



US DEPARTMENT OF DEFENSE

# BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## Extremity Injuries

### Major Deployment-Related Amputations in the U.S. Armed Forces, 2001–2017

Loss of limb from combat injuries can have dramatic effects on the quality of life of Service members and their families. Understanding the scope of these injuries is necessary for planning and maintaining appropriate support services in the DoD and Department of Veterans Affairs (VA). Researchers at the DoD/VA Extremity Trauma and Amputation Center of Excellence (EACE) surveilled the Expeditionary Medical Encounter Database to collect data on the numbers, types, and anatomic locations of deployment-related major lower and upper limb amputations, and the demographics and military characteristics of this cohort from 2001 through 2017 (*Farrokhi et al., 2018*).

Over this time period, 1,705 Service members had deployment-related major amputations. This group includes those with bilateral lower limb ( $n = 418$ ) and upper limb amputation ( $n = 18$ ), triple amputees ( $n = 46$ ), and quadruple amputees ( $n = 6$ ). The majority of lower limb amputations were transtibial ( $n = 995$ ; 52 percent). Transradial amputations ( $n = 114$ ; 38 percent) composed the largest category for upper limb loss. The amputees were mostly male (98 percent), primarily non-Hispanic white (76 percent), 21–29 years old at the time of injury (66 percent) and served in the Army or Marine Corps (67 and 29 percent, respectively). Trends in the incidence of injuries leading to limb loss followed patterns of the scope and intensity of ground combat operations. These data are critical for formulating sound, current and future policy, healthcare, and readiness decisions.

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#### REFERENCES:

Farrokhi, S., Perez, K., Eskridge, S., & Clouser, M. (2018). Major deployment-related amputations of lower and upper limbs, active and reserve components, U.S. Armed Forces, 2001-2017. *MSMR*, 25(7), 10-16.

