



Soldiers firing a 120mm Mortar.

The Overpressured Warfighters Act of 2025 (O.W.A.) - A Victory in Blast Overpressure.

The O.W.A. isn't a prolonged field trip into blast overpressure, it's an aggressively decisive horse-tackle from deep in the backfield. A bold play by the Cohort of OverPressured Warfighters who have had enough. To date, several well-meaning efforts have been made to methodically clear the ground and lay a foundation for addressing this issue. These efforts have delivered a mountain of anecdotal, circumstantial and scientific evidence but no real action and at a glacial pace. Meanwhile the Cohort's suffering goes on without real answers and action. We require much more and much sooner as we are already well past the point of action being warranted. The O.W.A. takes this ground and builds a fortress against the damage being done by these occupational blast exposures, it is created not to upend the system but strengthen it.

The Overpressured Warfighters Act of 2025 is a strategic and commanding victory over this quagmire. Bold strategies are by their nature expensive and risky, just ask Hannibal. The O.W.A. is such a bold plan, written by the affected- for the affected, where all involved stand to gain and prosper and a victory flag can be planted

But this is only the humble offering of a solution. In truth it is far beyond the scope & ability of its author and his Cohort to bring to life and can only happen with your ardent & vocal support. Thank you for your interest, below is more information. – Todd Strader

What the O.W.A. and its Cohort bring to the table:

- Hazard Status: Mandates DoD to tag blast overpressure exposure (BOPE) and particulate matter it creates as health risks, with guidelines in 180 days (Section 4).
- Funding: Locks in \$26.39B—\$12B from DoD budgets, \$8B from VA savings, \$6.39B from prevention gains (Section 3). No new taxes.
- BOPE Czar: Appoints a coordinator to streamline efforts with perspective from all sides and interest only for the affected (Section 5).

- Tracking & Surveillance: Wearables monitor blasts exposures feeding data into health records becoming a voice for the Warfighter and Veteran to come (Section 6).
- VA Boost: Adds BOPE to PACT Act—funds, screenings, retroactive claims (Section 10).
- Innovation: Funds weapon retrofits (50% blast reduction), studies, therapies and innovations thrive (Sections 8, 11, 18).

Why are we here?

Picture a dust covered soldier firing a 120mm mortar, we'll call him Corporal Steve. As each round fires, a massive combination of both blast and sound impulse waves cavitate his brain from all directions. Sometimes dozens a day, hundreds a year and even thousands over his enlistment. Or a Special Forces Operator, call him David, breaching doors in confined spaces with C4 explosives, every blast wave like a concrete-cracking storm hitting his whole body. With every blast, Steve and David both have their lungs filled with carbon-laced smoke and particulate dust while their heart pounds from the stress, struggling for oxygen. These warfighters carry our nation's shield and sword, but there's a silent carnage that is feasting on them: repetitive low-level blast overpressure (B.O.P.) exposures that are an occupational requirement. Blast waves from firing weapons are likely searing vast, permanent damage into their brains, hearts, and lungs. For long enough, this quiet toll has ravaged in the shadows.

Fast-forward a decade, Steve and David are veterans now, home but hurting, struggling. Steve's head throbs and David puts his keys in the refrigerator. Dave Philipps of the New York Times spoke of their 3,000-strong Cohort in his article: "Guys are getting destroyed." The O.W.A. changes that and names B.O.P. as a toxic exposure allowing presumptive benefits to flow, no burdensome proof slog. Steve gets a 33,000-dollar backpay and David gets screenings as \$8 billion shifts to the V.A. over four years. Science backing them with a 55 to 60% likelihood of injury for mortar crews and Special Forces and it's crucial to understand that these blast exposures are not a result of circumstances that occurred doing their duty, they are a requirement of the occupation we ask them to do in our service.

The Overpressured Warfighters Act of 2025 is the path that leads to families getting their peace restored. Behind Steve is Lisa, his wife, she watches him flinch at fireworks and yell at the dog, she fears he'll forget their vows and doesn't understand what's happening. David's son, Billy, misses his fun bedtime stories—but now his words stumble, his mind scatters and he gets frustrated and leaves, ashamed of what his son sees. Everyday life in our Cohort. The PACT Act's backlog of more than 250,000 claims keeps Lisa and Billy still waiting, hurting. The Blast Overpressure Safety Act doesn't heal David or Steve, the O.W.A. does. It funds family education so that Lisa finally learns of blast's full weight and can get counseling and support. The O.W.A. brings David back to Billy's bedside, fewer broken vets mean fewer broken homes. They gain stability with dignity and family love remains unbroken.

The D.O.D. worries B.O.P. rules could choke readiness with fewer rounds fired, troops sidelined, training dulled. Steve's mortar drills and David's breaching runs are both so vital to their edge in a life-or-death world and cannot falter. The D.O.D. has a point and the O.W.A. hears that, calling

for \$2 billion in retrofits for heavy weapons so they both can train smarter and safer. The O.W.A.s blast detecting wearables catch trouble early and become Steve and David's voice and ace, its data instantly integrated into their medical records, and emerging protective gear that can potentially mitigate exposure by half means careers endure and gain resilience, not restriction and degradation.

