

# MILITARY EXPOSURES & YOUR HEALTH

INFORMATION FOR VETERANS WHO SERVED DURING THE GULF WAR ERA (1990-PRESENT) AND THEIR FAMILIES

2019

ISSUE #1



## INTRODUCTION

Welcome to the first issue of the newsletter “Military Exposures and Your Health.” This newsletter will be released twice a year. It combines the previous “Gulf War Newsletter” and “Post-9/11 Vet Newsletter.” It is meant for Veterans who served during the period from 1990 to the present. Topics covered include military environmental exposures in the region, benefits information, updates about general health, and news about issues of concern to Veterans.

Look for this newsletter online at <https://www.publichealth.va.gov/exposures/publications/index.asp>. You can receive emails notifying you of when this newsletter is available and get other news about military exposures and Veterans health by subscribing to updates at <https://public.govdelivery.com/accounts/USVA/subscriber/new/>. After selecting “Submit” on the first page of subscription topics, select “Military Exposures” under “Veterans Health.”

For even more information on military exposures and your health visit: [www.publichealth.va.gov/exposures/index.asp](http://www.publichealth.va.gov/exposures/index.asp)



## IN THIS ISSUE

**The Individual Longitudinal Exposure Record** An individual, electronic record of exposures for service members and Veterans is under development. [Page 2](#)

**Gulf War Veterans and Presumptions** For Veterans who served since August 2, 1990, VA presumes service connection for certain health conditions and provides disability payments and health care benefits. [Page 2](#)

**Sleep Apnea in Gulf War Veterans** There are several types of sleep apnea, and some research has been conducted on Gulf War service and sleep apnea. [Page 3](#)

**New Resources on the Airborne Hazards and Open Burn Pit Registry** VA created new materials and updated information on the registry. [Page 4](#)

**Per- and Polyfluoroalkyl Substances and Your Health** Per- and polyfluoroalkyl substances (PFAS) are synthetic chemicals that have been used to fight fuel fires. [Page 5](#)

**Spotlight on the Work of an Environmental Health Coordinator and Clinician** Mr. William Kingsberry and Dr. Shoba Battu work together to make sure that Veterans receive environmental health registry exams. Find out about their roles and about environmental health registries. [Page 6](#)

**Research Update: WRIISC’s Airborne Hazards and Burn Pits Center of Excellence** The New Jersey WRIISC was designated as the site for the Airborne Hazards and Burn Pits Center of Excellence (AHBPCE) and continues its research program. [Page 7](#)

**Benefits Resources** Find links to helpful resources. [Page 7](#)

**VA’s Toxic Embedded Fragment Surveillance Center Program** VA offers programs for Veterans who are concerned about health effects from toxic embedded fragments or depleted uranium. [Page 8](#)

**National Academies to Review Long-Term Health Effects of Antimalarial Drugs** VA has contracted with the National Academies of Sciences, Engineering, and Medicine to conduct a study on the long-term health effects of antimalarial drugs. [Page 8](#)

**The Airborne Hazards and Open Burn Pit Registry Program** The Airborne Hazard and Open Burn Pit Registry program reached its five-year anniversary in June 2019. With this milestone, VA has achieved many important goals and continues to strive for improvement. [Page 9](#)

## THE INDIVIDUAL LONGITUDINAL EXPOSURE RECORD – CAPTURING EXPOSURES DURING MILITARY SERVICE

You will be hearing more about the Individual Longitudinal Exposure Record (ILER), and it will be an important part of your medical history. It is an individual, electronic record of exposures designed in collaboration between VA and the Department of Defense (DoD) for each service member and future Veteran. This record will begin with entry into military service and span across an entire military career.

ILER will contain:

- Time of deployments
- Locations and events during deployments
- All-hazard occupational data
- Environmental hazards that were known or found later
- Any monitoring performed in the area(s)
- Medical encounter information (e.g., diagnosis, treatment, and laboratory data)
- Medical concerns that should be addressed regarding possible exposures

ILER will be available to VA and DoD healthcare providers; epidemiologists and researchers; and VA disability evaluation and benefits determinations specialists. It will be used to improve internal processes and will not be available for individual access.

