Congress of the United States

Washington, DC 20515

October 10, 2024

The Honorable Denis McDonough
Secretary
U.S. Department of Veterans Affairs
810 Vermont Avenue, NW
Washington, DC 20420

Dear Mr. Secretary:

Thank you for being such a dedicated public servant, and a partner to Congress in our efforts to better serve America's veterans. You helped navigate the Department through unprecedented times during the COVID-19 pandemic, and deftly oversaw implementation of the largest expansion of care and benefits in decades through the Honoring our PACT Act. While we have made significant progress in assisting veterans who have experienced toxic exposure, we both know that much more remains to be done to ensure that the Department of Veterans Affairs (VA) is addressing both the current and future needs of our veterans. To that end, we write today to request that VA act to identify, prevent, treat, and compensate traumatic brain (TBI) injury related to servicemembers' occupational exposure to blast overpressure. Specifically, we ask that you exercise your existing authority to create an environmental health registry and establish a presumption of service connection for blast overpressure.

Servicemembers that repeatedly conduct breaching and fire heavy weapons such as mortars, artillery, and tanks are exposed to excessive amounts of low-level blast overpressure when firing these weapon systems. Most of these exposures occur in the training environment. This could amount to thousands of exposures over a single enlistment, and a frighteningly high number over a career. Overpressure exposure occurs when the pressure from a blast wave quickly exceeds normal atmospheric values and agitates the brain by moving it rapidly inside the skull. Recent research and reporting point to this occupational blast exposure as causing long-term damage to the health of servicemembers and veterans. Department of Defense (DoD) research now supports a causal relationship between chronic sub-concussive brain injury and these excessive occupational blast exposures. Moreover, other adverse effects have also been shown, such as memory loss, cognitive dysfunction, and even suggestions of suicidal ideation.

In a recent series, the New York Times reports that these cumulative occupational exposures can cause system-wide damage to the brain that are unique to other forms of TBI:

> The lab's research team started looking for similar damage in other brains. In civilians' brains, they did not find it. Nor was it in the brains of veterans who had been exposed to a single powerful explosion like a roadside bomb. But in veterans exposed repeatedly to blasts, they found it again and again.[1]

[1] *Pattern of Brain Damage is Pervasive in Navy SEALS Who Died by Suicide*, New York Times (June 30, 2024).

Section 734 of the National Defense Authorization Act (NDAA) for Fiscal Year 2018,[2] required a report on a longitudinal medical study of blast pressure exposure of members of the Armed Forces. This report identified and designated what they refer to as "Tier 1 weapons systems" "as the highest risk of creating injury. The study highlighted in the report was also effective in "measuring and quantifying blast over pressure exposure, understanding how this exposure impacts both warfighter health and performance necessary to establish evidence-based guidance on blast overpressure (BOP) exposure thresholds".[3] In response, Deputy Secretary of Defense Kathleen Hicks issued a memorandum on August 8, 2024, which stated:

> Experiences by DoD personnel in training and operational environments demonstrate possible adverse effects on brain health and cognitive performance (e.g., headache, decreased reaction time, attention difficulty, memory loss) resulting from acute (e.g., single or short-term) and chronic (e.g., repetitive or continuous) exposure to BOP…[4]

Likewise, the Traumatic Brain Injury Center of Excellence (TBICOE) released a provider fact sheet to DoD clinicians on low-level blast (LLB), informing medical staff that exposure may cause dizziness, irritability, memory problems, slowed thinking and reaction time, decreased hand-eye coordination, difficulty hearing, fatigue, headaches, and tinnitus. Providers are now encouraged to document estimated total exposures of LLB, Military Occupational Specialties (MOS), and years in occupation in patients' medical records, and required to use specific diagnostic codes denoting LLB exposure as a contributing factor to the patient's presenting condition (e.g., headaches, memory problems, dizziness, etc.).[5]

There have also been over 20 DoD and National Institutes of Health (NIH) peer-reviewed research studies published since 2017, many of which[6,7,8] suggest the delicate mechanisms of neurology, neurovascular, and neuroinflammation on the central nervous system are affected by cumulative occupational blast exposure. This affect has been posited to also produce a broad range of other long-term effects like headaches, tinnitus, vertigo, difficulty concentrating, impaired impulse control, anxiety, and neurocognitive dysfunction associated with accelerated aging process.