The O.W.A. empowers the V.A. to grow with an even stronger mission. Veterans Affairs now shoulders the PACT Act's near trillion-dollar price tag and half million new vets onto an already creaking system. The O.W.A. will ease that with \$6.5 billion saved and \$8 billion reallocated. Mandating blast detecting wearables in the D.O.D. will cut the backlog with hard data. It also expands a new diagnostic code for created for these blast exposures, ICD-10-S06.8A: "Primary Blast Injury of the Brain-Not elsewhere Classified" which was created by the V.A.'s own Dr. DePalma in 2022 to help end this "silent carnage" once and for all. The O.W.A. will see that Dr. DePalma's work is at last put to use. With the O.W.A., the V.A. gains scope and capacity of care, not chaos.

The Overpressured Warfighters Act of 2025 unleashes scientific research and gives it a target. Continuing and expanding with the O.W.A.-researchers gain resources to prove B.O.P.'s toll, science wins and knowledge is gained. Providers and innovators will be equipped to develop and market the best possible solutions that our Cohort deserves.

A Real Victory. With the O.W.A., everyone gains especially the affected Warfighters, Veterans and their loved ones. The D.O.D.'s fears of an impact on readiness and cost melt away with retrofits and redirects that are also a win for the defense industry. Warfighters stay strong, veterans reclaim their dignity, families heal, the V.A. scales up and researchers light the way. N.P.R.'s Marines and the New York Times's Soldiers are not just numbers; they are us, the Cohort of OverPressured Warfighters. Finally, the O.W.A. is not only a debt paid but also morally right and fiscally smart. After all, those who serve us deserve the very best when it is our turn to serve them, no matter what.

Together let's seize this victory, please support The OverPressured Warfighters Act of 2025.

Read the Bill and Fiscal Summary here, visit: OverPressured.com/owa2025

Thank you,

Todd Strader
Founder – Cohort of OverPressured Warfighters
Owner – OverPressured LLC



Overpressured Warfighters Act of 2025 (OWA2025)

Presented by Todd Strader, Owner of OverPressured LLC, Community Leader of The Cohort of OverPressured Warfighters

www.OverPressured.com

119th CONGRESS

H.R.

AN ACT

To amend the United States Code to require the Department of Defense to officially classify occupational exposure to low-level blast overpressure and associated particulate matter as health hazards, ensuring comprehensive measures for prevention, monitoring, treatment, and support, and to amend the Honoring our PACT Act of 2022 to include such exposures as recognized toxic exposure events, and for other purposes, including economic benefits for the defense industry.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

PREAMBLE

WHEREAS, United States military personnel, both active-duty members and veterans, face significant and often insidious health risks from low-level blast overpressure exposure (BOPE) during training and combat operations, as evidenced by rigorous studies such as Gama Sosa et al., 2019 in *Military Medicine* and detailed reports from the Defense and Veterans Brain Injury Center, 2020;

WHEREAS, a growing body of scientific research spanning 2018 to 2025 has conclusively linked repetitive BOPE to severe long-term health issues, including traumatic brain injuries (TBIs), post-traumatic stress disorder (PTSD), and systemic conditions, with critical findings from McEvoy, 2024 and Stone, 2024 underscoring the urgency;

WHEREAS, media outlets, including investigative articles by Myers, 2021 in Military.com and poignant reports from The New York Times and NPR in 2024, have illuminated the tragic human toll of these exposures—headaches, hemorrhages, and lives lost;

WHEREAS, the Department of Defense has taken steps through initiatives like the Blast Overpressure Safety Act (Hicks, 2021) and the Warfighter Brain Health Initiative, yet the scope, complexity, and persistence of BOPE’s impact demand bolder, more comprehensive action for both active-duty personnel and veterans;

WHEREAS, Dr. Ralph DePalma’s relentless advocacy secured the IDC-10 code S06.8A—“Primary blast injury of brain”—to track BOPE’s “silent carnage,” yet its underutilization persists due to insufficient monitoring data, as noted in VA Research Currents, 10/26/22;

WHEREAS, the Cohort of OverPressured Warfighters, a global community of 3,000 voices, amplifies the devastating toll of BOPE, gaining international attention (NY Times, 5/2/24);

WHEREAS, BOPE, previously termed BOP, denotes cumulative blast overpressure exposure, distinct from singular blast events, providing clarity for this Act’s scope and intent;

SECTION 1. SHORT TITLE

This Act may be cited as the “Overpressured Warfighters Act” or “OWA2025”.

SECTION 2. FINDINGS

(a) Health Risks. Congress finds that occupational exposure to low-level blast overpressure in the military has been conclusively linked to major long-term health issues—neurological, psychological, and physiological—as evidenced by a wealth of scientific studies and media reports spanning 2018 to 2025, painting a clear picture of a crisis needing immediate action.

(b) Elevated Risk. Research has demonstrated that service members in high-exposure occupations—such as artillery, mortars, and breaching—are at an elevated risk for deployment-related traumatic brain injuries (TBIs), with data showing a marked increase in incidence tied to routine training alone.

(c) Media Exposure. Extensive media coverage has brought these health risks into sharp focus, from personal stories of veterans grappling with unseen wounds to calls for legislative action, emphasizing the moral and practical necessity to safeguard the well-being of active-duty personnel and veterans alike.

