



THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

OCT 1 2007

The Honorable Carl Levin
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman:

This letter responds to the Fiscal Year 2007 Military Quality of Life and Veterans Affairs and Related Agencies Appropriations House Report 109-464. The Committee proposed a \$25 million increase in funding to integrate psychological health services into the daily lives of our Service members, which was not appropriated. It also called for continued joint study of post-traumatic stress disorder (PTSD) with the Department of Veterans Affairs (VA).

We developed a notional strategic plan for Human Systems Optimization and Maintenance to meet the requirements to integrate pre-clinical psychological health and wellness services into the daily lives of Service members. The plan includes two components: peer support training, and integration of occupational psychologists into military units. The strategic plan in Enclosure 1 outlines proposed program elements, implementation strategies, and estimated costs of peer-to-peer support training and program implementation, if funded. Developing a military occupational psychology program will require a long-term commitment to sustaining added personnel in uniform for this purpose, as well as recruiting, training, and retaining the professionals for this specialized, non-clinical track. A proposed plan for studying this transformative option is outlined in Enclosure 2.

We are committed to continued collaboration with the VA to study PTSD, and have received multiple responses to several PTSD research requests for proposals funded by recent supplements to the congressionally directed Medical Research Program. Examples of recent mental health related research are listed in Enclosure 3.

Thank you for your continued support for the Military Health System.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Ward Casscells".

S. Ward Casscells, MD

Enclosures:
As stated

cc:
The Honorable John McCain
Ranking Member

Assistant Secretary of Defense (Health Affairs)

A Report Responding as Directed to the
Fiscal Year 2007 Military Quality of Life and
Veterans Affairs and Related Agencies House Report 109–464

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Enclosure 1

ENCLOSURE 1

HUMAN SYSTEMS OPTIMIZATION AND MAINTENANCE

A Strategic Plan to Integrate Psychological Health Services and Wellness
into the Daily Lives of Service Members

I. "PEERS" Program—*Peer Empathy Education Referral Support*

A. PEERS: Definition and Purpose

- Definition: The PEERS Program will be a DoD-wide volunteer Service member, family member, government employee, and government contractor peer support program specifically funded by Congress to better integrate mutual psychological support into the daily lives of all members of the DoD community. It will augment buddy aid and wingman support programs already in existence for Service members and establish a new certification in "Behavioral Health Life Support".
- Purpose: The purpose of the PEERS program is to cultivate and sustain multi-dimensional high level well being by training community volunteers in basic listening, caring, distress recognition, and informed referral skills.

B. Program Overview

- The program will train volunteer Service members of any rank, volunteer Government employees, contractors, and volunteer Service member spouses and adolescent children to become an effective peer support system.
- An ongoing train-the-trainer cell with program development and support staff and resource function will be centrally located at the Defense Medical Readiness Training Institute (DMRTI) at Fort Sam Houston in San Antonio. The DMRTI staff embraces this concept and proposed adding the "Behavioral Health Life Support" certification program to parallel other trauma and life support training and certification programs at the same institute.
- DoD Program Management Cell (Personnel & Readiness, Health Affairs, and Service branch representatives).
- Military installation PEERS Program Support Function
 - A Command program. Installation commander determines most appropriate "nesting" of local PEERS Program Manager and program support services. Options include utilizing the PEERS program to augment existing family support, preventive health and wellness, education (including professional military education), suicide prevention, and chaplain program functions.
- Regional commands determine installations served by PEERS Program Managers

C. Personnel

PEERS Volunteers

- Potential Training Breakouts (installation population-dependent)
 - Junior enlisted

- Medics and E4–E6 Enlisted.
- Senior Enlisted (\geq E7 and above).
- Company Grade Officers (O1–O3).
- Field Grade Officers (O4–O6).
 - Collapse to enlisted and officer breakouts at smaller installations.
- Family members.
- Government employees and contractors.
- Training goals.
- Achieve a ratio of 1 PEERS volunteer for 200 personnel within 1–2 years.
- Achieve a ratio of 1 PEERS volunteer for 100 personnel within 3 years.
- Achieve a ratio of 1 PEERS volunteer for 50 or less within 4 years.

PEERS Program Managers (contracted)

- Initial staffing at 1 per 100,000 DoD community members.
 - Community includes Service and family members, and civilian force.
 - Program growth to meet goals will require doubling of staff after one year.
 - Program growth to meet goals may require 50 percent further increase at two years.
- Contracted program managers will ideally be those with former military experience and demonstrated personnel leadership and/or helping professional experience.

D. Training

PEERS Support Cell

- DoD PEERS contracted program staff to be located at DMRTI.
- Web-based resources and development at DMRTI.
 - Advanced Distributed Learning prior to both certification courses.
 - Up to 15 hours on high-speed Internet-based platform.
 - Maintain program currency and relevance.
 - PEERS helping resources.
 - PEERS policies.
 - Consultative support to PEERS volunteers by e-mail.
 - Certification tracking.
 - Program evaluation.
- PEERS Volunteer Training Content
 - Overview of primary and secondary objectives for optimal community building and individual high level well being.
 - Exercises to recognize psychological styles of ourselves and our peers.
 - ABCs: Active listening skills to:
 - Achieve a relationship
 - Boil down problems
 - Challenge to action
 - Training in self-help, healthy thinking, problem-solving approaches.
 - Orientation to military and community resources, for example:
 - Family Support
 - Family Advocacy

- Chaplain programs
- Educational opportunities
- MilitaryOneSource civilian counselors
- Mental Health resources, referral and confidentiality
- Orientation to DoD Web-based resources as:
 - <https://www.militarymentalhealth.org>
 - www.MilitaryOneSource.com
 - www.afterdeployment.org
 - <https://www.TRICAREonline.com>
- Suicide prevention training
- Use of Leaders Guides for Personnel in Distress
- Frontline Supervisors Training (FST)
- Multiple case presentations and role-playing of scenarios of military members in distress
- Skill set rehearsals
- Counselor ethics and recognizing limitations/need for referral

PEERS Program Manager Training at DMRTI

- Two weeks of formal training will include a detailed orientation to current military challenges, military psychological support services, formal training to conduct PEERS training, training on how to establish installation PEERS Program, recruit and support PEERS volunteers, and program evaluation requirements.

E. Estimated costs for congressionally-funded DoD-wide PEERS Program

(Personnel and manpower costs, including opportunity-costs of diverted personnel-hours from routine duties are not included in this estimate.)

(Cost savings to DoD as a result of early identification, problem-solving, and reduced incidence of acute mental health disorders and their sequellae are not estimated.)

FIRST YEAR COST ESTIMATES:

- Initial Course Syllabus Development/Subject Matter Expert Temporary Duty Travel (TDY)/Offsite = \$100,000
- First year high speed web-based Advanced Distributed Learning function/resources with initial Web-site set-up = \$300,000
- Internet Costs
 - High speed Web-based Advanced Distributed Learning annual maintenance = \$50,000 a year
 - Web-resource site maintenance = \$10,000 a year
- Educational Core Course Materials/Books/Certificates = \$200,000
- Contracted PEERS Admin and Training Cell at DMRTI = \$600,000 a year
 - One Psychologist
 - One Social Worker
 - One Educational Specialist
 - One Administrative Support Specialist

- On-site offices and equipment and maintenance = \$400,000 a year
- Fifty full-time contracted PEERS Program Managers = \$7.5 million a year
- Travel expenses of PEERS Program Managers
 - TDY for training x 2 weeks at San Antonio = \$200,000
 - Travel for those covering multiple installations = \$400,000

ESTIMATED START-UP YEAR TOTAL.....approximately \$10 million

FOLLOW-ON YEARS COST ESTIMATES:

YEARS TWO and THREE

- Subtract 21,000 course development start-up costs = -\$100,000
- Double materials for increased PEERS trainees locally = +\$200,000
- Double number of PEERS Program Managers = +\$7.5million
- Double travel expenses of PEERS Program Managers = +\$400,000

ESTIMATED OUT YEARS TWO and THREE TOTAL.....\$18 million

YEARS FOUR and thereafter (no inflation factor added, suggest 3 percent annually)

- Double material for increased PEERS trainees locally = +\$400,000 a year
- Sustain with same number of PEERS Program Managers = no increase

ESTIMATED OUT YEARS 4+ TOTALapproximately \$18.5 million

Enclosure 2

ENCLOSURE 2

II. Embedded Military Occupational Psychologist Program

Concept:

- Currently DoD successfully utilizes imbedded mental health support assets in some deployed settings. However, these assets are not used Service-wide and are primarily involved in treating combat and operational stress reactions. Currently, they are clinical assets and their work with Service members may result in the establishment of formal medical and mental health records, potentially stigmatizing to members who seek support, but do not require actual clinical management. In addition, the work of these clinicians is related primarily to clinical management.

