

New Research Links Burn Pit Fumes and Brain Injuries

Results of a national study released last year link brain trauma to troops who served near toxic burn pits during their service overseas

Jan 20, 2026

Since the adoption of the PACT Act by lawmakers in 2022 — a decisive win spearheaded by VFW’s lobbying on Capitol Hill — research on toxic burn pits and their effects on veterans who served near them has increased in scope.

“The PACT Act is the most significant toxic exposure legislation since the Agent Orange Act, but it must continue to evolve,” VFW National Veterans Service Director Michael Figlioli said. “A key component was continued research resulting from exposure.”

Conducted by the National Institutes of Health (NIH) in collaboration with the Department of Defense and the VA, a new study in late July connected military service near burn pits to a greater risk of mental health issues and brain trauma.

The research examined the health records of more than 440,000 troops who deployed to Iraq and Afghanistan from 2001 to 2011. The findings linked higher rates of depression and other mood disorders, as well as intracranial injuries and traumatic brain damage, among troops stationed near toxic burn pits. The study also noted that the toxic chemicals released during uncontrolled combustion may include chemicals with “deleterious” neurobehavioral effects.

While there is cause for alarm among those exposed to burn pits during their service, the study also opens new possibilities for the advancement of health care services and benefits provided by the VA to veterans. Since 2022, the VA has delivered more than \$6.8 billion in PACT Act benefits to veterans and surviving family members as a result.

“As research advances, the VFW will keep pressing to ensure every link between service-related exposures and illness is recognized so veterans receive the care and benefits they

NATIONAL HEADQUARTERS

406 W. 34th Street
Kansas City, MO 64111

Office 816.756.3390
Fax 816.968.1157

WASHINGTON OFFICE

200 Maryland Ave., N.E.
Washington, D.C. 20002

Office 202.543.2239
Fax 202.543.6719

info@vfw.org
www.vfw.org

have earned,” said Figlioli, who saw NVS’s network of VFW-accredited service officers recover more than \$14.6 billion in VA benefits in 2024 alone.

LONGER EXPOSURE EQUALS MORE RISK

Here are notable findings by the NIH on the examination of health records of more than 440,000 troops who deployed to Iraq and Afghanistan from 2001 to 2011:

- Troops who were exposed to burn pit fumes for at least 129 days during their deployments were 27 percent more likely to report symptoms of severe stress than individuals at bases without the toxic smoke, and 37 percent more likely to suffer from any intracranial injury.
- Troops with more than 474 days near the burn pits were 68 percent more likely to report severe stress than deployed troops without the smoke exposure, and 124 percent more likely to develop intracranial wounds.
- Sleep disorder issues were 18 percent higher for troops with four months near the burn pits and 35 percent higher for those who spent about 16 months nearby.

This article is featured in the 2026 January/February issue of [VFW magazine](#), and was written by [Ismael Rodriguez Jr.](#), associate editor for VFW magazine.