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[2] Pub. L. 115–91 (2017). The interim report was issued to the House and Senate Armed Services Committees in April 2019 and the final in December 2023.

[3] U.S. Department of Defense, *Longitudinal Medical Study on Blast Pressure Exposure*, (XXX. XX, 20XX) (https://health.mil/Reference-Center/Reports/2023/12/19/Longitudinal-Medical-Study-on-Blast-Pressure-Exposure).

[4] Department of Defense, *Department of Defense Requirements for Managing Brain Health Risks from Blast Overpressure* (Aug. 8, 2024) (media.defense.gov/2024/Aug/09/2003521276/-1/-1/1/DEPARTMENT-OF-DEFENSE-REQUIREMENTS-FOR-MANAGING-BRAIN-HEALTH-RISKS-FROM-BLAST-OVERPRESSURE-OSD005281-24-RES-FINAL.PDF).

[55] ICD-10 Codes: Garrison: Y37.290 (Military operations involving other explosion and fragments), and Deployed: Y36.290_ (War operations involving other explosion and fragments)"

[6] Kamimori, G., et al., *Occupational overpressure exposure of breachers and military personnel*, Shock Waves (2017), 27, 837-847, Https://doi.org/10.1007/s00193-017-0738-4.

[7] Carr, W., et al., *Association of MOS Based Blast Exposure with Medical Outcomes*, Frontiers in Neurology (2020), 11 (https://doi.org/10.3389/fneur.2020.00619).

[8] Kilgore, Madison O and W. Brad Hubbard, *Effects of low-level blast on neurovascular health and cerebral blood flow: Current findings and future opportunities in neuroimaging*, International Journal of Molecular Sciences (Jan. 4, 2024), vol. 25, no. 1, 642 (https://doi.org/10.3390/ijms25010642).

We feel it is important to note that these blast exposures are not a matter of happenstance during a servicemembers' enlistment; they are an occupational requirement necessary to the operational readiness of our military. It is part of the job we ask them to do for us. Moreover, our discussions with veterans have shown this to be an issue affecting those from multiple service periods, including the Global War on Terror, to the Gulf War, to the Cold War, and even peacetime periods. Therefore, it is important that all veterans from those jobs identified by DoD, as well as any others with documented high levels of LLB exposure be able to receive care and benefits for occupational blast overpressure exposure.

Based on the enormity of the evidence, we believe a causal connection exists between certain military job specialties exposed to occupational blast and negative brain health effects suffered by our veteran community, and these conditions are deserving of action by VA. We therefore request the Department consider the following actions:

I. Establishing an Environmental Health Registry (EHR) for Occupational Blast Overpressure Exposure:

Since 1984, the Secretary, though congressional mandate, has undertaken the activity to prescribe regulations regarding the determination of service connection of certain disabilities of veterans who suffered occupational exposures coincident to their military service, for example dioxin and ionizing radiation.[9] A review of the legislative history shows Congress authorized the Secretary to establish Environmental Health Registries (EHR) for exposed veterans for all presumptive conditions currently under the purview of the Secretary. In 1992, the Agent Orange Registry and Ionizing Radiation Registry[10,11] was enacted, in 1994, the Gulf War Registry[12] was enacted, and in 2014, the Airborne Hazards and Open Burn Pit Registry[13]. These registries share an important function as they provide information to help ascertain whether any health effects may be associated with specific reported exposures. Currently, VA's Office of Patient Care Services (VAOPCS), Health Outcomes Military Exposures (HOME)[14], a "VA-delivered core service," serves our nation's veterans to establish and administer research programs related to occupational exposures within the veteran population. The Environmental Health Program (EHP), maintains registries, evaluates research, recommends policy, and develops educational and outreach materials for various environmental issues and health outcomes related to military exposures, including:

- Agent Orange Registry
- Airborne Hazards and Open Burn Pit Registry
- Gulf War Registry (includes Operations Iraqi Freedom and New Dawn)
- Ionizing Radiation Registry
- Depleted Uranium Follow-Up Program