--Proposed Program:

- DoD will assign masters or above level occupational psychologists into military units as non-clinicians. They will utilize their specialized skills to enhance human performance through optimized personnel selection for particular tasks, provide specialized training including customized stress inoculation strategies, develop and monitor team enhancement strategies, optimize performance appraisals, enhance motivational strategies, and provide specialized consultation to leaders. By embedding into units, they will become a part of the unit in such a way to better detect problems before they become crises, and more effectively assist leadership and members during actual crises and traumatic events.
- This career path will provide a unique military career track to those psychologists seeking to expand their professional opportunities in the military, and to provide a leadership and clinical interface as a dedicated member of an operational unit.
- This career track will optimize unit resiliency and effectiveness, potentially enhancing retention of both Service members and psychologists themselves who seek the full range of psychologist professional development in non-clinical settings. Occupational psychologists will not constitute a "threat" to unit members as they will not be providing services that require documentation in clinical mental health records and they will be resiliency-focused with specialized knowledge regarding when referral for formal clinical care is necessary. By being embedded and not a threat to Service member careers, stigma will be reduced while this specialized skill set is embedded in a non-threatening fashion.

Proposal:

A work-group of DoD and Service branch mental health subject matter experts and civilian university program SMEs in occupational psychology will convene to:

1. Analyze civilian occupational psychology programs and what they bring to the embedded psychologist concept for in-garrison and deployed operations;
2. Establish potential career paths for new psychologists and psychologists who would seek retention in the military in order to pursue this unique military career path;
3. Estimate timeline for recruiting, training, and employing occupational psychologists to fully staff operational units;
4. Estimate the costs to fully staff DoD at brigade/wing-level units over the course of one decade; and
5. The work group will complete its analysis over the five quarterly meetings and provide its formal recommendations not later than October 1, 2008.

Estimated costs of five Military Occupational Psychology Work Group meetings, consisting of five DoD and five civilian SMEs will be:

Travel costs for 8 of 10 members x 5 meetings	= \$80,000
Facility costs and contract support	= \$10,000
Data analysis of costs/benefits	= <u>\$ 3,000</u>

Estimated cost for feasibility analysis/proposal = \$93,000

Final approval of this program would be dependent upon formal acceptance by operational leadership in full view of findings and recommendations of the Military Occupational Psychology Work Group and formal authorization of the addition of the required number of uniformed positions for this purpose.

Enclosure 3

ENCLOSURE 3

III. VA/DoD Joint Research in PTSD A. Congressionally Directed Medical Research Program: *<http://cdmrp.army.mil/funding/reftable.htm>*

FY07 Fast-Track Intramural (DOD and VA) Post-Traumatic Stress Disorder/Traumatic Brain Injury (PTSD/TBI) Research Program

Program Announcement	Release Date	Funding Amount	Submission Deadline
PTSD Advanced Technology-Therapeutic Development Award (Intramural)	MS Word Adobe PDF August 1, 2007	A maximum of \$4,000,000 for direct costs for up to a 4-year performance period plus indirect costs as appropriate	Pre-Application (LOI): September 20, 2007 Proposal: October 1, 2007
PTSD Investigator - Initiated Research Award (Intramural)	MS Word Adobe PDF August 1, 2007	<ul style="list-style-type: none"> A maximum of \$600,000 (or for proposals incorporating clinical studies, a maximum of \$1.5M) for direct costs for up to a 4-year performance period plus indirect costs as appropriate Requests for additional direct costs are allowed, provided the costs are well justified, compelling, and have the potential to accelerate the ongoing DOD or VA project/program. 	Pre-Application (LOI): September 20, 2007 Proposal: October 1, 2007
TBI Advanced Technology-Therapeutic Development Award (Intramural)	MS Word Adobe PDF August 1, 2007	A maximum of \$4,000,000 for direct costs for up to a 4-year performance period plus indirect costs as appropriate	Pre-Application (LOI): September 20, 2007 Proposal: October 1, 2007
TBI Investigator - Initiated Research Award (Intramural)	MS Word Adobe PDF August 1, 2007	<ul style="list-style-type: none"> A maximum of \$600,000 (or for proposals incorporating clinical studies, a maximum of \$1.5M) for direct costs for up to a 4-year performance period plus indirect costs as appropriate Requests for additional direct costs are allowed, provided the costs are well justified, compelling, and have the potential to accelerate the ongoing DOD or VA project/program. 	Pre-Application (LOI): September 20, 2007 Proposal: October 1, 2007

FY07 Post-Traumatic Stress Disorder/Traumatic Brain Injury (PTSD/TBI) Research Program

Post-Traumatic Stress Disorder and Traumatic Brain Injury Program Announcements

PTSD/TBI Clinical Consortium-Coordinating Center Award	MS Word Adobe PDF August 2, 2007	A maximum of \$25,000,000 for direct costs for a 5-year performance period plus indirect costs as appropriate	Pre-Application (PreProposal): September 12, 2007 Proposal: November 13, 2007
PTSD/TBI Clinical Consortium-Study Site	MS Word Adobe PDF August 2, 2007	A maximum of \$1,500,000 for direct costs for a 5-year performance period plus indirect costs as appropriate	Pre-Application (PreProposal): September 12, 2007 Proposal: November 15, 2007

Post-Traumatic Stress Disorder Program Announcements

Program Announcement	Release Date	Funding Amount	Submission Deadline
PTSD Advanced Technology-Therapeutic Development Award	MS Word Adobe PDF July 24, 2007	A maximum of \$4,000,000 for direct costs for up to a 4-year performance period plus indirect costs as appropriate	Pre-Application (PreProposal): September 12, 2007 Proposal: November 13, 2007
PTSD Concept Award	MS Word Adobe PDF July 18, 2007	A maximum of \$150,000 for direct costs for up to an 18-month performance period plus indirect costs as appropriate	Pre-Application (LOI): August 2, 2007 Proposal: August 23, 2007
PTSD Investigator-Initiated Research Award	MS Word Adobe PDF July 18, 2007	<ul style="list-style-type: none"> The combined maximum funding for all institutions is \$600,000 for direct costs for up to a 4-year performance period plus indirect costs as appropriate For proposals incorporating clinical trials or clinical research, the combined maximum funding for all institutions is \$1.5M for direct costs for up to a 4-year performance period plus indirect costs as appropriate 	Pre-Application (LOI): September 4, 2007 Proposal: October 18, 2007
PTSD Multidisciplinary Research Consortium Award	MS Word Adobe PDF July 24, 2007	A maximum of \$24,000,000 for direct costs for up to a 5-year performance period plus indirect costs as appropriate	Pre-Application (PreProposal): September 6, 2007 Proposal: November 13, 2007
PTSD New Investigator Award	MS Word Adobe PDF July 24, 2007	A maximum of \$300,000 for direct costs for up to a 3-year performance period plus indirect costs as appropriate	Pre-Application (LOI): September 13, 2007 Proposal: October 18, 2007