ILER will deliver capability and improvements in the following categories:

- **Health Care** - Improve the quality of information needed to facilitate quality, exposure-related health care.
- **Benefits** - Improve disability claim functions, increasing the accuracy and decreasing processing time of claims and benefits determinations. It will relieve the Veteran from “burden of proof” disability evaluations and benefits determinations.
- **Collaborations** - Increase transparency between VA, DoD, Congress, beneficiaries, and other stakeholders (such as Veterans Service Organizations).
- **Research** - Provide a foundation for prospectively following exposed cohorts for long-term or latent health effects that could be attributable to exposures.
- **Registries** - Integrate the environmental health registries, including the Agent Orange Registry, Gulf War Registry, Airborne Hazards and Open Burn Pit Registry, Ionizing Radiation Registry, Toxic Embedded Fragment Surveillance Center, and Depleted Uranium Follow-Up Program.

ILER will first be delivered as a pilot with initial operational capabilities in Fall 2019. After successful completion, ILER will be developed to achieve full operational capability.

The goal, as always, is improved care of Veterans.

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## GULF WAR VETERANS AND PRESUMPTIONS

For Veterans who served during the Gulf War from August 2, 1990, to the present and who have certain health conditions,

VA presumes service connection and provides disability payments and health care benefits.

### Unexplained illnesses

VA presumes that unexplained symptoms are related to Gulf War service if a Veteran has experienced the symptoms for six months or more; if the symptoms first appeared during active duty service in the Southwest Asia theater of military operations up until December 31, 2021; and if the symptoms are at least 10 percent disabling.

VA may compensate Veterans who have the following unexplained signs and symptoms:

- **Chronic Fatigue Syndrome**, which is long-term and severe fatigue not relieved by rest or directly caused by other conditions.
- **Fibromyalgia**, which includes widespread muscle pain with possible additional symptoms including insomnia, morning stiffness, headache, and memory problems.
- **Functional gastrointestinal disorders**, which includes irritable bowel syndrome, functional dyspepsia, and functional abdominal pain syndrome.
- **Undiagnosed Illnesses**, the symptoms of which may include, but are not limited to: abnormal weight loss, fatigue, cardiovascular disease, muscle and joint pain, headache, menstrual disorders, neurological and psychological problems, skin conditions, respiratory disorders, and sleep disturbances.

Learn more about [unexplained illnesses](#)<sup>1</sup>.

*continued on page 3*



## Infectious diseases

Nine infectious diseases qualify as presumptive conditions.

- Malaria
- Brucellosis
- Campylobacter Jejuni
- Coxiella Burnetii (Q Fever)
- Nontyphoid Salmonella
- Shigella
- West Nile Virus
- Visceral Leishmaniasis
- Mycobacterium Tuberculosis

These infectious diseases must be at least 10 percent disabling within one year from the date of military separation (or when the accepted incubation period began for malaria), except for visceral leishmaniasis and Mycobacterium tuberculosis. [Learn more](#)<sup>2</sup> about these infectious diseases.

## Filing a claim

Veterans who think they have one or more of the above conditions may file a claim and may receive a compensation and pension (C&P) exam. Those who

have had a Gulf War Registry exam can submit the findings in a claim, but it does not take the place of a C&P exam.

## Changes to disability claims

A [new rule](#)<sup>3</sup> in processing disability claims for many infectious diseases and for chronic fatigue syndrome takes into consideration whether the disease is active and at what level.

### ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/gulfwar/medically-unexplained-illness.asp>
2. [https://www.publichealth.va.gov/exposures/gulfwar/infectious\\_diseases.asp](https://www.publichealth.va.gov/exposures/gulfwar/infectious_diseases.asp)
3. <https://www.federalregister.gov/documents/2019/02/05/2019-00636/schedule-for-rating-disabilities-infectious-diseases-immune-disorders-and-nutritional-deficiencies>

## SLEEP APNEA IN GULF WAR VETERANS

Sleep Apnea is a serious health condition. It is an important predictor of heart disease. It can cause you to fall asleep while driving, can lead to changes in brain structure, and can affect your

ability to convert short-term memories into long-term memories.

