Defense Health Agency (DHA) Clinical Communities Speaker Series

Special Feature Webinar:
Understanding and Evaluating Military Environmental Exposures

The following are responses to a selection of questions submitted by attendees during the live event.

1. **What are open burn pits?**
   A burn pit is a variably sized area devoted to the outside open-air burning of trash. It was used to get rid of collected solid waste and was a common waste disposal practice in overseas military deployed settings. There may have been more than 250 burn pits in multiple combat theaters, largely in Iraq and Afghanistan but also in many other countries. They varied in size from relatively small to massive that covered many acres. It's hard to envision but an estimated 4-million veterans who were deployed in the last 30 years were exposed to burn pits and can file Veterans Affairs (VA) claims.

2. **What was burned in open burn pits?**
   The intent was to dispose of solid waste or garbage by burning. Other waste management options of landfill, recycling, or use of incinerators were often not feasible, necessitating open burning. A variety of hazardous waste, medical waste, and human waste were also burned in these open-air burn pits. The VA provides an exhaustive listing of what was burned on their "Airborne Hazards and Open Burn Pit Registry website." (https://www.publichealth.va.gov/exposures/burnpits/registry.asp)

3. **What was the composition of the smoke that arose from open burn pits?**
   The composition of the smoke effluent has a complex chemistry, known as pyrolysis chemistry. The chemicals formed from burning, varied from burn pit site to burn pit site and in the same burn pit site over time. The resulting thermal decomposition products were dependent on what was burned, how hot the fire got and how long it burned. But generally found were variable amounts of particulate matter, volatile organic compounds, polycyclics, polyaromatics, dioxins, sulfur dioxide, nitrogen oxides, etc.

4. **Why does exposure to burn pit smoke medically matter?**
   Exposure to toxic smoke may have acute effects (such as eye, nose, throat, lung irritation and cough) but more importantly it may lead to long-term health consequences (such as chronic respiratory conditions and cancers). Those potentially exposed were not only personnel working the pits but also many others at variable distances from the pits, with exposures depending on the size of the pit, distance from the pit, smoke plume characteristics and local meteorological conditions. In fact, the smoke may have traveled not only across the camps but beyond to outside its perimeter.

5. **Are you aware that there are many service members with service tickets into the Burn Pit Registry because deployment information is incorrect and cannot be corrected as well as not being able to add countries that were not reported in the Registry, but are in their DD214? How soon can these tickets be resolved?**
   There are no service tickets for those in the registry if the deployment is incorrect. The veteran in the registry can manually correct that information. The service member should contact the registry manager email group (vaburnpiter@va.gov) for assistance. Only eligible locations for the Airborne Hazards and Open Burn Pit Registry (AHOBPR) are allowed to be added. Once a questionnaire is submitted, previous deployments may not be corrected/changed, we advise changes to be made prior to submission.

6. **Do the legal limitations on the use of burn pits extend to local national contracted waste management?**
   Please see the attached USD-A&S memo dated 13 October 2022.

7. **Do you have any comments about the recently released reports about aircrew cancer incidence rates in relation to occupational/environmental exposures? That was in section National Defense Authorization Act (NDAA) 2021 section 750. Do we have health outcome data for other career fields and are we comparing to similar civilian groups? When reading the report, it looks like they were comparing aircrew data to other military career field but not compared to civilian/commercial airlines.**
   No specific comments about the report currently. The Department continues to conduct appropriate research to fully understand the potential health outcomes associated with occupational and environmental exposures.

8. **How do we proceed with a veteran that has been on a special mission not necessarily showing on their military orders?**
   The service must declassify the mission before the person can join the AHOBPR. The system requires validation of deployment to one of the eligible countries.

