



CTU-Online is an electronic newsletter produced by the VA National Center for PTSD. Subscribe at: [www.ncptsd.va.gov](http://www.ncptsd.va.gov)

**CTU-Online** contains summaries of clinically relevant research publications including links to the full article (Trouble accessing? See below\*) and the PILOTS ID number for easy access. ([What is PILOTS?](#))

Editor: Paula P. Schnurr, Ph.D.

Editorial Manager: Elizabeth Forshay, M.S.W.

Associate Editor: Susan Stevens, Psy.D.

Production Assistant: TBD

## CLINICIAN'S TRAUMA UPDATE 2(1), FEBRUARY 2008

### OIF/OEF Veterans

**PTSD and depression help explain persistent symptoms in OIF/OEF veterans with mild traumatic brain injury:** Mild traumatic brain injury (TBI)—a head injury resulting in brief loss of consciousness or altered mental state—has been described as a signature injury of the conflicts in Iraq and Afghanistan. VA and DoD have implemented screening programs because of concerns about the prevalence of mild TBI and its consequences. Recent findings from a survey of 2,525 Army soldiers conducted 3-4 months after the soldiers returned from deployment in Iraq indicates that the disorder is indeed prevalent: 4.9% reported injuries with loss of consciousness and 10.3% reported injuries with altered mental state. Soldiers who reported loss of consciousness had an elevated risk of PTSD and depression, and those who reported altered mental state had an elevated risk of PTSD. There was an increased risk of numerous physical symptoms, including postconcussive symptoms, in soldiers who reported mild TBI. However, a different picture emerged when the findings were statistically adjusted for PTSD and depression. Mild TBI was associated with increased risk of only one symptom: headache in soldiers who had experienced loss of consciousness. These analyses suggest that PTSD and depression mediate the relationship between mild TBI and persistent physical symptoms. If so, this is good news for the many service members who have experienced a mild TBI, because treating PTSD and depression, when present, may help to alleviate their physical symptoms as well.

Read the article... <<http://dx.doi.org/10.1056/NEJMoa072972>>

Hoge, C.W., McGurk, D., Thomas, J.L., Cox, A.L., Engel, C.C., & Castro, C.A. (2008). Mild traumatic brain injuries in U.S. soldiers returning from Iraq. *New England Journal of Medicine*, 358, 453-463. PILOTS ID: 30281.

**Standardized screening methods needed for soldiers seen in mental health:** Although screening efforts have been refined for use in military personnel who are not seeking treatment, the same attention has not been paid to developing a standardized psychological screen for personnel who are seen in mental health services. Screening is important for treatment settings to help clinicians understand the types, comorbidities, and rates of mental disorders in their patients. In an attempt to refine methods for screening in clinical settings, the authors of a recent study gathered data from the clinical records of 2,882 active duty Army soldiers seen in an outpatient behavioral health clinic located on a large military base from June 2003 to July 2005. The authors developed a measure, the Behavioral Health Screening Instrument (BHSI), which was used as a screen in a behavioral health clinic. The measure was based on other validated scales and combined the clinical domains of depression, relationship problems, PTSD and alcohol misuse. As might be expected from a treatment-seeking population, 89% of patients endorsed at least one symptom domain and 63% endorsed two or more. In addition to defining some of the demographics and clinical features of this population, the study reiterates

the existence of dual-diagnoses and also reinforces the need to expand screening methods to all stages and facets of military personnel.

Read the article... <[http://www-ca3.csa.com/ids70/view\\_record.php?id=2&recnum=0&log=from\\_res&SID=9f700d209233736f467b6ef9a5479e48&mark\\_id=search%3A2%3A0%2C0%2C1](http://www-ca3.csa.com/ids70/view_record.php?id=2&recnum=0&log=from_res&SID=9f700d209233736f467b6ef9a5479e48&mark_id=search%3A2%3A0%2C0%2C1)>  
Gahm, G. A., & Lucenko, B. A. (2008). Screening soldiers in outpatient care for mental health concerns. *Military Medicine*, 173, 17-24. PILOTS ID: 81615.

**Symptoms of PTSD are associated with anger in Iraq and Afghanistan War veterans:** Anger problems have long been associated with the diagnosis of PTSD, but the association has not been examined in veterans with subthreshold levels of PTSD. This is an important topic because many traumatized individuals who do not meet full diagnostic criteria still have symptoms and impaired functioning. But do subthreshold cases also have the anger problems typically seen in cases of full PTSD? A new study of treatment-seeking OIF/OEF veterans suggests that the answer is “yes.” The investigators performed a retrospective review of questionnaire data collected from 117 Iraq and Afghanistan veterans who presented at the Deployment Health Clinic at the VA in Puget Sound in Washington State. The data included measures of trait anger, hostility, and aggression. In confirmation of previous studies, veterans with PTSD had higher scores on all three measures relative to veterans without PTSD. So did veterans with subthreshold PTSD; they also had higher scores relative to the no PTSD group. Although veterans with PTSD reported higher levels of anger and hostility relative to veterans with subthreshold PTSD, the groups did not differ in aggression. This study confirms previous research indicating that veterans with subthreshold levels of PTSD also suffer from psychological impairments. The data should alert health care providers to attend to patients who do not meet the full criteria of PTSD but who nevertheless may suffer from significant problems with aggression and other symptoms more typically associated with PTSD.

