


# Marines Use Brain Scans to Spot PTSD Before the War

By [Katie Drummond](#)  November 20, 2009 | 3:27 pm | Categories: [Science!](#)



The military has launched [a new program](#) that'll use genetic testing and brain scans to figure out whether troops are vulnerable to post-traumatic stress — before they head off to war and experience that stress.

The initiative is a cooperative venture between the Marine Corps, Department of Veterans Affairs and Navy Medicine. Testing on 1,000 Marines started last year, and another 673 were recently recruited: participants undergo a battery of exams to reveal underlying “triggers” that might predispose someone to post-traumatic stress disorder, or PTSD. Examinations include more typical sessions, like psych analysis and stress tests, but also involve brain imaging and genetic evaluation - [recent evidence](#) suggests that specific genes might increase risk.

Upon return from war zones, participants will be re-tested for early warning signs of post-traumatic stress. By comparing pre-deployment results with post-deployment symptoms, researchers hope to develop a metric that'll be used to signal vulnerability among military men and women of the future.

Cmdr. Bryan Schumacher, the top doctor with the 1st Marine Division, says the tests won't bar members from service - instead, they'll be used to boost stress-prevention training for at-risk troops.

Initial test conclusions aren't anticipated for another six months, but they might also be useful for other Pentagon research. Darpa, the DoD's out-there research agency, wants a better understanding of stress reactions to come up with a quick-fix, [PTSD-prevention pharmaceutical](#).

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