

**Prepared Statement
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REGARDING

**POTENTIAL LONG-TERM HEALTH EFFECTS OF BURN PIT EXPOSURE AMONG
VETERANS**

**BEFORE THE HOUSE VETERANS AFFAIRS COMMITTEE
SUBCOMMITTEE ON HEALTH**

June 7, 2018

Chairman Dunn, Ranking Member Brownley, and Members of the Subcommittee - I appreciate the opportunity to discuss the concerns regarding potential long-term health effects of exposures to burn pit and other airborne hazards among our Service members and veterans, and the ongoing collaborative research and other actions the Department of Defense (DoD) is taking to continually improve force health protection, understanding of exposures, and health care for those we entrust to deploy, fight and defend our Nation.

DoD collaborates very closely with the Department of Veterans Affairs (VA) via working group meetings, co-sponsored symposiums, and routine direct consultation on all matters regarding airborne hazards, including health effects, health-related research, improving exposure monitoring and recording, data sharing, outreach and education, and most importantly, responding to the concerns of Service members and Veterans.

DoD recognizes and is concerned about the potential acute and chronic health effects of airborne hazards to Service members and Veterans. Burn pits were used for solid waste disposal in Iraq, Afghanistan, and other operational areas until incinerators or other alternate waste disposal processes became available. Smoke from open burn pits contained a variable mixture of chemicals that may have short- and long-term health effects, especially for those who were exposed for longer periods, or those more prone to health effects, such as individuals with asthma or other lung or heart conditions. The smoke emitted by burn pits contributes to the total concentration of environmental pollutants that may pose harmful effects. In addition to emissions from open air burn pit operations, other deployment-associated environmental hazards could include indigenous ambient particulate matter; exhaust from military vehicles, machinery, and generators; and pollutants from local industry. Identifying, assessing, mitigating and documenting environmental exposures are critical force health protection measures for deployed Service members and Veterans.

Focusing on protecting the health of the force, DoD deployment-related policies and procedures direct actions to minimize the disposal of solid waste in open-air burn pits during contingency operations, and prohibit the disposal of covered waste (for example, hazardous waste, medical waste, tires, batteries, etc.) in open-air burn pits in circumstances in which no alternative disposal method is feasible. These policies also provide guidance on conducting periodic health risk assessments at deployment sites, including monitoring emissions from operational burn pits and other airborne hazards. These assessments are used to inform decisions that mitigate health risks, document potential exposures, inform medical care, and to compile publically-available Periodic Occupational and Environmental Monitoring Summary reports for geographically-associated forward operating bases in Iraq, Afghanistan and other operational areas. Furthermore, the policies direct pre- and post-deployment health assessments for deployed Service members, an annual periodic health assessment for all Service members, and upon separation or retirement from military service a separation history and physical exam to facilitate the transfer of care from the DoD to the VA. These individual health assessments include questionnaires, medical provider reviews, and specialty referrals (if indicated) addressing individual Service member concerns about deployment environmental exposures and potentially related health issues.

In addition to the series of deployment- and health-related assessments, as part of proactive outreach and education activities, eligible Service members are encouraged to participate in the Airborne Hazards and Open Burn Pit Registry established in June 2014 by the VA, to include opting for the face-to-face physical examination available to any registry participant. The physical examination adds an objective assessment of physical manifestations of a condition or illness and current health status. At present, there are over 143,000 Veterans and active and reserve component Service members enrolled in the registry. Beyond enrollment activities, DoD also provides medical provider education about the registry through a web-based course that includes a 'Clinical Toolbox' for health care providers who are performing the follow-up clinical evaluations. DoD will continue collaboration and research with the

VA on how to improve the registry and how best to analyze the registry data to evaluate potential health outcomes, especially chronic outcomes, of deployed Service members and Veterans.

While the 2011 Institute of Medicine Report on “Long-term Health Consequences of Exposure to Burn Pits in Iraq and Afghanistan” concluded there was insufficient evidence of long-term health risks associated with burn pit exposure, the report found that negative health effects (particularly respiratory) were plausible due to particulate matter, albeit burn pits were likely one of many factors. The reviewed literature provided limited but suggestive evidence of decreased pulmonary function associated with combustion products. However, there was insufficient evidence of an association between exposure to combustion products and cancer, respiratory disease, circulatory disease, neurologic disease, or adverse reproductive and developmental outcomes in the populations studied.

On the basis of the available peer-reviewed published research, we do know that military personnel deployed to Iraq and Afghanistan appear to experience elevated rates of acute upper respiratory symptoms during deployment and may be at greater risk for post-deployment respiratory symptoms and respiratory illnesses.

DoD has and will continue to collaborate with the VA, other federal agencies, academia and others on epidemiological and health-related research focused on full understanding of potential long-term health outcomes associated with burn pit and other complex airborne exposures during deployments. To date, a considerable volume of research on this very important topic has been completed, is ongoing, and is planned through various programs resourced by Congress, DoD and VA.

DoD and VA collaboratively implemented the VA/DoD Airborne Hazards Joint Action Plan process, overseen by the VA/DoD Deployment Health Working Group, as a primary means of identifying research needs within the DoD and VA to address burn pit

and other ambient air exposures during deployments. As a result of the first meeting of the VA/DoD Airborne Hazards Symposium (2012), the Borden Institute published the Specialty Clinical Publications book, "Airborne Hazards Related to Deployment (2015)" written by the U.S. Army Public Health Center.

In addition to a concerted focus on health effects research to improve knowledge, diagnosis, and health care, DoD recognizes the need to improve recording of occupational and environmental exposures across all garrison and deployment operations. The DoD and VA are currently collaborating on the development of the first-ever Individual Longitudinal Exposure Record (ILER). The ILER will be a composite record of an individual's potential and documented exposures from garrison or deployment activities, from initial entry to discharge or retirement from military service. The ILER will be made available to DoD and VA medical providers, epidemiologists, and researchers, as well as to VA claims and disability adjudicators. The ILER will enhance medical evaluation and treatment; support epidemiological investigations and research to better understand potential and actual health outcomes; inform health risk mitigation strategies; and provide easily accessible exposure information when needed to DoD and VA medical and administrative offices. Of note, the ILER Pilot product will be rolled out September 30 of this year for initial testing and evaluation, followed by the roll out of a more robust Initial Operating Capability product not later than September 30, 2019.

Sustained readiness and combat lethality are critical components to the mission of DoD – to fight and win in any environment. In turn, force health protection and quality health care, whenever and wherever needed, are critical components of sustained readiness. Thus, DoD is very committed to the health and well-being of our Service members from initial entry to end-of-service, and very supportive of the health and well-being provided to Veterans by the VA – an unbreakable continuum and bond we share that is indicative of our utmost acknowledgement and respect of their collective service and sacrifice.

DoD will continue to closely work with the VA, the interagency, academic partners, and others to assess and mitigate environmental exposures, especially during deployments; to pursue targeted research to better understand the potential health effects of burn pits and airborne hazards; and to translate this research into prevention, diagnosis and treatment to better care for our Service members and Veterans.

DoD is grateful for the consistent Congressional support that has enabled collaborative actions focused on the health and readiness of Service members, and the provision of high-quality care to them and their families.