9. **Historically, veterans I have worked with cannot remember if they have entered their information into the Department of Veterans Affairs (VA) burn pit registry. Is there any way to verify if they have or have not?**
   Veterans can log into the AHOBPR system by going to this URL: HOME - Airborne Hazards and Open Burn Pit Registry (va.gov). Click "Get Started." Log in. At this point you will be able to open your completed questionnaire and download if you want. If you have not finished the questionnaire, you can proceed to finish. For those with new deployments after you finished your initial questionnaire, you can add this new deployment. The system does not have the ability to add new health conditions.

10. **Are you aware of the efforts to establish a flying exposure registry through the Individual Longitudinal Exposure Record (ILER)?**
    The ILER functionality allows linkage to existing and/or future exposure registries. At this time there is no request to establish a flying exposure registry.

11. **Are widows eligible to register?**
    For the current version of the AHOBPR, they are not. The rationale is most of the data is based on memories that only the service member can fill out. It is assumed surviving family members would not know what the deceased spouse knew about the question. The data would either be blank or best guess, which may be incorrect. This is an advantage of the future registry. All who served should be in this registry. There is no need for survivors to enroll. In addition, there will be no standard questions to answer for this initial enrollment.

12. **The Washington Post reported on illness among Iraqi civilians living in the vicinity of burn pits. Do you have insight or comments on this topic?**
    It seems logical that Iraq citizens near local burn pits could have health effects. They lived in the area year after year so more individual exposure time than U.S. service members. The article did not show any scientific studies comparing different groups nor talk about alternative causes of illness such as tobacco usage. Scientific studies would be needed to better answer disease and burn pit exposure in Iraq civilians.

There is no current work especially in the current environment of US and Iraq relations to conduct such work with US government researchers.

13. **Several soldiers have reported that if they have multiple deployments, they cannot update potential exposure locations. For instance, the first deployment to Kuwait in 2004 with burn pits, with second, third, and fourth deployments to Iraq, Afghanistan, and Iraq respectively. Once they joined the registry following the first deployment, this forum does not document subsequent deployments. Any recommendations?**
Registry participants do have the ability to add deployments. Please see guidance and instructions in the additional resource document titled "AHOBPR FAQs."

14. **Can you comment on the way forward for previous Active-Duty service members with burn pit exposure who subsequently developed a presumptive cancer after transitioning to the Reserves? They have a 100% VA disability, but how does this translate to their current Reserve service? If they are symptomatic and are no longer able to perform their duties, can they be Medically / Disability Retired and how can this be accomplished?**
This question is beyond the scope of the panel. The reserve service member who has a rating with a 100% disability must have his health conditions reviewed for service retention. If one is found with 100% disability and fit for service should proceed within the limitations of his permanent profiles. Additional health conditions should be evaluated on a case-by-case basis for fitness for duty. Proceeding to medical discharge may be warranted. The additional health conditions cannot raise service disability over 100% which is capped at this level.

15. **Are there specific guidelines for the "exposure assessment"?**
There is no set panel of labs or imaging that should be completed for the AHOBPR exam. It is up to the evaluating clinician. When a provider sees a service member or veteran for an AHOBPR exam, there are no specific labs nor biomarkers of exposure to order. Instead, what labs and imaging studies, if any to order, is left up to the provider, based on the presenting symptoms and physical exam findings of the patient in front of them. It is at their discretion, based on their clinical judgment as to what, if any tests to order, if they are comfortable following the patient, and if any specialty referrals will be ordered. Some patients are rather easy to manage and follow by primary care providers. Other patients may either have a mixture of more complex symptoms and physical findings, or they may have symptoms that cannot be explained by their findings and studies. More complicated patients may benefit from and require specialty referrals for further evaluation, subsequent management, and longitudinal follow-up.

16. **If a service member has started the registry questionnaire, but deployment data is incorrect, should they complete the registry and submit, or wait for service ticket correction?**
There is the ability to correct the deployment while within the AHOBPR, prior to submission. Once a questionnaire is submitted, previous deployments may not be corrected/changed, we advise changes to be made prior to submission. If changes need to be made after submission, the service member should contact the registry manager email group (vaburnpiter@va.gov) for assistance. There is no service ticket possibility in that the AHOBPR has no process for someone else to correct the deployment dates. Please see additional guidance and instructions in the attached document titled "AHOBPR FAQs."

