

PATIENT EDUCATION | **INFORMATION SERIES**

Military Burn Pits

The term burn pit is used by the military to refer to areas where solid waste is burned outside in the open air. In the military, waste may include chemicals, weapons and ammunition, metal/aluminum cans, medical and human waste, plastics, rubber, and discarded food. The military uses these open-air burn pits when there is no equipment specifically designed for burning solid waste and when there are more than 100 attached or assigned personnel to a place for longer than 90 days.



Where were burn pits located and who may be exposed?

There are safety and logistical concerns associated with transporting waste from a military base to other disposal facilities like landfills or incinerators in overseas deployments. Because of this, open-air burn pits are used to dispose of waste during military conflicts in Iraq and Afghanistan, including the 1990-1991 Gulf War, and since 2001 where their use have received the greatest attention. According to a report from the Government Accountability Office, the number of open-air burn pits in use at any time is hard to determine, but in 2010, 273 active burn pits were reported at military bases in Iraq and Afghanistan.

Are there health effects associated with exposure to burn pits?

Service members and Veterans who may have been exposed when they were deployed sometimes have questions about the potential health effects of working or living near burn pits. The first step in determining the potential for health effects is to define the person's exposure. However, this is very difficult. It is hard to measure how much a person has been exposed to the burn pits and to what potentially

harmful chemicals. There is limited monitoring data from the burn pits. And there is uncertainty about the materials that were burned, how much was burned, and how often they were burned.

There are several factors that may affect a person's exposure these include:

- How much and how long a period of time was spent near the burn pit
- The type of waste material burned (e.g. plastics, electronics, medical waste)
- Seasonal weather patterns and wind direction

In 2011, the Institute of Medicine (now National Academy of Medicine) reviewed the available scientific literature on whether there are adverse long-term health effects of exposure to open burn pits. At that time, they found there is only limited evidence suggesting an association between burn pit exposure and reduced lung function. They compared people who were within two miles of the burns pits to those who were located further than two miles away.

Smoke from open-air burn pits is also a known source of particulate air pollution in the deployment environment. There are other possible sources of particulate matter in the air as well such as sand

and dust. The Department of Defense (DoD) and the Department of Veterans Affairs (VA) continue to study the potential for long term health effects from exposure to open air burn pits and other airborne hazards such as particulate matter. The National Institute of Medicine is currently reviewing the latest available scientific information since 2011. An updated report is expected to be released sometime in 2020.



How can I find out more if I am concerned about exposure to burn pits?

The Department of Veterans Affairs (VA) started the Airborne Hazards and Open Burn Pit Registry in response to Public Law 112-260. Veterans and service members can take part in the Registry (whether or not they are currently enrolled in VA health care) by completing a web-based self-assessment/h questionnaire (see link in additional resources).

Eligibility for enrollment include those who were:

- Deployed to Southwest Asia after August 1, 1990
- Deployed to Djibouti, Africa or Afghanistan after September 11, 2001

The questionnaire takes about 30 to 40 minutes to complete and can be done on a smartphone, tablet, laptop, or personal computer.

After filling out the registry questionnaire, Veterans with ongoing symptoms and concerns may contact their local VA facility to request an in-person medical evaluation. If the Veteran is enrolled in the VA, he

or she should schedule an appointment with the primary care provider, or the patient aligned care team (PACT). If a Veteran is not enrolled in the VA, the Veteran can request a registry evaluation by the local Environmental Health Clinician. For a listing of environmental health clinicians by VA facility, go to <http://www.publichealth.va.gov/exposures/coordinators.asp>. The VA provider will assess the Veteran's exposure history, symptoms and concerns. Further evaluations, including lung function testing and/or specialist visits, may be recommended and ordered by a healthcare provider as needed.

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Additional Resources:

ATS Workshop Report—Respiratory Health after Military Service in Southwest Asia and Afghanistan

- <https://www.atsjournals.org/doi/full/10.1513/AnnalsATS.201904-344WS>

Long-Term Health Consequences of Exposure to Burn Pits in Iraq and Afghanistan

- <http://nationalacademies.org/hmd/activities/veterans/burnpitslongtermhealth.aspx>

VA Airborne Hazards and Open Burn Pit Registry

- <https://veteran.mobilehealth.va.gov/AHBurnPitRegistry/#page/home>

VA Airborne Hazards and Burn Pits Center of Excellence

- <https://www.warrelatedillness.va.gov/WARRELATEDILLNESS/AHBPC/index.asp>

Free Accredited E-Learning for Providers on Airborne Hazards and other deployment related concerns

- <https://www.train.org>

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