(d) Previous Efforts. Despite commendable efforts by the Department of Defense, including policies and preliminary studies, a significant gap persists in policy development, real-time monitoring, and robust support systems for those affected by BOPE, leaving both current troops and veterans underserved.

(e) Veteran’s Health. Studies have shown that repeated occupational exposure to low-level blast overpressure leads to cumulative neurological damage, respiratory issues, and other health consequences akin to toxic exposures, necessitating its formal inclusion within the PACT Act framework to ensure veterans receive the benefits and care they’ve earned.

SECTION 3. FUNDING MECHANISMS AND ALLOCATION

(a) Total Funding. The Overpressured Warfighters Act of 2025 secures a robust \$31.2–\$35 billion through redirected appropriations, reallocations, savings, and newly identified waste reductions

from the Department of Government Efficiency (DOGE), operationalized via targeted legislative tools to comprehensively address occupational blast overpressure exposure (BOPE) and associated particulate matter health risks, while fostering economic growth through defense industry innovation.

(b) Sources and Mechanisms.

(1) Defense Budget Redirect (\$12B)

- Source: FY2025 DoD appropriations—\$6B carved from artillery procurement (e.g., M777 howitzers, 155mm shells) and \$6B from training operations and maintenance (O&M). The GAO’s 2023 excess munitions report highlights stockpiles far exceeding operational needs, a legacy of over-preparation now ripe for redirection.
- Mechanism: Amend NDAA Section 806 to cap munitions at current operational requirements, redirecting these funds to BOPE-specific training reforms, protective gear development, and wearable technology—priorities that save lives and bolster industry.

(2) VA Reallocation (\$8B)

- Source: VA disability pool (\$120B/year, VA, 2022). Of 1.2M neuro-related claims, approximately 20% (240K veterans) are linked to BOPE, with an average claim cost of \$33K. By reducing these claims by 27% (65K fewer cases) through proactive prevention, the VA saves \$2.1B annually, totaling \$8B over 4 years.
- Mechanism: Establish a “Prevention Offset Fund” via VA appropriations, launching a 5-year pilot program with quarterly reports tracking claim reductions, ensuring transparency and adaptability as prevention measures take root.

(3) Cost Savings Harvest (\$6.39B)

- Source: Based on 120K exposed veterans (Cohort estimate), a 27% reduction in chronic cases (32K fewer) through protective gear yields \$50K/vet/year in avoided medical costs (McEvoy, 2024). Over 4 years: $32K \times \$50K \times 4 = \$6.4B$ (rounded to \$6.39B).
- Mechanism: Enact a “BOPE Cost Reduction Credit” in budget reconciliation, requiring CBO audits of savings annually. If projections fall short, DOGE-identified funds under Section 17(h) supplement this amount, with CBO review ensuring fiscal integrity.

(4) Supplemental Funding

- Source: Private-sector investments or NATO contributions following the HFM-371 conference (April 2025, Toronto), leveraging international interest in BOPE mitigation.
- Mechanism: Launch a “BOPE Innovation Grant” program with tax incentives, encouraging defense industry giants like Lockheed Martin and Raytheon, alongside innovative startups, to co-invest in retrofits, wearables, and health solutions, amplifying federal funds with private capital.

(5) DOGE-Identified Waste Reallocation (\$4.81–\$8.61B)

- Source: \$5–\$10B annually from Department of Government Efficiency findings, including \$2–\$3B from DoD credit card misuse and procurement overages (e.g.,

excessive contracts identified 2025), \$500M–\$1B from FEMA discretionary spending (e.g., luxury housing for non-citizens, 2025), \$100–\$200M from USAID foreign programs (e.g., Mozambique circumcision initiatives, 2025), and \$200–\$500M from DOE inefficiencies (e.g., DEI training programs, 2025). Total redirected over 4 years: \$4.81–\$8.61B.

- Mechanism: Amend NDAA and appropriations bills to redirect these waste savings to OWA2025 priorities within 90 days of DOGE certification, with CBO oversight. Funds are earmarked for weapons retrofits (Section 18), wearable technology deployment (Section 6), and industry-driven innovation (Section 3(b)(4)), turning fiscal excess into warfighter protection and economic opportunity.
- (c) Accountability. Total funding: \$12B + \$8B + \$6.39B + \$4.81–\$8.61B = \$31.2–\$35B. Funding aligns with NDAA and VA budgetary norms; savings projections are grounded in VA 2022 data, GAO reports, and McEvoy, 2024—ensuring transparency and defensibility. DOGE waste redirection aligns with Executive Order 14158 (2025), with quarterly CBO audits to monitor implementation and adjust as needed, safeguarding taxpayer dollars while maximizing impact.

SECTION 4. DESIGNATION OF OCCUPATIONAL HEALTH HAZARD

(a) Classification. The Secretary of Defense shall officially designate occupational exposure to low-level blast overpressure and associated particulate matter from weapon discharge as occupational health hazards for military personnel, recognizing the cumulative toll validated by extensive scientific research and media investigations into long-term health consequences.

(1) BOPE: “Research has shown that firing heavy weapons generates blast overpressure exposure (BOPE), delivering pressure waves that penetrate the skull and body, linked to traumatic brain injuries, neurological deficits, and systemic damage” (Gama Sosa et al., 2019; McEvoy, 2024).

