

**STATEMENT OF
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BEFORE THE
HOUSE COMMITTEE ON OVERSIGHT AND REFORM
SUBCOMMITTEE ON NATIONAL SECURITY**

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Chairman Lynch, Ranking Member Grothman and Members of the Subcommittee. Thank you for the opportunity to discuss the ongoing activities and research that VA is undertaking to address adverse health concerns that may be associated with exposure to environmental hazards, i.e., exposure to toxic substances, among Veterans who deployed to Karshi-Khanabad, a former Soviet Airbase in Uzbekistan also known as "K2."

Background

K2 is a former Soviet Airbase in Uzbekistan that the U.S. military used for entry into Afghanistan from 2001-2004. The area had not been maintained by the Soviets in a manner that would be considered environmentally safe, and early mitigation was a part of the initial actions for K2 use by U.S. forces. As described in Department of Defense (DoD) reports, the initial site assessment in 2001 found the following environmental concerns:

1. Jet fuel – Exposure may have occurred as a result of a leaking Soviet-era underground jet fuel distribution system.
2. Volatile organic compounds (VOC) -- Air samples collected during environmental assessments contained concentrations of VOCs from jet fuel vapors. Levels did not exceed military exposure guidelines or other health exposure criteria.
3. Particulate matter and dust – Service members who served in the Southwest Asia theater of operations were exposed to airborne particulate matter and dust.
4. Depleted uranium (DU) – During Soviet occupation of K2 missiles were destroyed there, contaminating some areas of sub-surface dirt with low-level, radioactive, depleted uranium. Dust was measured for radioactivity and not detected, inhalation as a hazard was negligible.
5. Asbestos – Asbestos was present in roof tiles and dirt samples but was not detected in air samples.
6. Lead-based Paint – K2's In-processing Center was the only K2 structure identified with lead paint.

DoD Actions

An initial assessment of these environmental hazards and their association, if any, with adverse health consequences was done by DoD, as reported by the Army Public Health Center. DoD found that while contamination was documented at this site, mitigation was possible and remediation efforts were completed to reduce potential exposure and risk to Service members deployed there. In accordance with environmental science best practices, DoD covered contaminated areas with clean dirt and declaring them “off limits” to prevent mitigate the threat of radiation hazard and fuel spills.

Staff of the Army Public Health Center also performed an evaluation of cancer outcomes in 2015. This analysis compared Service members deployed to K2 to a comparable group who deployed to South Korea, but never to Southwest Asia. The only statistically significant associations found were for malignant melanoma (Relative Risk= 3.7; 95%; Confidence Interval= 1.3-10.0) and cancers of the lymphatic and hematopoietic tissues (leukemias and lymphomas) (Relative Risk= 5.6; 95%; Confidence Interval= 1.7-18.7). The small number of cases (<10 in each group) resulted in very wide confidence intervals, which means the estimates must be interpreted with caution. Thus, these results should not be construed as a definitive regarding associated risk. The results demonstrated that Service members at K2 experienced lower risk relative to a comparison military cohort group stationed in South Korea for circulatory (9% lower) and respiratory (16% lower) issues and significantly fewer mental health issues. Overall cancer risk was not significantly elevated in the K2 group. This may be a result of the selection of personnel for forward deployment, who tend to be healthier than non-deployed Service members (a.k.a. the “healthy warrior” effect).

VA and Veterans Exposed to Environmental Hazards During Deployment

VA exists for Veterans. When military service has or may have negatively impacted a Veteran’s health, we are here to provide care to the Veteran, provided he or she is eligible to receive VA health care and, in some cases, compensation for those service-related conditions. VA recognizes that exposure to environmental hazards during deployment may be associated with both immediate and delayed adverse health consequences. There are over 18 million Veterans in the United States, and VA cares for approximately 9.6 million of them. One in three Veterans reports a possible exposure to an environmental hazard during their service, and one in four reports health concerns they believe may be due to such an exposure. In-service exposures to environmental hazards are a major concern of Veterans and the rationale for creation of VA’s Post Deployment Health Services (PDHS).