According to the Mayo Clinic, there are several types of sleep apnea, but the most common is obstructive sleep apnea. This type of sleep apnea occurs when your throat muscles intermittently relax and block your airway during sleep. A noticeable sign of obstructive sleep apnea is snoring. Risk factors for obstructive sleep apnea include excess weight, narrowed airways, hypertension, smoking, genetic factors, chronic nasal obstruction, neck size, and diabetes. Thinner individuals can also develop obstructive sleep apnea.

Some Veterans speculate that Gulf War service may be linked to obstructive sleep apnea; however, researchers have not yet proven this, as the data are limited, and research studies have not controlled for the risk factors listed above. Some data or research findings include:

- VA [published a report in 2015](#)<sup>1</sup> that showed that among VA users, the prevalence of sleep apnea was highest among Gulf War Veterans when compared to other Veteran groups.
- [Another VA study](#)<sup>2</sup> suggested a relationship between insomnia severity, subjective sleep quality, and risk for obstructive sleep apnea in Veterans with Gulf War illness; however, the investigators did not study if obstructive sleep apnea was more common overall in Gulf War Veterans.
- Among Veterans with Gulf War illness, researchers found a possible association with sleep apnea and Gulf War illness based on measures of arousals and inspiratory flow dynamics ([see the study](#)<sup>3</sup>).

*continued on page 4*

- In a [small pilot study](#)<sup>4</sup> of Veterans with Gulf War illness, nasal CPAP was found to greatly improve symptoms in Veterans with Gulf War illness and sleep-disordered breathing.



These studies suggest that there could be a relationship between sleep apnea, Gulf War service, and potentially, Gulf War illness, but more studies are needed to control for other confounding variables or causes.

Currently, sleep apnea is not a presumptive condition, so Veterans must file a claim on an individual basis if they are seeking disability compensation and/or increased health care eligibility.

VA encourages Veterans who are concerned about possible sleep apnea to discuss it with their primary care provider. [Learn more about sleep apnea and treatment](#)<sup>5</sup>.

#### ARTICLE LINKS:

1. <https://www.publichealth.va.gov/docs/epidemiology/PDSR-Vol1-No1.pdf>
2. <https://www.ncbi.nlm.nih.gov/pubmed/27612364>
3. <https://www.ncbi.nlm.nih.gov/pubmed/20703820>
4. <https://www.ncbi.nlm.nih.gov/pubmed/9110548>
5. <https://www.myhealth.va.gov/mhv-portal-web/ss20181127-control-sleep-apnea>

## NEW RESOURCES ON THE AIRBORNE HAZARDS AND OPEN BURN PIT REGISTRY

The Airborne Hazards and Open Burn Pit Registry allows eligible Veterans and service members to document their exposures and report health concerns through an online questionnaire and to schedule a free VA health exam after completing the questionnaire. The registry is open to Veterans who served in Operations Desert Shield or Desert Storm; Operations Enduring Freedom, Iraqi Freedom or New Dawn; Djibouti; Africa on or after September 11, 2001, or the Southwest Asia theater of operations on or after August 2, 1990; and active-duty service members.

VA's new informational materials, including a video and fact sheets, can help you learn more about the registry, including its purpose and how to join. Find these resources below:

- VA released a [video](#)<sup>1</sup> that highlights the benefits of the registry, including how the registry helps with research efforts and how participants can contact VA to schedule a medical exam and learn about their exposures and health. This is VA's second video on the registry. The [first video](#)<sup>2</sup> presents an overview of the registry.

- VA's fact sheet [Steps for Completing the Airborne Hazards and Open Burn Pit Registry](#)<sup>3</sup> makes it easy to participate in the registry by outlining how to complete it from start to finish. It explains where to find the registry web site, how to log in, and how to obtain and get the most out of an in-person health exam.
- The updated [Airborne Hazards and Open Burn Pit Registry fact sheet](#)<sup>4</sup> provides an overview of the registry, including how to participate and what to expect in the questionnaire. You can also view it [in Spanish](#)<sup>5</sup>.
- The [Airborne Hazards Concerns: Information for Veterans fact sheet](#)<sup>6</sup> discusses airborne hazards exposures and health, the registry, and services at the War Related Illness and Injury Study Center. This fact sheet has been updated to include current research on health effects. A [version for health care providers](#)<sup>7</sup> has also been updated with the latest research.
- Find out the number of Veterans and service members who have participated in the burn pit registry since its beginning, by state and U.S. territory. This fact sheet is released

*continued on page 5*



every three months and can be found in the middle of the [registry web page](#)<sup>8</sup>.