(2) Particulate Matter: “Associated particulate matter, including PM2.5 from weapon discharge, contains toxic metals such as lead, copper, and zinc, which penetrate the respiratory system and bloodstream, posing distinct systemic health risks over time, from lung inflammation to cardiovascular strain” (Stone, 2024).

(b) Policies and Guidelines.

(1) Integration with Existing Policy: This classification will be seamlessly integrated into existing DoD health and safety policies, ensuring a holistic approach that addresses both BOPE and particulate matter exposure across all relevant protocols.

(2) New Guidelines: Within 180 days of this Act’s passage, the DoD shall develop and implement detailed guidelines to manage risks associated with BOPE and particulate matter exposure. These will encompass updated training protocols to minimize exposure, equipment standards for protective gear, and operational procedures that balance safety with mission readiness; guidelines will prioritize real-time S06.8A data collection over rigid thresholds, using wearables (Section 6) and annual checkups (Section 7) to dynamically inform exposure limits, preserving combat flexibility while protecting troops (Stone, 2024; EPA).

SECTION 5. ESTABLISHMENT OF BOPE OVERSIGHT

(a) BOPE Czar.

(1) Appointment: The Secretary of Defense shall appoint a “BOPE Czar” within 90 days of enactment to oversee all facets of BOPE safety within the military, addressing the fragmented efforts across branches, research entities, medical providers, and affected communities that have hindered cohesive action to date.

(2) Duties: The BOPE Czar will coordinate policy development, research initiatives, and implementation strategies, ensuring all military branches adhere to the standards set by this Act. With authority to enforce compliance—including veto power over training protocols exceeding BOPE and particulate matter thresholds—the Czar will oversee on-site diagnostics (Section 12), parity in mental health treatment (Section 13), and cultural shifts within the military (Section 15). This role mirrors effective precedents like the Ebola Response Coordinator (2014) and the AIDS Czar (Clinton era), blending urgency with strategic oversight.

(3) International Collaboration: The BOPE Czar shall foster global research partnerships—engaging NATO allies, academic institutions, and industry leaders—to share data, best practices, and innovations on BOPE and particulate exposure effects, amplifying U.S. efforts with international expertise.

(4) Reporting: An annual report, due to Congress by March 1 each year, shall detail compliance metrics, progress on health and safety goals, and any barriers encountered, modeled on the rigorous reporting standards of the Intelligence Reform and Terrorism Prevention Act of 2004 (GAO), ensuring accountability and adaptability.

SECTION 6. HEALTH SURVEILLANCE AND MEDICAL TESTING

(a) Health Monitoring.

(1) Baseline Tests: Upon entry into BOPE-related occupations—such as artillery, mortars, or breaching—service members will undergo comprehensive health assessments, including neurological, cardiovascular, and respiratory evaluations, to establish a baseline for tracking future changes tied to exposure.

(2) Annual Monitoring: Ongoing health checks will be conducted annually for all personnel in high-risk roles, using a standardized battery of tests to monitor subtle shifts potentially linked to BOPE, ensuring early detection of emerging issues.

(3) High-Exposure Triggers and Records: Wearable technology will detect and respond to—
(i) Single BOPE Event ≥ 10 psi: Immediate screening—EKG (Section 6(b)(1)), EEG (Section 6(b)(2)), blood biomarkers (Section 6(b)(3))—with the soldier removed from duty until cleared by medical personnel. Unit commanders are overridden; fitness data dictates return-to-duty, with all incidents logged in medical records (date, psi, results)—\$350M base allocation (Section 6(b)).

(ii) Cumulative BOPE—Five ≥ 8 psi Events within 24 Hours: Same screening protocol applies, with results logged (dates, psi readings, results)—additional \$50M allocated. Total funding increased to \$800M—\$350M base + \$50M (Section 6(b)) plus \$400M from DOGE waste (Section 3(b)(5))—covering 200,000 units at \$4,000 each, ensuring all high-risk personnel (approximately 120,000 active-duty) are equipped, with records synced to a DoD-wide “Blast Exposure Log.”

(4) End of Enlistment: A mandatory final assessment will evaluate cumulative effects before

discharge, capturing long-term impacts to inform veteran care and future policy, with data shared across DoD and VA systems.

(b) Specific Tests.

(1) EKG: Routine electrocardiograms will monitor heart health, critical given findings by Wang, L. (2024) in *Journal of Gastroenterology and Hepatology Research* suggesting blast overpressure may disrupt cardiovascular function, including a 15% rise in arrhythmia risk. *Military.com* (2025) reports, “Blast Pressure Injuries May Affect More Than the Brain of Troops, New Data Shows,” underline the need for systemic monitoring beyond the brain.

(2) EEG: Electroencephalograms will track brain health, driven by Stone, J. R. (2024) in *Neurology Research International*, which ties repeated blast exposure to neurological changes—up to 45% prefrontal damage—observable via EEG. NPR’s 2024 coverage of Marines with headaches and hemorrhages after heavy weapon use highlights EEG’s role in early intervention for chronic conditions.

(3) Blood Biomarker Testing: Testing for blast-related biomarkers like glial fibrillary acidic protein (GFAP) and ubiquitin C-terminal hydrolase-L1 (UCH-L1), per Agoston, D. V. (2022) in *Frontiers in Neurology*, will detect brain injury early. *Spotlight on America* (2024) notes these markers as game-changers for diagnosing BOPE effects, vital for routine surveillance.

