Health Care Provider Guidance for Evaluating Exposures Noted on the DD 2796 - General Information Regarding Exposures

Background. Why ask about exposures?
Following the last war in the Gulf, as returning service members reported various symptoms and health problems, both individual providers and epidemiologists attempted to find data on potential exposures to determine if there were any connections with reported health effects. From deployments occurring during 1999-2001, about 5% of all soldiers completing a DD 2796 wrote in free-text responses to the question “Do you have concerns about possible exposures or events during this deployment that may affect your health?” The highest concerns noted were anthrax immunization, air pollution, TB, dust and depleted uranium. Twenty percent of soldiers also noted concern about “chemicals.” Post deployment providers typically had little data to address these concerns.

What do we know about exposures? Data collection on ambient environmental exposures has greatly expanded since that time, and the current deployment process ideally includes a number of steps to ensure that service members are not unnecessarily exposed to hazards to their health in deployed settings. Traditionally, armed forces have prepared for infectious disease threats by knowledge of disease in the region, immunizations and chemoprophylaxis where appropriate, and attention to infection control and field sanitation and hygiene. Currently, occupational and environmental hazards (OEH) are assessed by an evolving plan that ideally includes intelligence assessment that identify likely sources of industrial pollution or past activities at the site, use of this information in site selection, base camp assessments for OEH hazards, and sampling of air, water and soil for potential chemical and radiological hazards. According to the CENTCOM post-deployment briefing, environmental assessment were conducted at all base camps in Kuwait, and environmental conditions did not pose a health hazard except for particulate levels (largely dust and sand) which posed a moderate hazard.

How are measurements evaluated? Interpretation of air, water and soil sampling results is done by comparing measured levels to military exposure guidelines (MEGs) created to categorize the risk specifically to military service members with consideration of the duration of exposure. When this is done, risks are identified, and recommendations to reduce or eliminate risks are made. For the most part, sampling has not found unacceptable risk to soldiers from air, water and soil when analyzed, and in those limited instances where potential risk has been identified, recommendations have been made to minimize risk and to address any needed medical action. Examples include an oil spill that produced a transient hazard and the ongoing problem of high sand and dust (particulate levels) in the Gulf. The first situation involved a medical exam for those exposed and documentation in the medical record although no long-term effects of any sort are anticipated. The second included general recommendations to use goggles and cravats to reduce exposure, and acknowledge that long-term health risk is considered low. Thus, assessment and identification of the potential for health risk, followed by implementation of recommendations to reduce that risk may have occurred without
knowledge of the soldier and without any entry into his medical record. Deployment OEH sampling results are archived at USACHPPM in the Deployment Environmental Surveillance Program. Most actual sampling results would not be meaningful to most providers, and many are general to a location and not an individual’s personal exposure. All sampling summaries and reports are provided back to the deployed command with prevention recommendations when needed.

Where can I see these summaries if I needed to? To date, no sampling has resulted in a health risk sufficient to warrant any specific follow-up action post deployment. However, environmental conditions varied and some locations, such as Shuiba Port, had poor air quality. If a service member complains about a specific location, you can check this site for unclassified summaries with any health implications as they become available.

So what do I need to do? Except for the generic blood draw required for all returning soldiers, there are no recommendations for routine evaluations following deployment. Therefore, it should not be necessary to perform any specific testing for soldiers even though they may identify on the DD 2796 that they were exposed to a potential hazard. If an individual complains of some unusually excessive exposure, or has significant symptoms that are plausibly related to an exposure, assessment of that exposure should occur by history. Testing may be conducted, such as pulmonary function testing, if the provider thinks that it will help evaluate symptoms and signs and could be exposure related. Consultative assistance in determining the value (sensitivity, specificity, time frame for testing) of any specific biomonitoring is available from CHPPM (DSN 584-2714) and we would like to be made aware of any exposures identified. The risk from exposure to depleted uranium appears to be very low. If questions arise about DU exposure, you may refer to the MEDCOM policy which addresses post deployment clinical actions, based on category of DU exposure. Providers evaluating positive responses to exposure will determine the category of exposure in accordance with the DU policy and evaluate patients IAW this policy. DD 2796 should be annotated with the exposure category. See the fact sheet on Individual Exposure Assessment if you need assistance in taking the exposure history.

Are all of these deployment exposures related to health risk? No, many are not. These repeatedly recur as areas of concern on the DD 2796. Some of the exposures such as DEET, permethrin, area fogging, JP-8, solvents, paints, fog oil, tent heater smoke, and vehicle exhaust gases do not pose a hazard under normal use or conditions. Each fact sheet explain these normal uses for the soldier’s information, and also provide some information useful to attempt to determine if exposure was unusual or excessive. Acute symptoms are described and a discussion of any potential follow-up evaluations is described. Some exposures such as pesticide strips and flea collars are not recommended at all, and so exposure should not have occurred. These sheets explain this. Oil well fire smoke was limited during this deployment and the lack of significant health effects from the first gulf war with hundreds of oil well ablaze should be reassuring. Exposure to burning trash out of doors should not pose health risk. Some exposures, such as to lasers, microwaves and radar would occur only in specific situations. Noise may be common in deployed settings, but protective earplugs should have been used. See individual sheets for further information.