Traumatic Brain Injury Program Announcements

TBI Advanced Technology-Therapeutic Development Award	MS Word Adobe PDF July 24, 2007	A maximum of \$4,000,000 for direct costs for up to a 4-year performance period plus indirect costs as appropriate	Pre-Application (PreProposal): September 12, 2007 Proposal: November 13, 2007
TBI Investigator-Initiated Research Award	MS Word Adobe PDF July 18, 2007	<ul style="list-style-type: none"> The combined maximum funding for all institutions is \$600,000 for direct costs for up to a 4-year performance period plus indirect costs as appropriate For proposals incorporating clinical trials or clinical research, the combined maximum funding for all institutions is \$1.5M for direct costs for up to a 4-year performance period plus indirect costs as appropriate 	Pre-Application (LOI): September 4, 2007 Proposal: October 11, 2007
TBI Multidisciplinary Research Consortium Award	MS Word Adobe PDF July 24, 2007	A maximum of \$25,000,000 for direct costs for up to a 5-year performance period plus indirect costs as appropriate	Pre-Application (PreProposal): September 6, 2007 Proposal: November 13, 2007
TBI New Investigator Award	MS Word Adobe PDF July 24, 2007	A maximum of \$300,000 for direct costs for up to a 3-year performance period plus indirect costs as appropriate	Pre-Application (LOI): September 13, 2007 Proposal: October 11, 2007

B. In addition to joint projects creating and maintaining the VA/DoD Clinical Practice Guidelines for PTSD, two exceptional landmark studies were concluded in the past year:

Neuropsychological Outcomes of Army Personnel Following Deployment to the Iraq War
Jennifer J. Vasterling, Ph.D.; Susan P. Proctor, D.Sc.; Paul Amoroso, M.D., MPH; Robert Kane, Ph.D.; Timothy Heeren, Ph.D.; Roberta F. White, Ph.D.

- *JAMA*. 2006; 296:519–529.
- **Context:** The effects of war-zone deployment on neuropsychological health remain poorly understood. Neuropsychological performance deficits serve as sensitive measures of neural dysfunction and are often associated with psychosocial and occupational problems. Previous studies have not conducted objective neuropsychological assessments both before and after a major war-zone deployment.
- **Objective:** To examine objective neuropsychological outcomes of Iraq War deployment in a large military cohort.
- **Design, Setting, and Participants:** The Neurocognition Deployment Health Study, a prospective, cohort-controlled study conducted at military installations. This report centers on 961 male and female Active Duty Army soldiers drawn from the larger cohort. Deploying Army soldiers ($n = 654$) were examined prior to deployment to Iraq (April–December 2003) and shortly after return (within a mean of 73 days [median, 75 days]; January–May 2005) from Iraq deployment. A comparison group of soldiers ($n = 307$) similar in military characteristics but not deploying overseas during the study was assessed in sessions timed to be as close as possible to the assessment of deployers. Military unit sampling procedures facilitated representation of combat, combat support, and combat service support functions among both deployers and non-deployers.
- **Main Outcome Measures:** Individually administered, performance-based neuropsychological tasks. Estimates (β ; the unstandardized parameter estimate) for the absolute differences in adjusted mean outcome scores between deployed and non-deployed groups were determined using generalized estimating equations.
- **Results:** Multiple linear regression analyses adjusted for battalion membership revealed that Iraq deployment, compared with non-deployment, was associated with neuropsychological compromise on tasks of sustained attention ($\beta=0.11$; $P<.001$), verbal learning ($\beta=-1.51$; $P=.003$), and visual-spatial memory ($\beta=-3.82$; $P<.001$). Iraq deployment was also associated with increased negative state affect on measures of confusion ($\beta=1.40$; $P<.001$) and tension ($\beta=1.24$; $P<.001$). In contrast, deployment was associated with improved simple reaction time ($\beta=4.30$; $P=.003$). Deployment effects remained statistically significant after taking into account deployment-related head injury and stress and depression symptoms.
- **Conclusions:** Deployment to Iraq is associated with increased risk of neuropsychological compromise. Findings point to the need to investigate further the impact of deployment on neural functioning. Public health implications include consideration of neuropsychological compromise in health prevention and post-deployment clinical and occupational management.

Author Affiliations: Southeast Louisiana Veterans Health Care System and Tulane University School of Medicine, New Orleans, Louisiana (Dr. Vasterling); VA Boston Healthcare System and Boston University School of Public Health, Boston,

Massachusetts (Drs. Proctor, Heeren, and White); US Army Research Institute of Environmental Medicine, Natick, Massachusetts (Dr. Proctor); Madigan Army Medical Center, Fort Lewis, Washington (Dr. Amoroso); and VA Maryland Health Care System and University of Maryland School of Medicine, Baltimore, Maryland (Dr. Kane).

Cognitive Behavioral Therapy for Posttraumatic Stress Disorder in Women, A Randomized Controlled Trial

Paula P. Schnurr, Ph.D.; Matthew J. Friedman, M.D., Ph.D.; Charles C. Engel, M.D., MPH; Edna B. Foa, Ph.D.; M. Tracie Shea, Ph.D.; Bruce K. Chow, M.S.; Patricia A. Resick, Ph.D.; Veronica Thurston, MBA; Susan M. Orsillo, Ph.D.; Rodney Haug, Ph.D.; Carole Turner, M.N.; Nancy Bernardy, Ph.D.

- *JAMA*. 2007;297:820–830.
- **Context:** The prevalence of post-traumatic stress disorder (PTSD) is elevated among women who have served in the military, but no prior study has evaluated treatment for PTSD in this population. Prior research suggests that cognitive behavioral therapy is a particularly effective treatment for PTSD.
- **Objective:** To compare prolonged exposure, a type of cognitive behavioral therapy, with present-centered therapy, a supportive intervention, for the treatment of PTSD.
- **Design, Setting, and Participants:** A randomized controlled trial of female veterans (n=277) and Active Duty personnel (n=7) with PTSD recruited from nine VA medical centers, two VA readjustment counseling centers, and one military hospital from August 2002–October 2005.
- **Intervention:** Participants were randomly assigned to receive prolonged exposure (n=141) or present-centered therapy (n=143), delivered according to standard protocols in 10 weekly 90-minute sessions.
- **Main Outcome Measures:** PTSD symptom severity was the primary outcome. Comorbid symptoms, functioning, and quality of life were secondary outcomes. Blinded assessors collected data before and after treatment and at 3- and 6-month follow-up.
- **Results** Women who received prolonged exposure experienced greater reduction of PTSD symptoms relative to women who received present-centered therapy (effect size, 0.27; $P=.03$). The prolonged exposure group was more likely than the present-centered therapy group to no longer meet PTSD diagnostic criteria (41.0 percent vs 27.8 percent; odds ratio, 1.80; 95 percent confidence interval, 1.10-2.96; $P=.01$) and achieve total remission (15.2 percent vs 6.9 percent; odds ratio, 2.43; 95 percent confidence interval, 1.10-5.37; $P=.01$). Effects were consistent over time in longitudinal analyses, although in cross-sectional analyses most differences occurred immediately after treatment.
- **Conclusions:** Prolonged exposure is an effective treatment for PTSD in female veterans and Active Duty Military personnel. It is feasible to implement prolonged exposure across a range of clinical settings.
- **Trial Registration:** www.clinicaltrials.gov, Identifier: NCT00032617
- **Author Affiliations:** National Center for PTSD, White River Junction, Vermont (Drs. Schnurr, Friedman, and Bernardy, and Ms. Thurston); Dartmouth Medical School, Lebanon, New Hampshire (Drs. Schnurr, Friedman, and Bernardy); Walter Reed Army

Medical Center and Uniformed University of the Health Sciences (Dr. Engel) and VA Office of Women Veterans Health (Ms. Turner), Washington, D.C.; Department of Psychiatry, University of Pennsylvania, Philadelphia, Pennsylvania (Dr. Foa); VA Medical Center and Brown University Medical Center, Providence, Rhode Island (Dr. Shea); VA Cooperative Studies Program, Menlo Park, California (Mr. Chow); VA National Center for PTSD (Dr. Resick), Boston University School of Medicine (Dr. Resick) and Suffolk University (Dr. Orsillo), Boston, Massachusetts; VA Readjustment Counseling Center, Cheyenne, Wyoming (Dr. Haug).

