

Military hospitalizations among deployed US service members following anthrax vaccination, 1998-2001.

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Safety concerns have confronted the Department of Defense Anthrax Vaccine Immunization Program since inception in 1998. To determine if anthrax vaccination was associated with an increased risk of hospitalization, a historical cohort study utilizing pre- and post-anthrax-vaccination hospitalizations was undertaken and analyzed with Cox proportional hazards models. The study population consisted of 170,723 active duty US service members who were anthrax-vaccinated and deployed during the time period January 1, 1998 to December 31, 2001. Study outcomes included hospitalizations due to any-cause, 14 broad International Classification of Diseases diagnostic categories, autoimmune organ specific and organ non-specific hospitalizations, and asthma. After adjustment, anthrax vaccination was associated with significantly fewer hospitalizations for any-cause, diseases of the blood and blood forming organs, and diseases of the respiratory system. Comparing anthrax post-vaccination hospitalization experience with the pre-vaccination period resulted in no significant increased hazard for any of the hospitalization outcomes studied. Although there was no apparent increase in risk of

morbidity in this study population, the relationship between anthrax vaccine and deployment on health outcomes among US service members needs further study.

PMID: 17012889 [PubMed - indexed for MEDLINE]