



Photo: Sgt. Pete Thibodeau

VA research on POSTTRAUMATIC STRESS DISORDER (PTSD)

Investigators with the Department of Veterans Affairs (VA) are conducting cutting-edge research aimed at improving care for Veterans with PTSD.

ABOUT PTSD

- PTSD affects many people who experienced life-threatening events, such as combat, terrorist attacks, or personal assaults.
- Symptoms include flashbacks, nightmares, depression, and social withdrawal, as well as physical health changes.
- Treatment often includes anti-anxiety drugs or other medications, along with counseling therapy.
- On average, about [14 percent](#) of Iraq and Afghanistan Veterans are estimated to have PTSD. This compares with a lifetime prevalence of about [10 to 12 percent](#) in Gulf War Veterans and around [30 percent](#) in Vietnam Veterans.
- Overall, nearly [7 percent](#) of U.S. adults will experience PTSD at some point in their lifetime. Women are about twice as likely as men to develop it.

VA RESEARCH ON PTSD: OVERVIEW

- VA supports numerous studies aimed at understanding, treating, and preventing PTSD. These studies range from investigations of the genetic or biochemical underpinnings of the

disease to evaluations of new or existing treatments, including large clinical trials and studies on complementary and alternative approaches, such as various forms of meditation.

- VA's [National Center for PTSD](#), with headquarters in Vermont and branches at several VA sites nationwide, is home to a great deal of VA research on PTSD.
- Many VA studies are conducted in collaboration with the Department of Defense (DoD) and involve Veterans as well as active duty Service members.

SELECTED MILESTONES AND MAJOR EVENTS

- 1980** – PTSD is given a clinical name and a scientific definition
- 1989** – VA creates the [National Center for PTSD](#), headquartered in White River Junction, Vermont
- 2006** – A VA [study](#) shows wide benefits in the PTSD population for cognitive processing therapy, a form of psychotherapy initially developed to help victims of sexual trauma
- 2007** – VA researchers first [demonstrate](#) the benefits of prolonged exposure therapy as a treatment for PTSD in a clinical trial

2007 – VA researchers [find](#) that prazosin, an inexpensive generic drug, can improve sleep and lessen trauma nightmares in Veterans with PTSD

2011 – VA expands [funding](#) for studying complementary and alternative medicine to treat PTSD

2012 – VA joins with DoD in funding \$100 million in new studies on TBI and PTSD, leading to the creation of two major research [consortia](#)

RECENT STUDIES: SELECTED HIGHLIGHTS

- **A major VA cooperative study found no reduction in symptoms** among Veterans with chronic PTSD who received the drug risperidone as an add-on treatment. Those in the study had not responded to first-line drug treatment with antidepressants. ([Journal of the American Medical Association](#), Aug. 3, 2011)
- **Using data from VA's Vietnam Era Twin Registry**, researchers from VA, Massachusetts General Hospital, and Tufts University identified the dorsal anterior cingulate as one of the brain areas that undergo changes in those with PTSD. ([American Journal of Psychiatry](#), September 2011)

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- **Researchers from VA's Palo Alto Health Care System and Stanford University** found that Iraq and Afghanistan Veterans diagnosed with PTSD have more physical ailments than Veterans without mental health conditions. In particular, women Veterans with PTSD were found to be more susceptible to physical health issues than their male counterparts. ([Journal of General Internal Medicine](#), January 2011)
- **VA and Duke University researchers found that recent combat veterans with PTSD** have less volume in the amygdala of their brains—an area involved in fear and anxiety. The study did not determine whether this difference is a result of trauma, or a preexisting risk marker for PTSD. ([Archives of General Psychiatry](#), November 2012)
- **Using a type of brain scan called magnetoencephalography,** VA researchers found a potential “biomarker of resilience,” which may help explain why some people who are exposed to trauma never develop PTSD. ([JAMA Psychiatry](#), April 2013)
- **Veterans with PTSD and alcohol dependence can be helped by the drug naltrexone,** according to a study

at the Philadelphia VA Medical Center and the University of Pennsylvania. The 165 participants received either naltrexone—which reduces alcohol withdrawal symptoms—or a placebo. They also received either supportive counseling or 18 sessions of prolonged exposure therapy. Comparing outcomes among the different study arms, the researchers determined that naltrexone helped stem problem drinking in the long term. ([Journal of the American Medical Association](#), August 7, 2013)

- **A VA study showed that using videoconferencing to provide psychotherapy to Veterans in remote locations** is less costly than in-person treatment. A study from the Honolulu VA had previously shown that videoconferences were just as effective as in-person therapy. The same group found that videoconferencing had lower total costs, compared with in-person therapy. ([Telemedicine Journal and E-health](#), October 2013)
- **VA researchers found lower levels of the norepinephrine transporter protein in people with PTSD,** versus healthy controls. The scientists used PET scans to determine levels of the protein in a part of the brain called the locus coeruleus, which helps activate

the body's stress response. The finding could eventually play a role in new drug development. ([JAMA Psychiatry](#), November 2013)

- **Life and family stress during deployment can increase the risk for PTSD** by up to nine times in Veterans who were exposed to combat, according to a study from the Providence (R.I.) VA Medical Center. The research included 238 National Guard/Reserves members who completed surveys about four months post-deployment. ([Psychiatry Research](#), Dec. 30, 2013)
- **Marine Resiliency Study researchers with VA and the Department of Defense** learned that traumatic brain injury during a deployment was by far the strongest predictor of PTSD symptoms in service members and Veterans, far more significant than prior TBIs or the intensity of combat they experienced. ([JAMA Psychiatry](#), February 2014)

For more information on VA studies on PTSD and other key topics relating to Veterans' health, please visit www.research.va.gov/topics.

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