C: Additional Deployment-Related Research, much of which is jointly conducted includes:

APPENDIX A: MENTAL HEALTH DEPLOYMENT STUDIES

Mental Health (includes PTSD) Deployment-Related

On-going Research Projects:

2003-2004 Active-Duty Epidemiological Study*

This research will compare short-term health outcomes in troops deployed to OIF vs. non-deployed troops, including PTSD, neuropsychological symptoms, and health-related quality of life.

A Placebo-Controlled Trial of Prazosin vs. Paroxetine in Combat Stress-Induced PTSD Nightmares and Sleep Disturbance [CDMRP]

This study will evaluate the efficacy and tolerability of prazosin in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) combat-exposed returnees with nightmares and disrupted sleep in the context of PTSD.

A Randomized Clinical Trial of Cognitive-Behavioral Treatment for PTSD in Women

Ad Lib Smoking in PTSD: A Naturalistic Study

Adrenergic Mechanisms and Treatment of PTSD and Secondary Drug Abuse

Attitudes and Well-Being of Fathers During and After Deployment*

Barriers and Facilitators to PTSD Treatment Seeking

Cognitive-Behavioral Treatments for PTSD Sleep Disturbance

Context and the Hippocampus in Unremitting Posttraumatic Stress Disorder

New Onset of Tobacco Use During Deployment*

Ovarian Hormone Regulation of Behavior Following Traumatic Stress

Perceptions of the Compensation and Pensions Process for PTSD: Symptoms and Service Utilization*

This study will evaluate veterans who have new compensation claims for PTSD.

Prazosin Treatment for Combat Trauma PTSD Nightmares and Sleep Disturbance

Predictive Tools for PTSD*

This research will develop criteria to identify vulnerable soldiers returning from operational deployments.

Prefrontal Cortical Function in PTSD: A Proton Magnetic Resonance Spectroscopy (MRS)

Prospective Assessment of Neurocognition in Future Gulf-deployed and Gulf-nondeployed Military Personnel: A Pilot Study

This study will compare pre and post-deployment health status of military personnel deployed to the Middle East. (See also VA-88)

Psychological Interventions*

This research will evaluate potential group-level and individual-level interventions designed to improve soldier resiliency following exposure to potentially traumatic events.

Psychological Screening*

This research will develop at short validated psychological screening procedures to match soldiers with behavioral health care.

PTSD, Anger, Cognition, and Partner Violence Among Combat Veterans

PTSD, Sleep Disordered Breathing and APOE Genotype: Effects on Cognition

Quantitative Trait Genes Controlling Circadian and Sleep Behaviors

This animal study will look at mouse genes to determine which ones are responsible for how the internal clock controls sleep.

Retrospective Records Review to Determine Effectiveness of Prazosin in Reducing Nightmares in Recent Combat Veterans*

Role of Thyrotropin-Releasing Hormone (TRH) in Antidepressant Treatment

Serotonin and Dopamine Transporter Genetics: A Factor in PTSD Risk?

Sexual Assault Prevalence among Male PTSD Disabled Gulf War Veterans

Stress and Coping Aboard USNS Comfort*

Telemedicine and Anger Management Groups for PTSD Veterans in the Hawaiian Islands

Telephone Case Monitoring for Veterans with PTSD

The Efficacy of Virtual Reality in Treating Post-Traumatic Stress Disorder in US Warfighters Returning from Iraq and Afghanistan Combat Theaters

This study will focus on the development and refinement of psychotherapy procedures and the development of virtual environments to obtain the effectiveness of early treatment interventions using traditional VR toolsets and high-end VR equipment.

The Role of Neuropeptide (NPY) in Uncontrolled Alcohol Drinking and Relapse Behavior Resulting from Exposure to Stressful Events

This research will test the hypothesis that normal brain signaling protects against uncontrolled alcohol self-administration and relapse caused by exposure to stressful events.

The Role of the Serotonin 2C Receptor mRNA Editing and Alternative Splicing in Suicidal Behavior

Treatment of PTSD-related Anger in Troops Returning from Hazardous Deployments [CDMRP]

This study will test the efficacy and benefits of an existing evidenced-based cognitive-behavioral anger intervention for the secondary prevention of PTSD-related anger problems.

Use of Virtual Reality Warfighter Scenarios with Returning Gulf War and Afghanistan Combatants Experiencing Symptoms of Acute Stress Response and PTSD

This research is aimed at developing game-based VR scenarios to demonstrate the efficacy of VR therapy for treating acute PTSD and combat stress in Active Duty Military members.

Women Veterans Project: Operation Iraqi Freedom*

This research will determine the effects of deployment experiences, work stress and family stress on mental and physical health in current and former Active Duty and Reserve Air Force personnel who deployed during the period of OIF to Iraq or elsewhere.

Work, Family, and Stress: Deployment Resilience and Retention*

This study will determine the effects of deployment experiences, work stress and family stress on mental health and well being in male and female Air Force personnel who served during OEF and OIF.

*** (Asterisk) -Indicates the research information was obtained from a data call conducted by the office of Force Health Protection and Readiness in March 2005. All of this research is considered to be “on-going” at this time until a new data call can be initiated.**

Completed Research Projects:

A Comparison of PTSD Symptomatology among Three Army Medical Units Involved in ODS
This study tested individuals from reserve units involved in Operation Desert Storm for symptoms related to PTSD.

Antidepressant Mechanisms of Vagus Nerve Stimulation

A Placebo-Controlled Trial of Adjunctive Quetiapine for Refractory PTSD

A Randomized Clinical Trial for Cognitive-Behavioral Treatment for PTSD in Women (See DoD-125)

This study compared the ability of two types of treatment for mental and emotional disorders for women with military-related PTSD.

A Randomized Clinical Trial of Cognitive-Behavioral Treatment for PTSD in Women (See VA-74)

This study reviewed two different types of treatment for women with military-related PTSD.

A Randomized, Multi-Center, Controlled Trial of Multi-Model Therapy in Veterans with Gulf War Illness (EBT) (See also DoD-115; formerly VA/DoD 1V)

This project studied Gulf War veterans who had unexplained chronic medical symptoms such as pain, fatigue, and/or cognitive difficulties.

A Randomized, Multi-Center, Controlled Trial of Multi-Model Therapy in Veterans with Gulf War Illnesses (CBT) (See also VA-62; formerly VA/DoD 1D)

This study looked at whether or not cognitive behavioral therapy (CBT) and aerobic exercise, alone or in combination, are better than regular care for Gulf War veterans with chronic unexplained symptoms.

Acute and Long-Term Impact of Deployment to Southwest Asia on the Physical and Mental Health of Soldiers and their Families

This study looked at the short and long-term impact of deployment to Southwest Asia on the physical and mental health of soldiers and their families.

Clinical Relevance of Novel Immunological Markers in PTSD

This study looked at the possible relationship between a certain protein and PTSD in Vietnam War veterans.

