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IED Shockwaves Inject Hidden Damage in Troops, Study Claims

By Bill Briggs

Tens of thousands of [American combat veterans](#), many seemingly uninjured, carry higher risks of developing neurological disorders – and perhaps future organ ailments – simply because they were “exposed” to IED shockwaves, the Institute of Medicine reported Thursday.

As the signature weapon in [Iraq and Afghanistan](#), the improvised explosive device sends blast waves through the bodies of people even hundreds of yards from the detonation, leaving some nearby outwardly unharmed but disrupting their molecules and inner tissues. Years later, such changes could lead to adverse symptoms, according to a new IOM study.

“This is a totally [different type of injury](#) than our troops were exposed to 50 years ago,” said Dr. S. Andrew Josephson, associate professor of clinical neurology at the University of California, San Francisco, and a study co-author. “It’s going to require a fair amount of investigation to figure out the entire expanse of the blast injury, how to diagnose it, how to capture these soldiers who’ve been exposed, how to treat these patients long term and, as importantly, how to prevent these injuries.”

'It's part of life sometimes, I guess'

Lingering questions, Josephson said, are numerous. Will some symptoms emerge in 10 years or even later? What form may they take? How far do blast waves travel while still inflicting tissue damage?

“Could this lead to increased heart disease or lung disease down the road? These are possibilities,” Josephson said.

The doctors cited evidence that [blast waves](#) can impair the brain’s pituitary gland, leading to a growth hormone deficiency. According to Cedars-Sinai Medical Center, when that hormone becomes depleted, people can show anxiety, depression, fatigue, and feelings of isolation.

During the two wars, more than 31,000 U.S. troops have been wounded by IEDs but countless more were close to the explosions and may not be aware that they were exposed, the IOM reported.

The U.S. Department of Veteran Affairs sponsored the study. The doctors urged the VA and the Department of Defense to determine which service members, current and former, were exposed to the waves – and how often – so those men and women can be monitored.

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Briggs joined NBC News after 18 years at The Denver Post, where he was a staff writer. In that role, he was responsible for sports enterprise, investigations and Olympic coverage. He was part of the newspaper's team that earned the 2000 Pulitzer Prize for breaking news coverage of the Columbine High School massacre.

Briggs has authored two books, "Amped: A Soldier's Race for Gold in the Shadow of War," and "The Third Miracle: An Ordinary Man, a Medical Mystery, and a Trial of Faith."

He lives in Los Angeles with his wife and has an adult daughter.

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