluate those clinical treatments, rehabilitative programs, and prosthetics/orthotics that are actually moving the QOL meter for injured Service Members and those that are not. This not only results in immediate and real improvement in the quality of care delivered, but also in immense cost savings now and throughout the lifetime of care that many of these Service Members will require. WWRP continues to produce manuscripts, presentations, technical reports, and recommendations.

TABLE 1: Characteristics of Wounded Warrior Recovery Project (WWRP) Respondents

Demographic Averages	Branch of Service (%)		Mechanism of Injury (%)	
98% Male	Army	67%	IED	64%
33 years of age (SD=7.2)	Marine Corps	29%	Non-IED blast	15%
4.8 years since injury (SD=2.9)	Navy	3%	Gunshot wound	11%
	Air Force	1%	Other mechanism	10%

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