(4) Additional Screening: Where warranted—based on wearable data or symptoms—screening for neurological, auditory (e.g., tinnitus), and psychological health will be conducted, broadening the safety net.

(c) Data Availability.

(1) Research Access: HIPAA-compliant data will be accessible to the DoD Health System, fueling ongoing research into BOPE treatment and mitigation, with anonymized datasets shared with academic and industry partners.

(2) Physician Directive: DoD and VA healthcare systems shall mandate providers to use IDC-10 S06.8A for BOPE diagnoses, integrating wearable and assessment data to end diagnostic obscurity and track “silent carnage” (*VA Research Currents*, 10/26/22). Mandatory training on S06.8A—covering cumulative effects and data interpretation—begins within 90 days of enactment and concludes within 180 days (Stone, 2024).

SECTION 7. HEALTH SURVEILLANCE AND MEDICAL TESTING

(a) Health Monitoring.

(1) Baseline Tests: Identical to Section 6(a)(1), ensuring consistency across entry and ongoing care.

(2) Annual Monitoring: Annual checks mirror Section 6(a)(2), reinforcing a proactive approach with standardized protocols.

(3) End of Enlistment: Final assessments align with Section 6(a)(4), capturing a full exposure profile for transitioning veterans.

(b) Specific Tests.

(1) EKG: Annual EKGs for high-risk roles, reflecting Wang’s (2024) cardiovascular findings and *Military.com*’s 2025 systemic focus.

(2) EEG: Annual EEGs, per Stone (2024), to catch neurological shifts early, as NPR’s 2024 Marine stories emphasize.

(3) Blood Biomarker Testing: Biennial biomarker tests (GFAP, UCH-L1) per Agoston (2022), backed by Spotlight on America (2024) for early detection.

(4) Additional Screening: Tailored to individual needs, ensuring comprehensive care.

(c) Data Availability.

(1) Research Access: identical to Section 6(c)(1).

(2) Physician Directive: Identical to Section 6(c)(2), ensuring uniform S06.8A adoption.

SECTION 8. RESEARCH AND DEVELOPMENT

(a) Funding.

(1) Budget Allocation: Congress shall significantly increase funding for research into BOPE and particulate matter's total body effects—brain, heart, lungs—focusing on prevention, mitigation, and treatment breakthroughs.

(2) Prioritization: Research will target the full spectrum of impacts, prioritizing understudied areas like cardiovascular and gastrointestinal effects (Wang, 2024).

(3) Longitudinal Health Studies: Funding will support decade-long studies tracking service members into retirement, with preliminary reports due within five years and final reports within ten—or sooner if significant findings emerge—building a definitive evidence base.

(b) Market Solutions.

(1) Grants and Incentives: Establish competitive grants for private sector innovation in BOPE monitoring, mitigation, and protection, encouraging defense firms to lead.

(2) Military Health Innovation Grants: Targeted grants for health care innovations—wearables, diagnostics, therapies—addressing BOPE and particulate exposure.

SECTION 9. SUPPORT AND AWARENESS

(a) Family Support.

(1) Educational Programs: Funding for programs to educate families about BOPE and particulate matter risks, drawing from NY Times (2024) insights on community impact.

(2) Mental Health Services: Ensure robust mental health care addresses the psychological toll, per Myers (2021), with counseling tailored to BOPE effects.

(b) Veteran Transition Support.

(1) Integration with TAP: Embed BOPE and particulate matter education in the Transition Assistance Program, preparing veterans for post-service health needs.

(c) Public Health Surveillance System.

(1) Integration: Propose integrating BOPE and particulate exposure data into national public health surveillance systems, enhancing long-term tracking.

SECTION 10. AMENDMENT TO THE HONORING OUR PACT ACT

(a) Definition of Toxic Exposure.

Amendment: Section 101 of the PACT Act, 2022 amended by inserting: “(5) Low-level Blast Overpressure and Associated Particulate Matter – Exposure to low-level blast overpressure, including roles like artillery, mortars, and breaching, and particulate matter (e.g., lead, copper, zinc) from weapon firing, considered toxic exposure.”

(b) Health Care Benefits.

Expansion: VA shall extend benefits to 300,000 veterans, funded by \$9–\$10 billion (Section 3(b)(2) and (5)), including screenings, treatments, and presumptive service-connection for BOPE and particulate matter conditions, reflecting the scale of need.

Guidelines: VA and DoD shall develop detailed diagnosis and treatment guidelines within 180 days, covering respiratory, cardiovascular, and neurological care, ensuring comprehensive support.

(c) Research and Education.

Funding: Allocate funds for research into long-term health effects, emphasizing prevention and chronic condition management.

Education: Develop awareness programs; \$5M/year from \$100M VA claims budget (Section 17(a)) funds S06.8A workshops linking exposure data to claims (DoD Environmental Health Policy; VA News, 10/26/22).

SECTION 11. TREATMENT MODALITIES AND RESEARCH INTO NON-TRADITIONAL THERAPIES

(a) Development of Treatment Protocols. DoD and VA shall develop evidence-based protocols for BOPE and particulate matter conditions within 12 months (Stone, 2024).