- A [partial list of registry data](#)<sup>9</sup> collected from June 2014 through December 2018 provides a sense of the type of questions on the questionnaire, as well as how the data is reported when shared with researchers and VA staff. Read more about it in the Vantage Point blog post [Veterans in Burn Pit Registry helping fellow Vets](#)<sup>10</sup>.

#### ARTICLE LINKS:

1. <https://www.youtube.com/watch?v=Yrl63ipqZ5M>
2. <https://www.youtube.com/watch?v=37i6MDt6PII&feature=youtu.be>
3. <https://www.publichealth.va.gov/docs/exposures/Registry-Steps.pdf>
4. <https://www.publichealth.va.gov/docs/exposures/burn-pit-registry-fact-sheet.pdf>
5. <https://www.publichealth.va.gov/images/registry-fact-sheet-espanol.pdf>
6. <https://www.warrelatedillness.va.gov/education/factsheets/airborne-hazards-concerns-info-for-veterans.pdf>
7. <https://www.warrelatedillness.va.gov/education/factsheets/airborne-hazards-concerns-info-for-providers.pdf>
8. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>
9. <https://www.publichealth.va.gov/docs/exposures/va-ahobp-registry-data-report-may2019.pdf>
10. <https://www.blogs.va.gov/Vantage/60828/veterans-burn-pit-registry-helping-fellow-vets/>

## PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) AND YOUR HEALTH

Per- and polyfluoroalkyl substances (PFAS) are synthetic chemicals that are persistent (i.e., they do not break down) in the environment. Most people have been exposed at low levels, and according to the Environmental Protection Agency (EPA), PFAS can be detected in the blood of most people. PFAS has been used in the manufacturing of many products internationally, including in non-stick cookware, stain-resistant sofas and carpets, and waterproof clothes and mattresses. People can be exposed to PFAS by drinking water and eating foods contaminated with PFAS (e.g., fish). Until 2016, PFAS was also in some food packaging, such as popcorn bags, fast food containers, and pizza boxes.

In the 1970s, the Department of Defense (DoD) began using PFAS to fight fuel fires. The release of these chemicals into the environment during training and emergency responses is a major source of the PFAS contamination of ground water on several military bases in the United States.

DoD has conducted testing to ensure the safety of drinking water on bases. For bases with PFAS levels above the limit advised by the EPA, bottled water has been given as an alternative.

Exposure to PFAS may result in elevated cholesterol, uric acid, and liver

enzymes and changes in immune response. Some health conditions that could possibly be associated with PFAS exposure include thyroid function disorders, ulcerative colitis, testicular cancer, kidney cancer, and pregnancy-induced hypertension.

If you are concerned about PFAS and your health, you should make an appointment with your health care provider. Blood tests for the detection of PFAS are not recommended because most people have measurable amounts of PFAS in their blood, and detection cannot determine a source of exposure, inform treatment decisions, or predict future health outcomes.

You can learn more about PFAS on the [VA](#)<sup>1</sup> and Agency for Toxic Substances and Disease Registry web pages and find information about [ongoing research](#)<sup>2</sup>.

#### ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/pfas.asp>
2. [https://www.atsdr.cdc.gov/pfas/related\\_activities.html](https://www.atsdr.cdc.gov/pfas/related_activities.html)



## SPOTLIGHT ON THE WORK OF AN ENVIRONMENTAL HEALTH COORDINATOR AND CLINICIAN

At the Charlie Norwood VA Medical Center (VAMC) in Augusta, GA, Mr. William Kingsberry and Dr. Shoba Battu work together to make sure that Veterans receive environmental health registry exams, including the Gulf War Registry exam and the Airborne Hazards and Open Burn Pit Registry (AHOBPR) exam.