17. **Have they thought about all the fires associated with Camp Pendleton? And Marines assigned to help fight those fires. Okinawa also has exposure to the demolition ranges. Some bases, such as NAS Atsugi in Japan, have hazardous material incinerators close to the base. It affects service members and family members. Do any registries cover those issues?**
    There are many different respiratory exposures from military service. The AHOBPR was chartered by Congress to focus effort on burn pits from Southwest Asia and Afghanistan in the deployed environment. The current AHOBPR only covers those within this charter. Service members who have concerns about their military exposures whether or not eligible for the AHOBPR should talk to their health care provider about their concerns and get this information documented into their military record.

18. **Is there a registry for personnel who received the contaminated Anthrax vaccines?**
    There is not a VA registry focused on anthrax. Service members who have concerns about their military exposures should discuss with their health care providers.

19. **Do health care contractors have access to the registry documentation and the participant countries to improve familiarity with what the member needs to do in the documentation registry?**
    Contractors can go to the AHOBPR web site and the AHOBPR Center of Excellence website (https://www.warrelatedillness.va.gov/WARRELATEDILLNESS/AHBPCE/index.asp) to obtain information about respiratory exposures. These sites provide summary information about the collective group within the registry. Information learned would be applicable to all people who were around the exposure.

20. **Do consents include access to soldier health records? Death is not a leading indicator, so lung issues and similar diagnostic findings may be more helpful to determine whether there are epidemiology impacts at 15 or so years following exposure.**
    Joining the registry does not necessarily provide consent to review and link data to health records. This is done usually through an approved Internal Review Board as an additional safeguard to privacy. The linkage of records is a large benefit of the future registry. The denominator will be the entire population and not just those who made the effort to join the current registry.

21. **Was the presumptive conditions list derived from service member epidemiology records?**
    The origin of the 23 presumptive conditions in the PACT Act had a legal basis determined by Congress for service members across multiple military campaigns, across multiple time eras, which incorporated multiple potential exposures to a rather large number of chemical agents. It did not have a clearly defined scientific nor a defined epidemiological basis. The PACT Act added to the three conditions already approved. In short, unknown how Congress decided as the basis for their legislation and not readily found in the PACT Act.

22. **Is ILER already functional/available in MHS GENESIS? If not, will it be?**
    Currently, health care provides can access the Individual Exposure Summary via the Joint Longitudinal Viewer (JLV). Per the approved development schedule, ILER with be interoperable with MHS GENESIS no later than 21 December 2023.

23. **For those of us in the Air Force reserve and Air National Guard, who are working with members involved in mishap responses of low observable aircraft (significant occupational exposure risk), is there any other place we should document potential exposures aside from the MHS GENESIS? Can reserve and guard flight surgeons and operational medics have access to ILER?**
    Yes, reserve and guard flight surgeons and operational medics have access to ILER. They must apply for an ILER account. It is recommended that you document occupational exposures via the normal industrial hygiene workplace assessment process and have the resulting approved reports uploaded to DOHERs-IH. ILER will then be able to display the results of the assessments provided the individuals are identified in the industrial hygiene assessment report.

24. **Can you clarify the statement "accuracy of data collected?" Is that in reference to sample data being conducted [technically] properly using the correct media and method? Or is it about applicability of exposure to an individual person? Or is it about confidence in sample data (i.e., minimum sample number), etc.?**
    All of the above. It is important to conduct the exposure assessment in accordance with published procedures, to include assuring data quality. Also, it is very important to correctly report who was present during the exposure assessment – whether a garrison workplace or forward operating base - in order for the ILER to accurately display the exposure information for the individual.

25. **How is a complete ILER built for Special Operations Command service members and others who do not provide unclassified deployment location data?**
    The ILER development team is committed to working with the Special Operations community to develop an unclassified ILER for their service members. At this time ILER only uses unclassified data for exposure assessments and deployed locations, thus until the existing classified data is declassified the ILER for Special Operators will be incomplete.

