

Risk of Dental Disease Non-Battle Injuries and Severity of Dental Disease in Deployed U.S. Army Personnel

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Dental Disease and Non-Battle Injuries (D-DNBI) continue to be a problem among U.S. Army active duty (AD), U.S. Army National Guard (ARNG), and U.S. Army Reserve (USAR) deployed soldiers to Operation Iraqi Freedom/Operation New Dawn in Iraq and Operation Enduring Freedom in Afghanistan. A previous study reported the annual rates to be 136 D-DNBI per 1,000 personnel for AD, 152 for ARNG, and 184 for USAR. The objectives of this study were to describe D-DNBI incidence and to determine risk factors for dental encounters and high severity diagnoses for deployed soldiers. The 78 diagnoses were classified into three categories based on severity. Poisson regression was used to compare D-DNBI rates and logistic regression was used to analyze the risk of high severity DDNBI. In both campaigns, Reserve had a higher risk of D-DNBI than active duty. For Afghanistan, ARNG and USAR demonstrated over 50% increased risk of D-DNBI compared to AD. In Iraq, USAR had a 17% increased risk over AD. Females had a higher risk of D-DNBI (>50%) compared to males in both campaigns. High severity D-DNBI made up 2.77% of all diagnoses. Within Afghanistan there was a 4.6% increased risk of high severity D-DNBI for each additional deployment month.