(b) Research into Non-Traditional Therapies. Funding for:

(1) Neurofeedback: Assessing cognitive recovery potential (Wang, 2024).

(2) TMS: Treating depression and anxiety linked to BOPE (Agoston, 2022).

(3) Other Approaches: Acupuncture, MBSR, and HBOT, with HBOT showing a 65% PTSD reduction (VA, 2022).

(c) Pilot Programs and Clinical Trials. Establish pilots in DoD/VA facilities, with annual Congressional reports on efficacy and scalability.

(d) Collaboration with Research Institutions. Partner with universities (e.g., Johns Hopkins, NIH) for cutting-edge studies.

(e) Integration with Health Systems. Approved treatments will be integrated with provider training within 2 years.

(f) Enhancements for Strength. Include case studies (e.g., 50% pain reduction, VA, 2022), stakeholder input, and 10% research funding from Section 8.

(g) Implementation Considerations. Validation requires peer-reviewed trials with interim annual reports; funding leverages Section 17 partnerships; acceptance mandates stakeholder engagement and annual barrier reports; compliance aligns with FDA and VA oversight (VA, 2022).

SECTION 12. ON-SITE HEALTH EQUIPMENT

(a) Development for Immediate Response. Fund portable diagnostic equipment—EKGs, EEGs—for field assessments post-exposure, deployable within 18 months.

SECTION 13. MENTAL HEALTH PARITY

(a) Parity in Treatment. Ensure mental health treatments for BOPE and particulate exposure match physical health coverage in access and quality, with quarterly Congressional reports on wait times and penalties for disparities exceeding 30 days.

SECTION 14. EDUCATIONAL OUTREACH TO MEDICAL SCHOOLS

(a) Curriculum Inclusion. Propose medical schools integrate military occupational exposure training, with \$10M/year grants for S06.8A case studies and biomarker analysis (VA Research Currents, 10/26/22; Agoston, 2022), starting within 2 years.

SECTION 15. CULTURAL CHANGE INITIATIVES

(a) Cultural Awareness. Promote a military-wide cultural shift via leadership training and peer support, emphasizing health risks from occupational exposures, with programs rolled out within 12 months.

SECTION 16. CONTINUOUS POLICY REVIEW

(a) Dynamic Policy Adjustment. Establish a review mechanism every 2 years, adjusting policies based on new findings or technological advancements, with input from the BOPE Czar and Congress.

SECTION 17. FUNDING MECHANISMS AND SOURCES

(a) Appropriations. Congress shall appropriate \$200M annually for monitoring, research, and prevention, and \$100M annually for VA retroactive claims via NDAA, modeled on PACT Act scale (PACT Act, 2022), starting FY2026.

(b) Defense Health Program Reallocation. Redirect a portion of the DHP budget annually to support OWA2025 programs, prioritized by the BOPE Czar.

(c) Environmental Funds. Utilize the Defense Environmental Restoration Program for BOPE and particulate studies, allocating \$50M/year.

(d) Grants and Partnerships. VA and DoD establish grants with industry, imposing a 5% penalty on non-innovative contractors to spur progress.

(e) Innovation and Endowment Funds. Encourage endowment funds or social impact bonds, targeting \$100M over 4 years.

(f) Philanthropy and Crowdfunding. Promote foundations and crowdfunding campaigns, aiming for \$50M in contributions.

(g) Cost Recovery and Patent Revenue. Recover costs from savings and royalties on BOPE-related innovations, reinvesting into the Act.

(h) DOGE Waste Prioritization. Beyond the \$2B identified herein, DoD and VA shall redirect \$4.81–\$8.61B from DOGE-identified waste (Section 3(b)(5)) over 4 years, certified by CBO, prioritizing industry-led solutions like retrofits and wearables (Section 18).

(i) Offset by Efficiency. Redirect defense budget efficiencies, targeting \$500M/year, to bolster OWA2025 initiatives.

SECTION 18. WEAPONS INNOVATION AND MONITORING

(a) Purpose. Drives weapons innovation and exposure tracking to mitigate BOPE and particulate risks, while fostering defense industry growth.

(b) Weapons Modification.

(1) Scope: Target every weapon on the Tier 1 Weapons List—including mortars, artillery, and

breaching tools—for blast-dampening retrofits, achieving 60%+ exposure reduction by January 1, 2027, enhancing troop safety and industry output.

(2) Market Incentive: Allocate \$4–\$5B—\$2B from \$12B DoD redirect (Section 3(b)(1)) plus \$2–\$3B from DOGE waste (Section 3(b)(5))—for R&D and contracts with defense industry partners (e.g., Lockheed Martin, Raytheon, Northrop Grumman). Funds prioritize retrofits reducing BOPE by 60%+, projected to create 5,000–10,000 high-skill jobs over 4 years in design, manufacturing, and testing (NDAA 2025, Section 711(b)(1)(J)).

(c) Tier 1 Weapons Tracking.

(1) Mandate: Implement a DoD-wide “Blast Exposure Log” synced to medical records via wearables (Section 6), tracking every Tier 1 weapon use (NDAA 2025, Section 711(e)(4)).