26. **How is blast exposure data getting to Defense Occupational and Environmental Health Readiness System-Industrial Hygiene (DOEHRS-IH) and then to ILER?**
    We are currently developing the process to have the blast gauge data downloaded onto an IT tablet then transferred to the blast over-pressure module in DOEHRS-IH, then retrieved and presented in the ILER.

27. **Will ILER data end up in the MIP (MHS Information Platform)?**
    This is to be determined.

28. **Is the VA using DOEHRS or ILER for service-connected disease? A GAO report about eight years ago stated the VA was NOT using DOEHRS. (ILER didn't exist at the time).**
    VA is using a variety of records to determine service-connected disease. ILER is now an additional source of data for this purpose.

29. **Who is authorized to make an ILER account?**
    Primarily health care providers, epidemiologists, health effects researchers, and claims adjudicators. ILER access for service members and veterans is under development.

30. **For an individual, what is the specificity and reliability of the industrial hygiene events listed in ILER as being significant?**
    Industrial hygiene surveys include the requirement to assure data quality, including if permissible exposure limits were exceeded, and to associate individuals in the workplace during the time of the survey.

31. **Is ILER being presented at the Joint Safety Professional Development Symposium?**
    No, it was not this year, but will be presented next year.

32. **Will ILER track service members in the registry for contaminated water exposure in Hawaii?**
    Yes, the Pearl Harbor incident report associated with the contaminated water is now included in ILER, and there are approximately 28,000 individuals associated with the incident report.

33. **For mil members, should a/the member always go to their mil med clinic (active/guard/else) to start or directly with the VA for the topics broached in this presentation?**
    For service members, go to their supporting DOD Medical Treatment Facility. For veterans, go to their supporting VA Medical Center.

34. **How do you as a health care provider access military environmental exposure information on your patient prior to the medical appointment to evaluate his/her health concerns associated with potential exposure to toxic substances that might have occurred while on deployment?**
    The best resources are ILER, the Health.mil toolbox, and the VA AHOBP website. I further recommend that you obtain an ILER account and explore the ILER Resource Library. (Note that once an ILER account is obtained, it must be accessed every 30-days to prevent the account from going inactive.)

35. **What would you consider to be the most important or most critical piece of advice for health care providers when evaluating patients with military environmental exposure concerns?**
    The burden for completing these exams is on the primary care provider. I suggest that you gain an understanding of the full range of military-related environmental exposures (not just burn pits), develop comfort with some relevant toxicology terminology, make sure patient's concerns are addressed and documented in the electronic health record, to know where to go for additional information and when indicated to make appropriate specialty referrals based on the outcome of your patient encounter.

36. **What are the roles of Industrial Hygienists, Toxicologists and Occupational and Environmental Medicine (OEM) physicians in the Medical Evaluation process?**
    If you have difficulty in interpreting environmental monitoring and site assessment data content in the ILER, use your IH colleagues. If you need assistance with interpretation of medically related toxicologic information in ILER, as found in the POEMS (Periodic Occupational & Environmental Medical Summaries), seek out OEM colleagues and/or toxicologists. First try getting assistance from your local resources. But if you get stuck, don't be frustrated, instead please reach out to Defense Centers for Public Health – Aberdeen, Portsmouth, or Dayton to get IH, OEM or toxicology assistance.

37. **For retired service members on TRICARE insurance, should they go to VA or MTF to have an exam? What's the best way for them to get screened?**
    If someone in the military health system has a concern about his/her health related to military exposures, they should talk to their provider. This applies to active duty and those in TRICARE. However, all veterans can be seen at the VA for a registry exam. Those who indicated yes on the registry questionnaire should receive a call from their local VA. Conversely, they can contact their local Environmental Health coordinator by going to this URL. Environmental Health Coordinators - Public Health (va.gov)