CRF1 Receptor, GRKs, Arrestins: Stress Sensitization and Mood Disorders

Demonstrating the Efficacy of Scenario-Based Virtual Reality Tools for Assessment and Treatment of Acute PTSD and Acute Stress Response in Combat Arms Personnel

The current effort was aimed at developing game-based virtual reality scenarios to demonstrate efficacy of VR therapy for treating acute PTSD and combat stress in Active Duty Military member.

Desert Storm Reunion Survey

This project examined patterns of readjustment of Gulf War veterans following their return from the Gulf region.

Does PTSD Service Connection Affect Disease Course and Family?

Epidemiologic Studies of Morbidity Among Gulf War Veterans: A Search for Etiologic Agents and Risk Factors; A Study of Symptoms Among 1500 Seabees

This study compared post-war symptoms and diseases of Gulf War-era deployed veterans to non-deployed veterans.

Epidemiologic Studies of Morbidity Among Gulf War Veterans: A Search for Etiologic Agents and Risk Factors; Study 5: Seabee Health Study

This study compared symptoms and illnesses between Gulf War veterans and other veterans.

Epidemiological Studies Persian Gulf War Illnesses, PG Women's Health Linkage Study

This study compared the general health of Gulf War era women who deployed to those who did not deploy.

Evaluation of Cognitive Functioning of Persian Gulf Veterans

This project reviewed self-reported health complaints and environmental exposures in the Persian Gulf region.

Family Study of Fibromyalgia

The primary goal of this study was to examine the relationship between fibromyalgia and mental disorders within families.

Feasibility of Developing a Registry of PTSD Affected Veteran Sib Pairs

This study examined the possibility of developing a database of veteran sibling pairs to look at possible genetic associations with PTSD.

Follow-Up Investigation of Troops Exposed to Nerve Agents at Aberdeen Proving Ground (Pilot Study) (See also VA-63A; formerly VA/DoD-2DA)

This pilot study surveyed individuals exposed to chemical agents for common neurological and mental health disorders to determine whether or not a full study of health effects on exposed individuals can be done.

Follow-Up Investigation of troops exposed to nerve agents at Aberdeen Proving Ground (Pilot Study) (See also DoD-116A; formerly VA/DoD-2VA/2DA)

This study was done to determine if it was possible to follow up on soldiers exposed to chemical agents.

Follow-up of Psychological and Neurocognitive Gulf War Outcome: Relation to Stress

The purpose of this study was to continue to examine mental illness and brain function in Gulf War veterans with and without PTSD.

HPA Axis Alterations in PTSD: A Comparison of Gulf War and Vietnam Veterans

HPA Axis Reactivity in Men and Women with Chronic PTSD

This study was designed to evaluate the brain functions in men and women with chronic PTSD.

Illness Among Persian Gulf War Veterans: Case Validation Studies

This study compared confirmed illnesses of Gulf War veterans to veterans who did not deploy to the Gulf.

Improving Outcomes of Depression in Primary Care

This study reviewed the impact of a low-intensity care management program on outcomes of patients with major depression.

Interactions of Subsymptomatic Doses of Sarin with Pyridostigmine: Neurochemical, Behavioral, and Physiological Effects

This animal study tested the effects of low level exposure of sarin and pyridostigmine bromide (PB) on the brain and nervous system functions of rats.

Longitudinal Health Study of Gulf War Veterans

This study assessed the health status of Gulf War veterans and non-Gulf War veterans to determine if the Gulf War veterans health status are better, worse or the same as non-Gulf War veterans ten or more years after the war.

Measurement and Validation of Psychosocial Risk and Resilience Factors Accounting for Physical and Mental Health and Health-Related Quality of Life among PGWVs

This study compared self-reported symptoms and health-related quality of life among Gulf War veterans to determine if these factors could be associated with deployment.

Memory and Attention in PTSD

This project compared two groups of PTSD sufferers (one Vietnam-era, one Gulf War era) to a group of veterans with no PTSD symptoms.

Neural Correlates of PTSD Prevention with Mindfulness Based Stress Reduction (MBSR) in Iraqi Veterans

Neurobiology of Severe Psychological Trauma in Women

This study reviewed the effects of mental trauma on normal brain functioning in women with PTSD.

Neurological and Circadian Substrates of PTSD-like Behaviors

This study was designed to determine if the development of PTSD requires both a traumatic event and a genetic increased risk.

Neuroplasticity and Calcium Signaling in Stressed Rat Amygdala

This animal study looked at the ability of rats brains to recover function after being exposed to stress.

Neuropsychological Functioning in Persian Gulf Era Veterans

This study evaluated the brain function and mental health of some Gulf War veterans who sought treatment.

Neuropsychological Functioning in Veterans

This project compared learning, memory, and attention performances in groups of Gulf War returnees with and without PTSD diagnosis.

Physical, Mental, Social, and Family Health Outcomes of Gulf War Veterans

This study compared the physical, social, mental, and family health of Gulf War veterans to military personnel who deployed and did not deploy to other regions of the world.

Physiologic Effects of Stress in Gulf War Veterans

This study looked at the association between Persian Gulf War illness and stress among women who served in the Persian Gulf War.

Physiological Responding in Posttraumatic Stress Disorder

This study examined combat veterans from the Vietnam and Persian Gulf Wars with and without PTSD.

Predicting Chronic PTSD in Individuals Exposed to Trauma

Psychobiologic Alterations in Persian Gulf War Veterans with and without PTSD

This study compared brain functions of Vietnam veterans to Gulf War veterans.

Psychobiological Assessment of Desert Storm Veterans

This study was designed to evaluate the relationship between PTSD and physical symptoms in Gulf War veterans.

Psychological Adjustment in Operation Desert Shield/Storm Veterans

This study looked at the mental health effects of military service in Operations Desert Shield/Desert Storm.

Psychological Assessment of Operation Desert Storm Returnees

This study compared post-war mental health symptoms between a group of Gulf War returnees to a group of troops from the same units who did not deploy.

Psychological Health Screening: Methods and Metrics for Deployed Forces

This study was designed to develop and test a mental health screening tool for soldiers throughout their deployment cycle.

Psychological Screening Tools for Reduced Attrition

This research developed instruments to identify individuals likely to attrite based on their psychological (vice physical) attributes.

Psychological Test Data of Gulf War Veterans Over Time

This project was designed to learn more about mental stress and physical symptoms experienced by Gulf War veterans.

Psychological and Neurobiological Consequences of the Gulf War Experience

This study looked at the effects of stress from war-related trauma on Gulf War veterans over time.

Psychosocial, Neuropsychological and Neurobehavioral Assessment (Project I)

This study was designed to determine if veterans had developed neurobehavioral or mental health effects from service in the Gulf War.

Relationships of Stress Exposures to Health in Gulf War Veterans

This study addressed gaps and enhanced the understanding of the undefined Gulf War Illness due to stress and stress exposures encountered by Gulf War veterans.

SPECT Benzodiazepine Receptor and MR Imaging in PTSD

This study was designed to use an imaging technique to compare brain functions between Vietnam and Gulf War veterans with PTSD.

Stress, Pro-Inflammatory Cytokines, and Coping Behavior

Stress Symptoms and Their Causal Attribution in Desert Storm Veterans

This study tested individuals from reserve units for symptoms related to PTSD.

Suppression of PTSD-Related Information-Processing Biases

The General Well-Being of Gulf War Era Service Personnel from the States of Pennsylvania and Hawaii: A Survey

This study reviewed the effects of the Gulf War on the mental health and adjustment of military personnel in Hawaii and Pennsylvania who either deployed or did not deploy.

Traumatic Experiences Persistently Enhance Cue-dependent Learning: Toward an Animal Model of Chronic Stress and Posttraumatic Stress Disorder

This animal study looked at the relationship between repeated exposures to stressful events and the development of stress-related mental illness.