(2) Industry Gain: Expand wearable sensor contracts to \$800M—\$400M base (Section 6) plus \$400M from DOGE waste (Section 3(b)(5))—incentivizing firms (e.g., L3Harris, startups) to develop advanced analytics and sensors, supporting 2,000–3,000 jobs in tech development and production.

(d) Funding Alignment. \$4–\$5B funds retrofits and tracking, aligning with NDAA’s January 1, 2027, deadline and NATO’s HFM-371 goals, ensuring U.S. leadership in military innovation.

SECTION 19. EFFECTIVE DATE

This Act shall take effect immediately upon passage.

SECTION 20. SEVERABILITY

If any provision or application is held invalid, the remainder remains unaffected.

REFERENCES

- McEvoy, A. (2024). “Cumulative Blast Impulse Is Predictive for Changes in Chronic Neurobehavioral Symptoms Following Low Level Blast Exposure during Military Training.” *Journal of Military Medicine*, 189(3-4), 456-463.
- Stone, J. R. (2024). “Neurological Effects of Repeated Blast Exposure in Special Operations Personnel.” *Neurology Research International*, 2024, Article ID 8855443, 12 pages.
- Belding, J.N., et al. (2019). “Blast Exposure and Risk of Recurrent Occupational Overpressure Exposure Predict Deployment TBIs.” *Military Medicine*.
- NY Times (2024): “Signs of Brain Injury in Mortar Soldiers: ‘Guys Are Getting Destroyed’”
- NPR (2024): “Two Marines spent years firing heavy weapons. Then came headaches and hemorrhage”
- ABC News (2024): “Military hunts for answers to mysterious brain injuries among troops”
- Spotlight on America (2024): “Soldiers and veterans suffering brain injuries from firing the weapons that defend us”
- Military.com (2025): “Blast Pressure Injuries May Affect More Than the Brain of Troops, New Data Shows”

- Gama Sosa MA, et al. (2019). Occupational Overpressure Exposure and Cognitive Decline in Military Personnel. *Military Medicine*, 184(Suppl 1), 561-567.
- Defense and Veterans Brain Injury Center. (2020). *Blast Overpressure: What We Know and Don't Know*.
- Myers, M. (2021). *Blast Exposure and the Hidden Health Risks for Soldiers*. Military.com.
- Hicks, K. (2021). *Memorandum: Policy and Procedures for Managing Risk to Brain Health from Blast Overpressure*. Office of the Deputy Secretary of Defense.
- U.S. Department of Veterans Affairs. (2022). *Implementation of the PACT Act – Toxic Exposure Screening and VA Integrative Health Strategies Report*.
- Agoston, D. V. (2022). "Blood-Based Biomarkers of Repetitive, Subconcussive Blast Overpressure Exposure in the Training Environment: A Pilot Study." *Frontiers in Neurology*, 13, 843122.
- Wang, L. (2024). "Blast Overpressure Exposure in Military Breachers Contributes to Leaky Gut." *Journal of Gastroenterology and Hepatology Research*, 13(1), 29-34.
- "Broken Track: How Army Times Discovered High Tank Unit Suicide Rates." *Army Times*, March 11, 2024.
- "Maine Shooter Had Traumatic Brain Injuries, New Scan Finds." *The New York Times*, March 17, 2024.
- Myers, M. (2021). "Blast Exposure and the Hidden Health Risks for Soldiers." Military.com.
- Wang, L. (2024). "Blast Overpressure Exposure in Military Breachers Contributes to Leaky Gut." *Journal of Gastroenterology and Hepatology Research*, 13(1), 29-34.
- U.S. Department of Defense. *Environmental Health Policy*.
- PACT Act (2022). "Honoring our PACT Act of 2022."
- Multidisciplinary Association for Psychedelic Studies (MAPS). (2023). "MDMA-Assisted Therapy for PTSD: Clinical Trial Results." [Online Report].
- Executive Order 14158 (2025). "Establishment of the Department of Government Efficiency." White House, January 20, 2025.
- ProPublica (2025). "DOGE Budget Escalates to Nearly \$40M Amid Transparency Concerns." February 20, 2025.
- GAO-23-105 (2023). "Veterans Affairs: Cost Estimates for Disability Claims Need Improvement."



Fiscal Summary:

Overpressured Warfighters Act of 2025 - Morally Right, Fiscally Smart

Marines breaching a hardened barrier, each run a 5 to 10 psi of blast overpressure explodes concrete-shattering impulse waves that cavitate their whole bodies. Science says 4 psi can bust eardrums, 6 psi knocks you flat, and chronic hits mess with your head [Gama Sosa, 2019]. The Department of Defense (DoD)? Still humming “association, not causation.” The Overpressured Warfighters Act of 2025 (OWA2025) says enough—\$26.39 billion to protect 120,000 troops and 250,000 vets, funded smart and built to outpace today’s half-measures. This isn’t just reshuffling bucks; it’s a fiscal and policy gut-punch to the status quo—here’s how it pays and why it’s different.

How’s It Funded?

No new taxes—OWA2025 grabs what’s already there, trims waste, and bets on savings.

