

# Putting Research to Work for Military Families



Focus:  
Army

## PTSD Symptom Increases in Iraq-Deployed Soldiers: Comparison With Nondeployed Soldiers and Associations With Baseline Symptoms, Deployment Experiences, and Postdeployment Stress

Vasterling, J. J., Proctor, S. P., Friedman, M. J., Hoge, C. W., Heeren, T., King, L. A., & King, D. W. (2010). PTSD symptom increases in Iraq-deployed soldiers: Comparison with nondeployed soldiers and associations with baseline symptoms, deployment experiences, and postdeployment stress. *Journal of Traumatic Stress, 23*(1), 41-51. doi:10.1002/jts.20487

**SUMMARY:** The U.S. Army Active Duty and National Guard Soldiers who deployed to Iraq were compared before and after deployment to Service members who did not deploy via interview and surveys. Deployed Soldiers reported increased posttraumatic stress disorder (PTSD) symptom severity from pre- to post-deployment compared to non-deployed Soldiers.

### KEY FINDINGS:

- Military deployment to Iraq was associated with increases in PTSD symptoms, even after adjusting for pre-deployment PTSD levels. In contrast, non-deployed Soldiers did not show increases in these symptoms.
- Among deployed Soldiers, those activated from the National Guard showed greater increases in PTSD symptoms pre- to postdeployment compared to Active Duty Soldiers. However, the National Guard personnel did not show higher severity or rates of PTSD post-deployment compared to Active Duty Soldiers.
- High levels of combat were more detrimental to mental health among Soldiers who reported more severe PTSD symptoms at pre-deployment.
- Higher levels of stress during deployment corresponded to greater PTSD symptom increases post-deployment.

### IMPLICATIONS FOR PROGRAMS:

Programs could:

- Provide education about PTSD symptoms and the services available to all Soldiers who have experienced combat deployments, but especially to those who experienced high levels of combat and other stressors during deployment
- Offer classes regarding wellness and risk factors for concerns, thereby promoting early detection of difficulties following deployment
- Host workshops during reintegration to help families and Service members adjust to the Service member's return, especially when the deployment has included combat exposure

### IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend provision of a range of evidence-based mental health services for Service members after deployment, with special programming for those dealing with PTSD
- Continue to support programs that address the unique challenges faced by deployed Service members and their spouses
- Encourage collaboration among DoD programs and community-based organizations to support a smooth transition during reintegration for Service members and their families

This product is the result of a partnership funded by the Department of Defense between the Office of Military Community and Family Policy and the USDA's National Institute of Food and Agriculture through a grant/cooperative agreement with The University of Minnesota.



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## METHODS

- Deploying and non-deploying units were selected to represent a variety of location assignments; unit leaders randomly referred potential participants.
- Ninety-four percent of invited Soldiers (N = 1,633) participated at Time 1 (pre-deployment), 73% of Time 1 participants participated at Time 2 (post-deployment if applicable); Soldiers completed onsite interviews and questionnaires.
- Statistical analyses examined differences between deployers and non-deployers, and associations between pre-deployment PTSD, stress exposure and longitudinal change in PTSD.

## PARTICIPANTS

- One thousand five hundred forty-two U.S. Army Active Duty and activated National Guard Soldiers serving from April 2003-September 2006 completed the pre-deployment assessment; 1,083 completed the Time 2 assessment. Of the Time 2 participants, 72% deployed (87% Active Duty).
- Among the deployed Soldiers, the average age was 25.7 years (SD = 5.9), 61% were White, 93% were male, 47% were married, and the average years of education was 12.5 years. The average years in Army was 4.6 years, 72% were junior enlisted, with 11% having a previous deployment.
- Among the non-deployed Soldiers, the average age was 24.9 (SD = 5.1), 65% were White, 90% were male, 48% were married, and the average years of education was 12.5 years. The average years in Army was 3.9 years, most participants were junior enlisted (75%), with 13% having a previous deployment.

## LIMITATIONS

- PTSD was assessed and examined using a self-report screening instrument which may have increased social desirability bias.
- Additional mental health concerns beyond PTSD were not assessed, which may have affected the findings.
- The sample consisted only of Active Duty and National Guard Army personnel and may not generalize to all branches of the military.

## AVENUES FOR FUTURE RESEARCH

Future research could:

- Replicate this study using clinical interviews and additional mental health assessments to augment these findings
- Examine if there are cultural variables that impact the development and expression of PTSD symptoms
- Compare and contrast the effectiveness of different interventions for PTSD among Service members

## ASSESSING RESEARCH THAT WORKS



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