Troops Exposed to Nerve Agents at Aberdeen Proving Ground: Follow-Up

This was a follow-up study reporting on the health of U.S. Army soldiers who were exposed to chemical warfare and other agents between 1955 and 1975.

Medical Research Publications

Mental Health (includes PTSD) Deployment- Related

The following is a listing of articles from peer-reviewed medical and scientific journals. The articles are listed alphabetical by the first author's last name beginning with the current year.

2001–2007 Medical Articles Related to Mental Health of Veterans of Operation Enduring Freedom and Operation Iraqi Freedom (February 10, 2007)

Articles Related to Operation Enduring Freedom Only

2001–2007

1. Reyes, VA, and Hicklin, TA. Anger in the combat zone. *Military Medicine* 2005 June; 170(6):483–487. **(Funded by DoD)**
2. Champion, BH, Hacker Hughes, JG, Devon, M, and Fear, NT. Psychological morbidity during the 2002 deployment to Afghanistan. *Journal of Royal Army Medical Corps* 2006 June; 152(2):91–93. **(Funded by UK Ministry of Defence)**

Articles Related to Both Operation Enduring Freedom & Operation Iraqi Freedom

2001–2004

1. Hoge, CW, Castro, CA, Messer, SC, McGurk, D, Cotting, DI, and Koffman, RL. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine* 2004 July 1; 351(1):13–22. **(Funded by Army Medical Research and Materiel Command)**
2. Friedman, MJ. Acknowledging the psychiatric cost of war. *New England Journal of Medicine* 2004 July 1; 351(1):75–77. **(Commentary)**
3. Gross, R, and Neria, Y. Combat duty in Iraq and Afghanistan and mental health problems. *New England Journal of Medicine* 2004 October 21; 351(17):1798–1800. **(Letter to editor on Hoge, et al.)**
4. Lamberg, L. Military psychiatrists strive to quell soldiers' nightmares of war. *Journal of American Medical Association* 2004 October 6; 292(13):1539–1540. **(News article)**

2005

1. Friedman, MJ. Veterans' mental health in the wake of war. *New England Journal of Medicine* 2005 March 31; 352(13):1287–1290. **(Commentary)**
2. Kang, HK, and Hyams, KC. Mental health care needs among recent war veterans. *New England Journal of Medicine* 2005 March 31; 352(13):1289. **(Funded by VA)**
3. Stetz, MC, McDonald, JJ, Lukey, BJ, and Gifford, RK. Psychiatric diagnoses as a cause of medical evacuation. *Aviation, Space, and Environmental Medicine* 2005 July; 76 (7 Supplement):C15–C20. **(Funded by DoD)**
4. Wain, H, Bradley, J, Nam, J, Waldrep, D, and Cozza, S. Psychiatric interventions with returning soldiers at Walter Reed. *Psychiatric Quarterly* 2005 Winter; 76(4):351–360. **(Review)**

5. Doyle, ME, and Peterson, KA. Re-entry and reintegration: Returning home after combat. *Psychiatric Quarterly* 2005 Winter; 76(4):361–370. **(Review)**
6. Ramaswamy, S, Madaan, V, Qadri, F, Heaney, CJ, North, TC, Padala, PR, Sattar, SP, and Petty, F. A primary care perspective of posttraumatic stress disorder for the Department of Veterans. *Primary Care Companion to the Journal of Clinical Psychiatry* 2005; 7(4):180–187. **(Review)**
7. Reeves, RR, Parker, JD, and Konkle-Parker, DJ. War-related mental health problems of today's veterans: New clinical awareness. *Journal of Psychosocial Nursing and Mental Health Services* 2005 July; 43(7):18–28. **(Review)**
8. Sammons, MT. Psychology in the public sector: Addressing the psychological effects of combat in the US Navy. *American Psychologist* 2005 November; 60(8):899–909. **(Review)**
9. Ursano, RJ. On healing and prevention. *Psychiatric Times* 2005 April; 22(4):1–6. **(Review)**
10. Kaplan, A. Virtually possible: Treating and preventing psychiatric wounds of war. *Psychiatric Times* 2005 April; 22(4):1–6. **(News article)**
11. Levin, A. Professional psychiatrists may soon see more combat veterans. *Psychiatric News* 2005 November 4; 40(21):1. **(News article)**

2006: Psychiatric Screening, Diagnosis and Risk Factors

1. Rundell, JR. Demographics of and diagnoses in Operation Enduring Freedom and Operation Iraqi Freedom personnel who were psychiatrically evacuated from the theater of operations. *General Hospital Psychiatry* 2006 July-August; 28(4):352–356. **(Funded by DoD)**
2. Sherer, RA. Adequacy of mental health screening and care in the military is questioned. *Psychiatric Times* 2006 July; 23(8). **(News article)**
3. Levin, A. Military blamed for inadequate referrals for PTSD assessment. *Psychiatric News* 2006 June 16; 41(12):5. **(News article)**
4. Levin, A. Vets' PTSD claims trigger study of diagnostic criteria. *Psychiatric News* 2006 April 7; 41(7):13. **(News article)**
5. Levin, A. VA to keep using *DSM* to diagnose PTSD in vets. *Psychiatric News* 2006 July 21; 41(14):1. **(News article)**
6. Stambor, Z. War's invisible wounds: Volunteer psychologists and other providers are helping relatives of National Guard and Army Reserve troops in Afghanistan and Iraq to cope with the wars' effects. *Monitor on Psychology* 2006 January; 37(1):48. **(News article)**

2006: Psychiatric Treatment and Prevention

1. Hoge, CW, Auchterlonie, JL, and Milliken, CS. Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq and Afghanistan. *Journal of the American Medical Association* 2006 March 1; 295(9):1023–1032. **(Funded by DoD)**
2. Levin, A. Nearly 10 percent of Iraq vets screen positive for PTSD. *Psychiatric News* 2006 April 7; 41(7):1. **(News article on Hoge study)**
3. Miller, G. Mental health: Widening the attack on combat-related mental health problems. *Science* 2006 August 18; 313(5789):908–909. **(News article on Hoge study)**
4. Larson, GE, Booth-Kewley, S, and Highfill-McRoy, RM. Mental health after deployment to Iraq or Afghanistan. *Journal of the American Medical Association* 2006 August 2; 296(5):514–5. **(Letter to Editor on Hoge, et al.)**
5. Filien DA, Saxon, A, and Renner, JA, Jr. Mental health after deployment to Iraq or Afghanistan. *Journal of the American Medical Association* 2006 August 2; 296(5):515. **(Letter to Editor on Hoge, et al.)**
6. Hoge, CW, Auchterlonie, JL, and Milliken, CS. Mental health after deployment to Iraq or Afghanistan. *Journal of the American Medical Association* 2006 August 2; 296(5):516. **(Author reply)**
7. Stevens, LM, Lynn, C, and Glass, RM. JAMA patient page: Posttraumatic stress disorder. *Journal of the American Medical Association* 2006 August 2; 296(5):614. **(Patient fact sheet)**
8. Grieger, TA, Cozza, SJ, Ursano, RJ, Hoge, C, Martinez, PE, Engel, CC, and Wain, HJ. Posttraumatic stress disorder and depression in battle-injured soldiers. *American Journal of Psychiatry* 2006 October; 163(10): 1777–1783. **(Funded by DoD)**
9. Levin, A. Injured soldiers' symptoms may worsen over time. *Psychiatric News* 2006 October 6; 41(19):22. **(News article on Grieger article)**
10. Friedman, MJ. Posttraumatic stress disorder among military returnees from Afghanistan and Iraq. *American Journal of Psychiatry* 2006 April 1; 163(4):586–593. **(Review)**
11. Ritchie, EC, Benedek, D, Malone, R, and Carr-Malone, R. Psychiatry and the military: An update. *Psychiatric Clinics of North America* 2006 September; 29(3):695–707. **(Review)**
12. Hutchison, J, and Banks-Williams, L. Clinical issues and treatment considerations for new veterans: Soldiers of the wars in Iraq and Afghanistan. *Primary Psychiatry* 2006 March; 13(3):66–71. **(Review)**

