

# Putting Research to Work for Military Families



**Focus:**  
Multiple  
Branches

## Deployment Stress, Tobacco Use, and Postdeployment Posttraumatic Stress Disorder: Gender Differences

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**SUMMARY:** Increased numbers of women are being deployed to combat zones, yet little is known about their tobacco use and posttraumatic stress disorder (PTSD). Therefore, an examination of gender-specific associations between deployment stress, tobacco use, and post-deployment PTSD symptoms was completed.

### KEY FINDINGS:

- Warfare stress was associated with initiation and increases in tobacco use during deployment in both men and women.
- Harassment stress was associated with initiation and increases in tobacco use in women only.
- Neither warfare exposure nor harassment exposure predicted continuation of tobacco use post-deployment
- Continued tobacco use after deployment was associated with PTSD in women.

### IMPLICATIONS FOR PROGRAMS:

Programs could:

- Offer training before deployment on healthy means of coping with deployment stress (e.g., social support, relaxation, exercise, cognitive interventions) for Service members and families
- Develop online modules for both male and female Service members on tobacco use and deployment, and harassment, tobacco use and deployment
- Create support groups for Service members and their spouses upon their return from deployment to address issues of mental and physical health

### IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend training for Service members on positive coping strategies or interventions to prevent or treat tobacco dependence
- Encourage an awareness campaign that brings to light issues of military harassment and its effects on Service members and their families
- Recommend professional development for professionals who work with military families around deployment stress and coping strategies

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## METHODS

- Participants were randomly selected from the Environmental Epidemiology Service's roster of Operation Enduring Freedom/Operation Iraqi Freedom Veterans.
- Measures on tobacco use, deployment stress, and PTSD symptoms were selected from a larger previous study.
- Analyses on the associations between deployment stress, tobacco use during and after deployment, and post-deployment PTSD symptoms by gender were conducted.

## PARTICIPANTS

- Participants completed the survey on average 4.25 years after their most recent deployment.
- The sample included 1,074 men and 1,139 women.
- All military branches were represented, but the Army was the most common (men: 52%; women: 56%).
- Participants' ages, race and ethnicity were not provided.

## LIMITATIONS

- Self-reports of tobacco use and PTSD symptoms during deployment were given between 3 and 10 years later.
- Data were drawn from a previous study; therefore, measures were not adaptable to the current study.
- Participant's current physical and psychological state, which was not measured, could have affected the outcomes of the study.

## AVENUES FOR FUTURE RESEARCH

Future research could:

- Employ a longitudinal design which could better assess the relationships between trauma exposure, PTSD, and tobacco use.
- Investigate what biological or psychological mechanisms may be associated with increases in tobacco use in reaction to extreme stress.
- Broaden the sample to include different ranks, education level, length of deployment, and type of combat to assess any differences in PTSD and tobacco use.

## ASSESSING RESEARCH THAT WORKS



For more information about the Assessing Research that Works rating scale visit:  
<https://reachmilitaryfamilies.umn.edu/content/assessing-research-that-works>