Read the article... <<http://dx.doi.org/10.1002/jts.20258>>  
Jakupcak, M., Conybeare, D., Phelps, L., Hunt, S., Holmes, H.A., Felker, B., Klevens, M., & McFall, M.E. (2007). Anger, hostility, and aggression among Iraq and Afghanistan War veterans reporting PTSD and subthreshold PTSD. *Journal of Traumatic Stress*, 20, 945-954. PILOTS ID: 81472.

**VA clinicians may face role conflicts as OIF/OEF veterans shift to active duty status:** Veterans seen today by VA mental health providers might be eligible for return to active duty, posing clinical challenges and ethical issues not normally present when treating the traditional veteran who is permanently retired from service. Observing the changes in the military status of patients seen in VA mental health settings, the author of a recent paper explored the ethical issues of dual-agency faced by VA clinicians. The author describes how a conflict of dual-agency could occur if a clinician felt that he or she was acting on behalf of the military as well as the patient, using case examples for discussion. As in other ethical conflicts, dual agency can be resolved by adhering to professional ethical mandates (psychiatrists, social workers, psychologists), which in this case means understanding that your obligation is to place the patient first and provide the best care possible, and by vigilant self-examination, and a thorough understanding of the medical, legal and administrative contexts that surround patient care. The paper is interesting in its overt observation of changes in the military status of patients seen in the VA. The author has offered a reminder to all clinicians to be vigorous about their ethical duty to serve their patients' needs first even when there may be new pressures from outside forces such as the military.

Read the article... <<http://www.informaworld.com/smpp/content~content=a789838314~db=all>>  
Stone, A.M. (2008). Dual agency for VA clinicians: Defining an evolving ethical question. *Military Psychology*, 20, 37-48. PILOTS ID: 30317 (available mid-March 2008.)

**A composite screen is the best method for identifying soldiers with mental health problems:** A screening measure that is able to quickly and accurately identify soldiers with psychological problems is an important step in directing them to the mental health care they need. Inherent in the goal of brevity and ease is a screen that is short and simple and yet still effective at detecting those with problems and those without. A recent study compared psychological screening methods to determine which method offered the best balance between sensitivity (identifying true positives) and specificity (identifying true negatives) when identifying U.S. combat soldiers with PTSD, depression or alcohol abuse. Three samples of soldiers (totaling 3,041) were

screened by a variety of methods at pre-deployment, 1 week following return, and three months upon return from Iraq. The best performing screen consisted of a composite of a PTSD scale, depression scale, alcohol use scale, and a single item that asked, "Would you like to speak with a counselor?" The benefits of this combined screen cannot be generalized beyond the military sample. However, the results are suggestive. It remains to be seen whether such composite scales are equally useful for screening veterans and civilians in other settings.

Read the article... <<http://dx.doi.org/10.1002/jts.20279>>

Wright, K.M., Bliese, P.D., Thomas, J.L., Adler, A.B., Eckford, R.D., & Hoge, C.W. (2007). Contrasting approaches to psychological screening with U.S. combat soldiers. *Journal of Traumatic Stress, 20*, 965-975. PILOTS ID: 81474.

## Gulf War Illness

**Longitudinal findings on Gulf War illness show improved symptoms for some veterans:** Many studies have been undertaken to determine the cause of the often-debilitating symptoms experienced by some veterans who served in the Persian Gulf War. So far no single cause has been identified, and no single group of symptoms has been defined. One team of investigators who studied a large group of Gulf War veterans in 1995-1997 found 4 neurological symptoms—blurred vision, loss of balance/dizziness, tremors/shaking, and speech difficulty—occurred more often in deployed veterans relative to those who were not deployed. Clinical examination data from a stratified random sample of 57 of these veterans in 2001 reveal evidence of substantial recovery and point to a possible etiological cause. Only half of the veterans who initially reported neurological symptoms in 1995-1997 still reported these symptoms in 2001. There was a trend for initially symptomatic veterans to have more neurological findings during clinical exam, but relatively few veterans had abnormalities on objective neurological tests. In fact, the percentage with abnormal tests was comparable to the percentage among veterans who had PTSD but no initial neurological symptoms. The PTSD group also showed recovery; only 27% still had PTSD in 2001. Of possible environmental causes, only the receipt of multiple vaccines was associated with neurological symptoms. The significant amount of improvement in neurological symptoms and PTSD is good news, although, because the data were collected in 2001, we do not know whether the improvement was sustained. Continued investigation is necessary to determine the longer-term course and also to investigate the suggestive findings regarding vaccines.