1. Hoge, CW, Auchterlonie, JL, and Milliken, CS. Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq and Afghanistan. *Journal of the American Medical Association* 2006 March 1; 295(9):1023–1032. **(Funded by DoD)**
2. Levin, A. Nearly 10 percent of Iraq vets screen positive for PTSD. *Psychiatric News* 2006 April 7; 41(7):1. **(News article on Hoge study)**
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11. Ritchie, EC, Benedek, D, Malone, R, and Carr-Malone, R. Psychiatry and the military: An update. *Psychiatric Clinics of North America* 2006 September; 29(3):695–707. **(Review)**
12. Hutchison, J, and Banks-Williams, L. Clinical issues and treatment considerations for new veterans: Soldiers of the wars in Iraq and Afghanistan. *Primary Psychiatry* 2006 March; 13(3):66–71. **(Review)**

13. Regan, J, Hagwood, TW, Hamer, G, and Wright, A. Posttraumatic stress disorder following military deployment in Iraq and Afghanistan. *Tennessee Medicine* 2006 February; 99(2):40, 43. **(Review)**
14. Lineberry. TW, Bostwick, JM, and Rundell, JR. US troops returning home: Are you prepared? *Current Psychiatry* 2006 January; 5(1):13–22. **(Review)**
15. Lineberry, TW, Ramaswamy, S, Bostwick, JM, and Rundell, JR. Traumatized troops: How to treat combat-related PTSD. *Current Psychiatry* 2006 May; 5(5):39–52. **(Review)**
16. Lineberry, TW, Ramaswamy, S, Bostwick, JM, and Rundell, JR. Military sexual trauma: How to identify and treat a unique form of PTSD. *Current Psychiatry* 2006 May; 5(5):53–54. **(Review)**
17. Kiser, K. Tailhook's legacy. *Minnesota Medicine* 2006 February; 89(2):10, 12. **(News article)**
18. Kaplan, A. Hidden combat wounds: Extensive, deadly, costly. *Psychiatric Times* 2006 January; 23(1). **(News article)**
19. Pomerantz, JM. Can posttraumatic stress disorder be prevented? *Psychiatric Times* 2006 April; 23(4). **(Review)**
20. Daly, R. Military hopes to do better job of meeting troops' mental health needs. *Psychiatric News* 2006 June 2; 41(11):1. **(News article)**

2007: Psychiatric Screening, Diagnosis and Risk Factors

1. Chartrand MM, Siegel B. At War in Iraq and Afghanistan: Children in US Military Families. *Ambulatory Pediatrics* 2007 Jan-Feb;7(1):1–2. **(Letter from Editor)**

Articles Related to Operation Iraqi Freedom Only

2003-2005: United States

1. US Army Surgeon General and Headquarters Department of the Army. *Operation Iraqi Freedom (OIF) Mental Health Advisory Team (MHAT) Report*. 16 December 2003. Accessible at: www.armymedicine.army.mil/news/mhat/MHAT_Report.pdf
2. US Army Surgeon General. *Operation Iraqi Freedom (OIF-II) Mental Health Advisory Team (MHAT-II) Report*. 30 January 2005. Accessible at: www.armymedicine.army.mil/news/mhat_ii/OIF-II_REPORT.pdf
3. Nelson, R. Suicide rates rise among soldiers in Iraq. *Lancet* 2004 January 24; 363(9405):300. **(News article)**
4. Forsten, R, and Schneider, B. Treatment of the stress casualty during Operation Iraqi Freedom One. *Psychiatric Quarterly* 2005 Winter; 76(4):343–350. **(Review)**
5. Cozza SJ, Chun RS, Polo JA. Military families and children during Operation Iraqi Freedom. *Psychiatric Quarterly* 2005 Winter;76(4):371-8. **(Review)**
6. McNulty, PA. Reported stressors and health care needs of active-duty Navy personnel during three phases of deployment in support of the War in Iraq. *Military Medicine* 2005 June; 170(6):530–535. **(Funded by DoD)**
7. Daly, CM, Doyle, ME, Raskind, M, Raskind, E, and Daniels, C. Clinical case series: The use of prazosin for combat-related recurrent nightmares among Operation Iraqi Freedom combat veterans. *Military Medicine* 2005 June; 170(6):513-515. **(Funded by DoD)**

2003–2005: United Kingdom

1. McAllister, PD, Blair, SP, and Philpott, S. Op Telic—A field mental health team in the general support medical setting. *Journal of Royal Army Medical Corps* 2004 June; 150(2):107–112. **(Funded by UK Ministry of Defence)**
2. Turner, MA, Kiernan, MD, McKechnie, AG, Finch, PJ, McManus, FB, and Neal, LA. Acute military psychiatric casualties from the war in Iraq. *British Journal of Psychiatry* 2005 June 1; 186(6):476–479. **(Funded by UK Ministry of Defence)**
3. Hacker-Hughes, J, Cameron, F, Eldridge, R, Devon, M, Wessely, S, and Greenberg, N. Going to war does not have to hurt: Preliminary findings from the British deployment to Iraq. *British Journal of Psychiatry* 2005 June 1; 186(6):536–537. **(Funded by UK Ministry of Defence)**
4. Lepping, P. Going to war always hurts (response to Hacker-Hughes, et al.). *British Journal of Psychiatry* 2006 January 1; 188(1):83. **(Letter to editor)**

5. Hacker-Hughes, J, Wessely, S, Cameron, F, Eldridge, R, and Devon, M. Authors' reply (to P. Lepping). *British Journal of Psychiatry* 2006 January 1; 188(1):83. **(Reply to Lepping letter)**
6. Jhingan, HP. War and psychological health (response to Hacker-Hughes, et al.). *British Journal of Psychiatry* 2006 March; 188(3):290. **(Letter to Editor)**
7. Hacker-Hughes, JG, Cameron, F, Eldridge, R, Devon, M, Greenberg, N, and Wessely, S. Authors' reply (to Jhingan). *British Journal of Psychiatry* 2006 March; 188(3):290-291. **(Reply to Jhingan letter)**

2006: United States: Psychiatric Screening, Diagnosis, and Risk Factors

1. Office of the Surgeon, Multinational Force-Iraq and Office of the Surgeon General US Army Medical Command. *Mental Health Advisory Team (MHAT-III) Operation Iraqi Freedom 04-06 Report*. 20 May 2006. Accessible at:
http://www.armymedicine.army.mil/news/mhat/mhat_iii/mhat-iii.cfm
2. Killgore, WD, Stetz, MC, Castro, CA, and Hoge, CW. The effects of prior combat experience on the expression of somatic and affective symptoms in deploying soldiers. *Journal of Psychosomatic Research* 2006 April; 60(4):379–385. **(Funded by DoD)**
3. Eaton, KM, Messer, SC, Garvey-Wilson, AL, and Hoge, CW. Strengthening the validity of population-based suicide rate comparisons: An illustration using US military and civilian data. *Suicide and Life-Threatening Behavior* 2006 April; 36(2):182–191. **(Funded by DoD)**
4. Reger, GM. Combat operational stress control in Iraq: Lessons learned during Operation Iraqi Freedom. *Military Psychology* 2006; 18(4):297–307. **(Review)**
5. Hoyt, GB. Integrated mental health within operational units: Opportunities and challenges. *Military Psychology* 2006; 18(4):309–320. **(Review)**
6. Gutierrez, CA, Blume, AW, Schmaling, KB, Stoeber, CJ, Fonseca, C, and Russell, ML. Predictors of aversive alcohol consequences in a military sample. *Military Medicine* 2006 September; 171(9):870–874. **(Funded by DoD)**
7. Romanoff, MR. Assessing military veterans for posttraumatic stress disorder: A guide for primary care clinicians. *Journal of American Academy of Nurse Practitioners* 2006 September; 18(9):409–413. **(Review)**
8. Kimerling, R, Ouimette, P, Prins, A, Nisco, P, Lawler, C, Cronkite, R, and Moos, RH. Brief Report: Utility of a short screening scale for DSM-IV PTSD in primary care. *Journal of General Internal Medicine* 2006 January; 21(1):65–67. **(Funded by VA)**

