

Fatal motor vehicle crashes among veterans of the 1991 Gulf War and exposure to munitions demolitions at Khamisiyah: a nested case-control study.

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BACKGROUND: A proposed explanation for the observed higher risk of fatal motor vehicle crashes (MVC) among 1991 Gulf War-deployed veterans is neurocognitive deficits resulting from nerve agent exposure at Khamisiyah, Iraq. Our objective was to assess any association between postwar fatal MVC and possible nerve agent exposure based on 2000 modeled plume data. **METHODS:** Cases were defined as MVC deaths with a record in the Department of Transportation Fatality Analysis Reporting System through 1995. Cases (n = 282) and controls (n = 3,131) were derived from a larger nested case-control study of Gulf War-era veterans and limited to Army, male, deployed personnel. Exposure and cumulative dose by case-control status were analyzed using multivariate techniques. **RESULTS:** Exposure status was not associated with fatal MVC (OR 0.96, 95% CI 0.72-1.26), nor were tertiles of cumulative dose. **CONCLUSIONS:** Findings do not support an association

between possible exposures at Khamisiyah and postwar fatal MVC among Gulf War veterans.

PMID: 16550564 [PubMed - indexed for MEDLINE]