The Gulf War Registry is for Veterans who served in the Gulf during Operation Desert Shield, Operation Desert Storm, Operation Iraqi Freedom, or Operation New Dawn, and involves just an exam. The AHOBPR is for Veterans and active-duty service members who served in one of the same conflicts above, or Operation Enduring Freedom or Djibouti, Africa. The AHOBPR involves an online questionnaire and optional follow up exam. Veterans may be eligible for both of these registries or for others within VA's [environmental health registry program](#)<sup>1</sup>, depending on their military service.

Mr. Kingsberry has been an Environmental Health Coordinator for 16 years and has worked at VA for 30 years. He is also a Veteran, having served in the U.S. Army from June 1977 to August 1984 (medically retired). Dr. Shoba Battu is an Environmental Health Clinician and has worked at VA for 34 years. Her first five years were as an employee health/registries physician, and then she worked as a primary care provider. Dr. Battu retired in 2015 and came back in January 2016 to work on AHOBPR exams and primary care, part-time.

VA's Post Deployment Health Services asked Mr. Kingsberry and Dr. Battu questions about their roles as Environmental Health Coordinator and

Clinician, focusing on their work with the Gulf War Registry and AHOBPR.

**What is the process for a Veteran to set up a Gulf War Registry exam or an AHOBPR exam at your VA Medical Center?**

**Kingsberry:** For either exam, the Veteran calls or comes to the Agent Orange & Persian Gulf office to schedule an appointment. Also, other hospital staff members at the Charlie Norwood VA Medical Center notify my office when a Veteran is requesting information or an appointment for the exam.

**How often do you conduct Gulf War Registry and AHOBPR exams?**

**Kingsberry:** We schedule Gulf War Registry exams on Mondays, Tuesdays, and Fridays, and see four Veterans each morning. AHOBPR exams are scheduled two Mondays a month, with 11 Veterans seen on each of those days.

**About how long are the exams?**

**Battu:** Gulf War Registry exams could take 30 to 45 minutes, and AHOBPR exams could take 30 minutes.

**What can a Veteran expect to happen during a Gulf War Registry exam or AHOBPR exam?**

**Battu:** For both exams, we explain the purpose of the registry exam and answer any questions the Veteran may have about the exam. We also conduct a brief physical exam. For the Gulf War Registry exam, tests may be ordered based on medical history and other issues the Veteran may have, and the tests could include lab work and x-rays. For the AHOBPR exam, tests may be ordered based on medical history, and we conduct the usual tests, such as a chest x-ray and Pulmonary Function Test.

**What are some common questions or points of confusion that you hear from Veterans as a coordinator? What do you think Veterans should know about the Gulf War and AHOBPR exams?**

**Kingsberry:** Veterans ask, "Is this a C&P exam? Can I file a disability claim just with the notes of the registry exam?" They may confuse the Gulf War Registry and the AHOBPR if they are not given the right information, and they may think the registries are for a compensation and pension (C&P) exam, which is totally different.

I explain the difference between the registries and between the registry and C&P exams. A registry exam might be helpful for a disability claim, but it does not take the place of a C&P exam, and Veterans must have a C&P exam as a part of the claims process.

**What do you like most about helping Veterans set up an exam?**

**Kingsberry:** I like explaining the exam to them, so they understand the process. I also like leading them on the right track for better health services and for filing a claim if they have any disabilities.

**What do you like most about conducting registry exams?**

**Battu:** I like that it can help all Veterans identify specific diseases related to Gulf War service and burn pit fume exposures.

Environmental Health Coordinators like Mr. Kingsberry are available across the country to help you schedule an exam and to help you answer questions about registries. Clinicians like Dr. Battu will perform your environmental health registry exam. [Find a coordinator near you](#)<sup>2</sup> to schedule an exam.

*continued on page 7*

**ARTICLE LINKS:**

1. <https://www.publichealth.va.gov/exposures/benefits/registry-evaluation.asp>
2. <https://www.publichealth.va.gov/exposures/coordinators.asp>

## RESEARCH UPDATE: WRIISC'S AIRBORNE HAZARDS AND BURN PITS CENTER OF EXCELLENCE (AHBPCE)

Over 10 years ago, the New Jersey War Related Illness and Injury Study Center (WRIISC) first published a research paper reporting deployment-related health and exposure concerns among Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) Veterans referred for clinical evaluation (see [the study](#)<sup>1</sup>). Since that time, the New Jersey WRIISC has published over 20 peer-reviewed manuscripts, presented more than 20 conference abstracts, and delivered more than a dozen invited lectures regarding airborne hazards. The New Jersey WRIISC has received multiple VA and Department of Defense (DoD) research awards and recently was designated as the site for the Airborne Hazards and Burn Pits Center of Excellence (AHBPCE).

