Combat Injury Trends in U.S. Marines: 2009-2011 OIF/OEF

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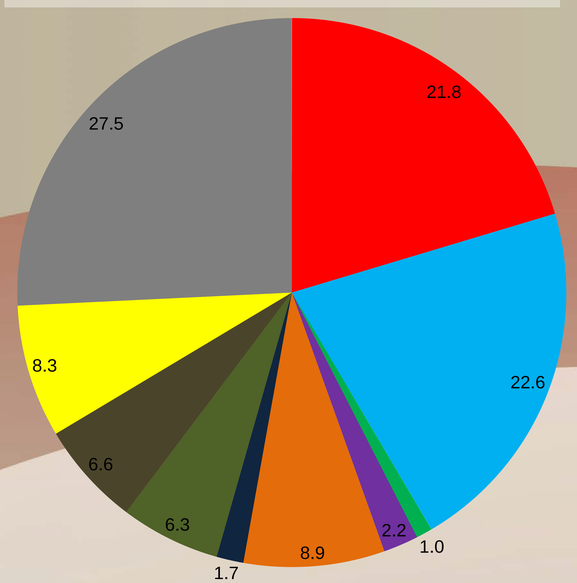
ABSTRACT

Purpose: To survey U.S. Marines that reported specific musculoskeletal injuries between 2009 and 2011 in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) and conduct limited case studies to further understand the relationship between loads carried and injury type and location. **Methods:** An electronic survey was sent via SurveyMonkey to Marines who experienced those injures. **Results:** Based on those responses, 50% of all reported injuries were due to a work-related activity, 26% occurred while engaged in some form of physical training, 13% reported "other" injuries (e.g., walking), and 11% reported participating in Marine Corps Martial Arts Program. Twenty-five percent of Marines reported injuries while on patrol (67% dismounted, 33% mounted). **Conclusions:** Anecdotally, these Marines suggested that while their load may not have been a primary factor in their injury, the loads were related to secondary injuries, such as chronic back and shoulder pain. This study showed that 50% of injuries sustained in theater by the respondents were due to work-related tasks. The next highest incidence of injuries was from physical training type activities. While loads carried were not a direct cause of injury, case study interviews suggested that chronic load carriage exacerbated an existing injury or prevented healing.

PURPOSE:

Purpose: To review the Navy-Marine Corps Combat Trauma Registry Expeditionary Medical Encounter Database (CTR EMED) to identified the top five musculoskeletal injuries between 2009 and 2011 as well as Marines that sustained those injuries.

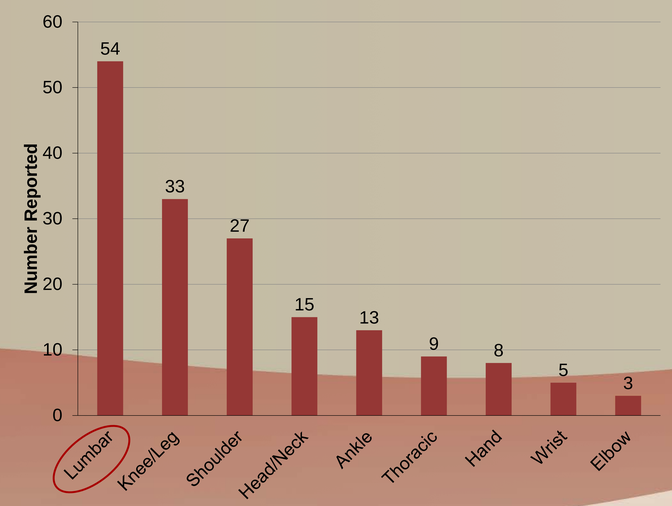
Figure 1. Average Load: Dismounted Patrol



Note: Numbers reported in lbs.

RESULTS

Figure 2. Injury Location

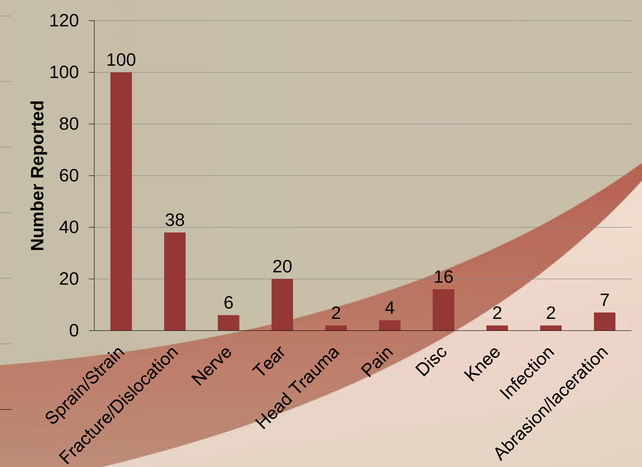


54 Lumbar Spine Injuries

- Sprain/strain = 34
- Disc injuries = 12
- Fractures = 4
- Muscle spasms/pain/nerve = 4

RESULTS

Figure 3. Injury Type



CONCLUSIONS

This study showed that 50% of injuries sustained in theater by the respondents were due to work-related tasks. The next highest incidence of injuries was from physical training type activities. While loads carried were not a direct cause of injury, case study interviews suggested that chronic load carriage exacerbated an existing injury or prevented healing.

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