VA has reviewed the above-described DoD study and its findings related to the possible risk of developing cancer(s) due to known or possible exposures to environmental hazards while deployed to K2. In our view, even the small number of cancers found within this group of relatively young Service members is cause for concern. VA is therefore taking these results seriously. However, this DoD study is just

an initial undertaking; more scientific investigation is needed to enable VA and DoD to perform a reliable assessment of the possible or known long-term adverse health effects associated with to any of the above-referenced list of environmental hazards while deployed to K2.

Partnering with our DoD colleagues, PDHS Epidemiology Program has confirmed 10,333 Service Members (10,2999 Veterans) were deployed to K2. While the science continues, VA will continue to hear and address this Veteran-cohort's health related concerns, furnish them with all necessary medical care for which they are eligible, and provide them with the most up-to-date epidemiological findings and outreach materials related to K2 post-deployment health matters. The scientific studies will not cause delays in Veterans access to VA care for which they are eligible. They do not, however, have independent eligibility for VA health care under 38 U.S.C. 1710(a)(2)(F) and 1710(e) based solely on their deployment to K2; however, some in this cohort transited through K2 to serve in Afghanistan such that they would be covered by VA's special treatment authority in section 1710(e)(1)(D). (Care provided under this provision is not subject to any copayment obligations that would otherwise apply.)

VA Post-Deployment Health Research

PDHS, through its epidemiological experts, has designed a comprehensive prospective epidemiological study to assess any possible associations between adverse health conditions and exposure to environmental hazards during K2 deployment. We estimate that it will take 12-18 months to complete based on our current assets. This study will include assessments of rates of morbidity, to include health conditions such as cancer, respiratory/neurologic diseases and rates of mortality. As to the latter, it will include an overall mortality rate for each study group as well as specific rates of mortality per condition, including respiratory disease. This is considered to be an extension of the study conducted by the Army Public Health Center, discussed above. Additionally, we will include two military comparison groups: Operation Enduring Freedom (OEF), Veterans deployed to OEF (2001-2005) but never to K2; and OEF-era Veterans on active duty but never deployed to K2 or OEF. This prospective study will follow these study groups for approximately 20 years.

In addition, during the development of the K2 roster, we matched the roster against the Mortality Data Repository (through 2016). We used these data to compare cancer mortality rates between the K2 Veteran-cohort and the general population. We found there was not an increased mortality rate due to cancers in the K2 cohort as compared to cancer mortality rates found in the general population. Caution is warranted in interpreting these results; however, as these data included only two-thirds of the K2 cohort and did not include cause of death data for the last 4 years. We stress that these findings should not be construed as definitive because of the limitations noted above. We will have to await completion of VA's prospective epidemiologic study for a thorough and valid assessment of possible or identified adverse long-term health outcomes among the K2 Veteran-cohort, which may be associated with their possible or known exposures to environmental hazards while deployed at K2.

The study by the Army Public Health Center coupled with VA's prospective epidemiological study are just part of VA and DoD's collaborative research efforts and joint commitment to address K2 Veterans' self-reported post-deployment health concerns. The Departments also work closely on such matters through the joint Deployment Health Work Group. VA and DoD subject matter experts assigned to this work group meet monthly to discuss and plan joint or complementary actions regarding identification of deployment-related environmental exposures and their possible association with the onset of subsequent adverse long-term health conditions. Investigation into K2 deployment health concerns, as raised by K2 Veterans, has been and remains an ongoing part of these regular discussions.

DU Exposure

As noted above, DU was listed as one of the environmental contaminants and hence hazards at K2. VA has a great deal of experience with DU through VA's Toxic Embedded Fragments/Depleted Uranium Center in Baltimore, Maryland, which includes an extensive monitoring program. DU radiation exposure has low radioactivity at 5 half-lives and is unlikely to result in measurable levels of exposure. However, even this long after potential or known exposure to DU, current testing methods can establish if there is a clinically meaningful exposure-dose. Therefore, VA does encourage K2 Veterans to test for DU by submitting a urine DU assay and get regular DU testing.

Conclusion

VA is committed to the health and well-being of Veterans and is dedicated to investigating potential adverse long-term health effects resulting from Veterans' possible or known exposure to environmental (toxic) hazards while deployed to K2. This knowledge is expected to translate into improved clinical care for K2 Veterans. It should also help DoD to protect Service members from experiencing unprotected similar exposures in future deployments. Your continued support is essential.