

# Late pulmonary function abnormalities are common among Iraq/Afghanistan veterans

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Pulmonary function abnormalities may be a precursor to chronic respiratory disease in Iraq/Afghanistan and Gulf War veterans years after their deployment, according to a new study presented at the 2014 American Thoracic Society International Conference.

"Previous studies of Gulf War and Iraq/Afghanistan veterans have found persistent respiratory symptoms decades after their deployment but have not always detected clinically significant pulmonary abnormalities," said lead author Michael Falvo, PhD, a research physiologist at the U.S. Department of Veterans Affairs' New Jersey War Related Illness and Injury Study Center. "In our study, however, we found evidence of small airway obstruction and other pulmonary abnormalities in many deployed veterans."

Small airway obstruction may lead to asthma, COPD, or other [respiratory problems](#).

The retrospective study included 63 Gulf War veterans approximately 20 years post-deployment and 70 Iraq/Afghanistan veterans approximately 10 years post-deployment. Pulmonary function abnormalities were assessed with spirometry. Among the Gulf War veterans, the rate of small airway obstruction was five times greater (38% vs. 7%) than that seen in a reference group from an earlier population-based sample of Gulf War veterans evaluated 10-years post-deployment, and the rate of restrictive lung physiology was two times greater (24% vs. 12%). Among the Iraq/Afghanistan veterans, the rate of small airway obstruction was

also five times greater (31% vs. 7%). Rates of non-reversible airway obstruction were significantly lower in the study groups than in the reference sample.

"The veterans we evaluated exhibited unique spirometry patterns," said Dr. Falvo. "If confirmed in larger studies, these patterns may indicate a higher risk for progression to chronic respiratory disease and may allow for early intervention. Our laboratory is currently engaged in multiple studies, supported by the Department of Veterans Affairs, to better understand mechanisms of respiratory symptoms in deployed [veterans](#)."

**More information:** Abstract 54486

Late Prevalence Of Pulmonary Function Abnormalities In

Iraq/Afghanistan Veterans

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