**Read the article...<<http://dx.doi.org/10.3200/AEOH.61.6.271-278>>**

Levine, P.H., Richardson, P.K., Zolfaghari, L., Cleary, S.D., Geist, C.E., Potolicchio, S., Young, H.A., Simmens, S.J., Schessel, D., Williams, K., Mahan, C.M., & Kang, H.K. (2006). A study of Gulf War veterans with a possible deployment-related syndrome. *Archives of Environmental & Occupational Health, 61*, 271-278. PILOTS ID: 30267.

## Vietnam Era Twin Registry

**New findings on PTSD from the Vietnam Era Twin Registry:** In the mid-1980s, the VA assembled a national sample of over 7,000 pairs of male twins who served on active duty during the Vietnam era. The registry has served as an invaluable resource for performing studies of genetic contributions to a wide range of physical and mental health problems. The breadth of topics is illustrated by two recent studies focused on PTSD. In one study, the investigators examined whether the high comorbidity between PTSD and depression is due to a common genetic vulnerability, putting individuals at risk of both disorders. In the other study, investigators explored whether PTSD is associated with increased risk of asthma, and if so, whether this is due to genetic factors. Twin research capitalizes on the difference in genetic relatedness between monozygotic twins, who have genes from only one parent, and dizygotic twins, who have genes from both parents. Correlations, e.g. of PTSD with an outcome, are contrasted between monozygotic and dizygotic twins in statistical models that also estimate shared and individual environmental influences.

*Depression study:* The study on depression used data from 1,874 monozygotic and 1,498 dizygotic twin pairs. In the best-fitting statistical model, PTSD and depression shared a common genetic liability that explained over 60% of the comorbidity between PTSD and depression. Even more striking was the fact that 15% of the genetic risk for depression explained the risk of PTSD. Individual environmental factors also were statistically significant, which means there are environmental risk factors specific to each disorder. This highlights the importance of identifying the particular risk factors for PTSD and MDD in order to understand why a person may develop one versus the other and also to support prevention and treatment.

*Asthma study:* The study on asthma used data from 1,646 monozygotic and 1,256 dizygotic twin pairs. The investigators assessed asthma with a single self-reported question about whether the veteran had ever received a diagnosis of asthma from a physician. There was evidence that genetic factors contributed to the development of asthma and PTSD, something that has been shown in prior studies. The key finding was a strong linkage between PTSD and asthma: veterans who had the highest PTSD symptoms were 2.3 times as likely to have asthma, relative to veterans who had the lowest PTSD symptoms—even when the data were statistically adjusted for confounding variables such as smoking. Also key was the finding that neither common familial or genetic factors explained the association between PTSD and asthma. The fact that diagnosis of asthma was based on a single self-reported item is a limitation of the study. However, the analyses and other aspects of the study were well done, and therefore, its findings add to growing evidence that PTSD increases the risk of poor physical health.

Read the article...<<http://dx.doi.org/10.1016/j.jad.2007.04.021>>

Koenen, K.C., Fu, Q.J., Ertel, K., Lyons, M.J., Eisen, S.A., True, W.R., Goldberg, J., & Tsuang, M.T. (2008). Common genetic liability to major depression and posttraumatic stress disorder in men. *Journal of Affective Disorders*, 105, 109-115. PILOTS ID: 30266.

Read the article...<<http://dx.doi.org/10.1164/rccm.200610-1467OC>>

Goodwin, R.D., Fisher, M.E., & Goldberg, J. (2007). A twin study of posttraumatic stress disorder symptoms and asthma. *American Journal of Respiratory Critical Care Medicine*, 176, 983-987. PILOTS ID: 30170.

[Subscribe to the CTU-Online](#) newsletter published 6 times per year and sent via email. To search archives of the CTU-Online, use the [Advanced Search](#).

CTU-Online is published by the Executive Division of the VA National Center for Posttraumatic Stress Disorder in White River Junction, VT. We welcome feedback from readers about content and format. Please email us at [ncptsd@ncptsd.va.gov](mailto:ncptsd@ncptsd.va.gov).

\*Articles authored by National Center for PTSD staff we make available in full text. For other articles we provide a link to where you might be able to view or download the full text. VA clinicians might have privileges through their university affiliation, however VA firewalls sometimes block the permissions to access reference materials. If you cannot access the Full Text version of any of these articles, we advise that you contact your local librarian or web/internet technical person.