2. Horn, O, Hull, L, Jones, J, Murphy, D, Browne, T, Fear, NT, Hotopf, M, Rona, RJ, and Wessely, S. Is there an Iraq War Syndrome? Comparison of the health of UK service personnel after the Gulf and Iraq wars. *Lancet* 2006 May 27; 367(9524):1742–1746. **(Funded by UK Ministry of Defence)**
3. Axelrod, BN. Interpreting symptoms in military personnel after combat. *Lancet* 2006 May 27; 367(9524):1709–1710. **(Commentary)**
4. Hoge, CW, and Castro, CA. Post-traumatic stress disorder in UK and US forces deployed to Iraq. *Lancet* 2006 September 2; 368(9538):837. **(Letter to editor on Hotopf, et al.)**
5. Hotopf, M, Fear, N, Hull, L, Rona, R, and Wessely, S. Post-traumatic stress disorder in UK and US forces deployed to Iraq-Author's reply. *Lancet* 2006 September 2; 368(9538):837. **(Reply to letter of Hoge)**
6. Holdstock, D. Is there an Iraq war syndrome? *Lancet* 2006 September 2; 368(9538):837-838. **(Letter to editor on Horn, et al.)**
7. Jones, R. Interpreting symptoms in military personnel after combat. *Lancet* 2006 September 2; 368(9538):838. **(Letter to editor on Horn, et al.)**
8. Horn, O, and Wessely, S. Is there an Iraq war syndrome?-Author's reply. *Lancet* 2006 September 2; 368(9538):838. **(Reply to letter of Holdstock)**
9. Rona, RJ, Hooper, R, Jones, M, Hull, L, Browne, T, Horn, O, Murphy, D, Hotopf, M, and Wessely, S. Mental health screening in Armed Forces before the Iraq War and prevention of subsequent psychological morbidity: Follow-up study. *British Medical Journal* 2006 November 11; 333(7576):991–995. **(Funded by UK Ministry of Defence)**
10. Hyams, KC. Mental health screening before troop deployment is not supported by current evidence. *British Medical Journal* 2006 November 11; 333(7576):979–980. **(Editorial)**
11. Utku, F, and Checinski, K. Predicting mental illness in soldiers: Pre-deployment screening for vulnerability to post-traumatic stress disorder. *British Medical Journal* 2006 November 25; 333(7578):1123. **(Letter to Editor on Rona)**
12. Newton Ede MP, and Goh, SW. Predicting mental illness in soldiers: Too broad a conclusion. *British Medical Journal* 2006 November 25; 333(7578): 1123. **(Letter to Editor on Rona)**
13. Rona, RJ, Hooper, R, Greenberg, N, Jones, M, and Wessely, S. Medical downgrading, self-perception of health, and psychological symptoms in the British Armed Forces. *Occupational and Environmental Medicine* 2006 April; 63(4):250–254. **(Funded by UK Ministry of Defence)**

14. Rona, RJ, Hooper, R, French, C, Jones, M, and Wessely, S. The meaning of self-perception of health in the UK Armed Forces. *British Journal of Health Psychology* 2006 November; 11(4):703–715. **(Funded by UK Ministry of Defence)**
15. Jones, M, Rona, RJ, Hooper, R, and Wessely, S. The burden of psychological symptoms in the UK Armed Forces. *Occupational Medicine* 2006 August; 56(5):322–328. **(Funded by UK Ministry of Defence)**

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1. Rowan, AB, and Campise, RL. A multisite study of Air Force outpatient behavioral health treatment-seeking patterns and career impact. *Military Medicine* 2006 November; 171(11):1123–1127. **(Funded by DoD)**
2. Hill, JV, Johnson, RC, and Barton, RA. Suicidal and homicidal soldiers in deployment environments. *Military Medicine* 2006 March; 171(3):228–232. **(Funded by DoD)**
3. Moore, BA, and Reger, GM. Clinician to frontline soldier: A look at the roles and challenges of Army clinical psychologists in Iraq. *Journal of Clinical Psychology* 2006 March; 62(3):395–403. **(Review)**
4. Lambert, MT. Aripiprazole in the management of post-traumatic stress disorder symptoms in returning Global War on Terrorism veterans. *International Clinical Psychopharmacology* 2006 May; 21(3):185–187. **(Funded by VA)**
5. Zilke, TM, Morrison, RS, Kirby, A, and Martin, TS. Development of an interdisciplinary case management program for combat veterans. *Lippincott's Case Management: Managing the Process of Patient Care* 2006 September/October; 11(5):265–270. **(Funded by VA)**
6. Cooper, JA, Creamer, MC, and Forbes, D. Mental health initiatives for veterans and serving personnel. *Medical Journal of Australia* 2006 October 16; 185(8):453. **(Review)**

2007: Psychiatric Screening, Diagnosis, and Risk Factors

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2. Hoge CW, Terhakopian A, Castro CA, Messer SC, Engel CC. Association of posttraumatic stress disorder with somatic symptoms, health care visits, and absenteeism among Iraq war veterans. *Am J Psychiatry.* 2007 Jan;164(1):150–3. **(Funded by DoD)**
3. Levin, A. Multiple physical illnesses common in Iraq war veterans with PTSD. *Psychiatric News* 2007 January 19; 42(2):4. **(News article about Hoge study)**

4. Britt, TW, Greene-Shortridge, TM, and Castro, CA. The stigma of mental health problems in the military. *Military Medicine* 2007 Feb;172(2):157–161. **(Funded by DoD)**
5. Gahm GA, Lucenko BA, Retzlaff P, Fukuda S. Relative impact of adverse events and screened symptoms of posttraumatic stress disorder and depression among active duty soldiers seeking mental health care. *J Clin Psychol.* 2007 Mar;63(3):199–211. **(Funded by DoD)**
6. Crawford EF, Calhoun PS, Braxton LE, Beckham JC. Validity of the Personality Assessment Inventory Aggression Scales and Violence Potential Index in Veterans With PTSD. *J Pers Assess.* 2007 Feb;88(1):90-8. **(Funded by VA)**
7. Stein DJ, Seedat S, Iversen A, Wessely S. Post-traumatic stress disorder: medicine and politics. *Lancet.* 2007 Jan 13;369(9556):139–44. **(Review)**

2007: Psychiatric Treatment and Prevention

Bisson JI, Ehlers A, Matthews R, Pilling S, Richards D, Turner S. Psychological treatments for chronic post-traumatic stress disorder: Systematic review and meta-analysis. *Br J Psychiatry.* 2007 Feb;190:97–104. **(Review)**

Additional studies

2006

Black D W, Blum N , Letuchy E , Doebbeling C C, Forman-Hoffman V L, Doebbeling B N . Borderline personality disorder and traits in veterans: psychiatric comorbidity, healthcare utilization, and quality of life along a continuum of severity. *CNS Spectr.* 2006;11:680–9; quiz 719.

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