Table 1: Funding Sources

Source	Amount	How It Works
DoD Budget Redirect	\$12B	\$6B from artillery overstock (M777s, shells) + \$6B from training, per GAO 2023
VA Reallocation	\$8B	Cuts 65K neuro claims (\$33K each) over 4 years—\$2.1B/year saved via prevention
Cost Savings Harvest	\$6.39B	Gear drops 32K vet cases (\$50K/year each) over 4 years—32K x \$50K x 4 = \$6.4B
Supplemental Grants	Pocket Change	NATO/private cash post-April 2025—small bonus
Total	\$26.39B	No tax hikes, just lean moves

The \$12B DoD redirect’s pure hustle—GAO’s 2023 report flags excess munitions, so why not flip it to BOPE gear? VA’s \$8B comes from dodging claims—20% of their \$120B disability pool ties to BOPE, and prevention slashes that [VA, 2022]. The \$6.39B savings? If new tech cuts cases 27%, it’s money we keep [McEvoy, 2024]. Hawks, chew on this: it’s all existing cash, no debt—smart, right?

Where’s It Going?

Every dollar’s got a gig—tracking blasts, fixing weapons, and catching vets before they crash.

Table 2: Spending Breakdown

Purpose	Amount	What It Buys
Wearables	\$400M	Sensors for 120K troops—tracks every 6 psi hit, real-time data
Weapon Retrofits	\$2B	50%+ blast cuts on M777s, mortars—big fix, not tinkering (Section 18)
Research	\$200M/year	10-year deep dive—brain, heart, more (Section 8)
VA Claims & Care	\$100M/year	Screenings, benefits for 250K vets—retroactive (Section 10)
Rest (Czar, Training)	~\$19B	BOPE Czar, guidelines, family help—spread over 4+ years
Total	\$26.39B	Covers 370K warfighters, no bloat

That \$400M for wearables is the ace—soldiers’ voices in data, not whispers. The \$2B retrofit chunk? It’s serious—50% blast drops vs. today’s Band-Aids. Research and VA cash (\$300M/year) lock in long-term wins [Stone, 2024].

How’s It Different?

Table 3: OWA2025 vs. Current Policy

Aspect	OWA2025	BOSA (2023) / Hicks Memo (2021)
Funding	\$26.39B—redirects + savings	BOSA: \$10s of millions in NDAA; Hicks: vague
Scale	370K troops/vets, full fix	BOSA: pilots, gauges; Hicks: guidelines only
Policy	Hazard status now (Section 4)	BOSA: study first; Hicks: monitor, no teeth
Prevention	\$6.39B saved via gear	Neither bets on big savings—react, don’t preempt

Cash Boon: The BOSA’s a drip that sprinkles maybe \$50M on wearables [NDAA, 2023].

The D.O.D. Memo’s got no budget, only more talk [Hicks, 2021] but the OWA2025’s \$26.39B outmuscles their scope and the bank account to back it.

- Bold Move: The OWA2025 tackles BOPE as a hazard now—wearables log exposures daily, forcing action, not reports.
- Savings Edge: Current policy reacts—OWA2025 prevents, banking \$14.39B in cuts.

Here’s the bottom line:

Table 4: Cost vs. Savings (4 Years)

Item	Cost	Savings	Net
Total Spending	\$26.39B	-	-\$26.39B
VA Claim Cuts	-	\$8B	+\$8B
Case Avoidance	-	\$6.39B	+\$6.39B
Total	\$26.39B	\$14.39B	-\$12B

Net: \$12B over 4 years—\$3B/year. Stack that against VA’s \$24B yearly BOPE claims & health encounters. Spend a dime now, save a dollar later. Risk? Sure—if gear flops, savings shrink—but even then, it’s cheaper than ignoring 370K lives. And given the recent revelations about how federal tax dollars have squandered, can we seriously look our Warfighters and Veterans in the face and say, “Sorry, we don’t have the money.”?

Why It’s a Win

No tax grabs—just DoD/VA budgets reworked, plus prevention math. It’s leaner and meaner than the Blast Overpressure Safety Act’s slow roll or Hicks’ D.O.D. memos, its real cash, real fixes, real savings. Hawks get CBO audits (Section 3); regular folks get troops covered.

OWA2025’s fiscal smarts meet soldier grit—fund it, and it flies.

Please Visit: www.OverPressured.com/owa2025

Sources Cited

- Gama Sosa, M.A., et al. (2019). Occupational Overpressure Exposure and Cognitive Decline in Military Personnel. *Military Medicine*, 184(Suppl 1), 561-567.
- McEvoy, A. (2024). Cumulative Blast Impulse Is Predictive for Changes in Chronic Neurobehavioral Symptoms. *Journal of Military Medicine*, 189(3-4), 456-463.
- Stone, J.R. (2024). Neurological Effects of Repeated Blast Exposure. *Neurology Research International*, 2024, Article ID 8855443.

- U.S. Department of Veterans Affairs (2022). Implementation of the PACT Act - Toxic Exposure Screening Report.
- Hicks, K. (2021). Memorandum: Policy and Procedures for Managing Risk to Brain Health from Blast Overpressure. Office of the Deputy Secretary of Defense.
- Defense and Veterans Brain Injury Center (2020). Blast Overpressure: What We Know and Don't Know.
- National Defense Authorization Act (NDAA) for Fiscal Year 2023, Pub. L. No. 117-263 (2022).
- U.S. Government Accountability Office (GAO) (2023). Excess Munitions Report.