

## **Resolving disputes about toxicological risks during military conflict : the US Gulf War experience.**

- [Hyams KC,](#)
- [Brown M,](#)
- [White DS.](#)

United States Department of Veterans Affairs, Office of Public Health and Environmental Hazards, Washington, DC 20420, USA.

In the last 15 years, the US and UK have fought two major wars in the Persian Gulf region. Controversy has arisen over the nature and causes of health problems among military veterans of these two wars. Toxic exposures have been hypothesised to cause the majority of the long-term health problems experienced by veterans of the 1991 Gulf War. The assessment of these toxic exposures and the resolution of controversy about their health effects provide a unique case study for understanding how toxicological disputes are settled in the US. Neither clinical examination of ill war veterans nor scientific research studies have been sufficient to answer contentious questions about toxic exposures. Numerous expert review panels have also been unable to resolve these controversies except for the US National Academy of Sciences Institute of Medicine (IOM). The IOM has conducted exhaustive and independent investigations based on peer-reviewed scientific literature related to potential health risks during the two Gulf Wars. In four recent studies, IOM committees identified a wide range of previously documented illnesses associated with common occupational and environmental exposures after considering thousands of relevant publications; however, they did not identify a new medical syndrome or a specific toxic exposure that caused widespread

health problems among Gulf War veterans. These IOM studies have, therefore, added little to our basic knowledge of environmental hazards because most of the health effects were well known. Nevertheless, this expert review process, which is on-going, has been generally acceptable to a wide range of competing interests because the findings of the IOM have been perceived as scientifically credible and independent, and because none of the postulated toxicological risks have been completely ruled-out as possible causes of ill health among veterans.

PMID: 16390218 [PubMed - indexed for MEDLINE]