[9] Pub. L. 98-542 (1984), the Veterans' Dioxin and Radiation Exposure Compensation Standards Act.
[10] *See*, Pub. L. 102-4 (1991), Pub. L. 102-585 (1992), Sec. 703, Pub. L. 100-687 (1988), 38 U.S.C. § 527, and 38 U.S.C. § 1116.
[11] *See*, Pub. L. 102-585 (1992), Sec. 703, Pub. L. 100-687 (1988), 38 U.S.C. 527, and 38 U.S.C. § 1116.
[12] *See*, Pub. L.102-585 (1992), Pub. L. 103-446 (1994), and 38 U.S.C. § 1117.
[13] Pub. L. 112-260 (2013), Sec. 201.
[14] Department of Veterans Affairs, Public Health (https://www.publichealth.va.gov/about/postdeploymenthealth/index.asp) (accessed Oct. 1, 2024).

- Toxic Embedded Fragment Surveillance Center[15]

Importantly, not all of the aforementioned registries are congressionally mandated under public law. Accordingly, we ask you to exercise the broad authority of 38 U.S.C. § 501, et seq., to authorize the establishment of an EHR for Occupational Blast Overpressure Exposure (OBOE) to begin the work of capturing and utilizing this information for the purpose of understanding the impact, conducting further research, policy recommendations, outreach materials, and clinical guidelines for VA medical personnel. Such a registry should include veterans from all historical periods, and all MOSs that may regularly utilize or be in close proximity to repeated firing of heavy weapons.

II. Establishing a presumptive service connection based on Occupational Blast Overpressure Exposure and its secondary conditions:

Existing law provides a framework upon which to add medical conditions associated with military occupational exposure from the excessive exposure of low-level blasts related to chronic effects of post-concussive disorder.[16] As such, we encourage you to use this authority to provide for a presumption of service connection for any found illnesses or injuries associated with OBOE. To further support you in justifying your action on this, we also encourage you to do the following:

1. Establish a Working Group and Task Force for the consideration of presumptive conditions associated with Military Occupational Exposure from Chronic Exposure to BOP.

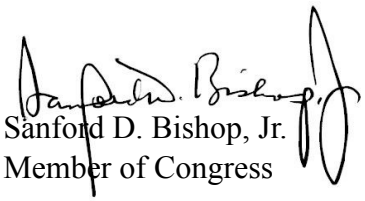
2. Contract with the National Academies of Sciences, Engineering, and Medicine and designated partners to inform findings on the issue.

The impact of blast exposure on servicemembers and veterans remains a deeply bipartisan concern. With new data being developed every day, it is important to act quickly and in concert with DoD to begin the process of assessing and analyzing the effects these blast exposures have had on generations of veterans. Both they and their families deserve timely access to the healthcare and benefits they have earned through faithful and honorable service to their nation. Thank you again for your commitment to veterans, and we look forward to continuing to work with you on this crucial issue.

[15] In 2007, the Presidential Task Force on Returning Global War of Terror Heroes recommended that VHA establish an embedded fragment surveillance center and registry to allow VA to identify and provide clinical surveillance to Veterans with retained fragments (VHA Directive 1303.1).
[16] *See*, 38 U.S.C. §§ 501(a)(1), 1110, 1113, and 1116(b), and 38 C.F.R. §§ 3.303(a), 3.307 and 3.309.

Sincerely,

Representative Mark Takano
Ranking Member
House Committee on Veterans' Affairs



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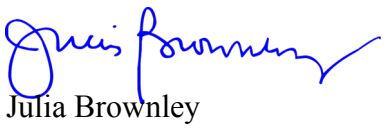

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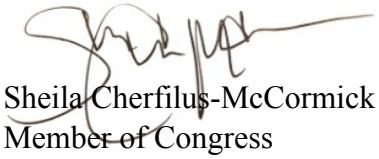

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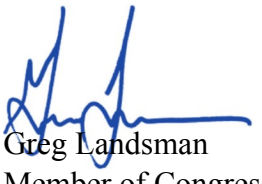

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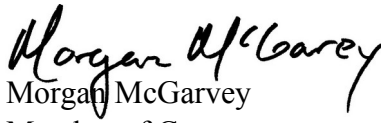

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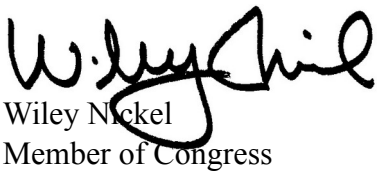

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