The AHBPCE research program continues to draw from its expert clinical experience in airborne hazards to develop testable research questions in collaboration with academic (Rutgers, University of Wisconsin-Madison, University of Michigan, and Ohio State University) and federal (Walter Reed National Military Medical Center and Joint Pathology Center) collaborators. Listed below are two examples of current AHBPCE research:

**Blast Study:** Among registrants of the [Airborne Hazards and Open Burn](#)

[Pit Registry](#)<sup>2</sup>, AHBPCE researchers saw a relationship between blast exposure during deployment and cardiopulmonary symptoms (see [the study](#)<sup>3</sup>). To understand this relationship, the research team collaborated with investigators from the Walter Reed Army Medical Center to prepare a research project that was recently awarded to investigate both the mechanisms (animal) and clinical sequelae (human) of exposure to blast overpressure waves.

**Pulmonary Vascular Project:**

Researchers noticed a consistent pulmonary function pattern among Veterans referred to the AHBPCE (see [the study](#)<sup>4</sup>) that might be suggestive of pulmonary vascular dysfunction. In a VA-supported project, AHBPCE researchers are now exploring this problem in greater depth to better understand how the pulmonary vascular system functions during exercise stress, with an emphasis on observing the right side of the heart. This study will also evaluate new ways to assess pulmonary gas-exchange and understand the peripheral vascular system (veins and arteries in the limbs).

Stay tuned for more research updates from the AHBPCE and WRIISC team. [Read more about AHBPCE](#)<sup>5</sup>.

**ARTICLE LINKS:**

1. <https://www.ncbi.nlm.nih.gov/pubmed/17495689>
2. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>
3. <https://www.ncbi.nlm.nih.gov/pubmed/28975227>
4. <https://www.ncbi.nlm.nih.gov/pubmed/27614096>
5. <https://www.warrelatedillness.va.gov/WARRELATEDILLNESS/AHBPCE/index.asp>

## BENEFITS RESOURCES

[Benefits Overview](#)

<https://www.publichealth.va.gov/exposures/gulfwar/benefits/index.asp>

[Health Care Overview](#)

<https://www.publichealth.va.gov/exposures/gulfwar/benefits/health-care.asp>

[VA Disability Compensation](#)

<https://www.va.gov/disability>

[Gulf War Registry Exam](#)

<https://www.publichealth.va.gov/exposures/gulfwar/benefits/registry-exam.asp>

[Burn Pit Registry](#)

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

[Illnesses Presumed Related to Service](#)

<https://www.publichealth.va.gov/exposures/gulfwar/medically-unexplained-illness.asp>

[Infectious Diseases Presumed Related to Service](#)

<https://www.publichealth.va.gov/exposures/gulfwar/infectious-diseases.asp>

[Survivor Benefits](#)

<https://www.publichealth.va.gov/exposures/gulfwar/benefits/survivors.asp>

[eBenefits](#)

<https://www.ebenefits.va.gov/ebenefits/homepage>

[Veterans Crisis Line](#)

<https://www.veteranscrisisline.net/>

## VA'S TOXIC EMBEDDED FRAGMENT SURVEILLANCE CENTER PROGRAM

Veterans who served during Operations Enduring Freedom (OEF), Iraqi Freedom (OIF), or New Dawn (OND), and who were exposed to a blast, may be concerned about health effects if toxic embedded fragments (also called shrapnel) entered their body. Possible health problems include injury at the site of the fragment and health effects from chemicals traveling from the fragment through the bloodstream.

To address health concerns, VA offers medical surveillance at the Toxic Embedded Fragment Surveillance Center Program at the Baltimore VA Medical Center. For more information, visit the [Toxic Embedded Fragment Surveillance Center Program web site](#)<sup>1</sup> or contact your local [Environmental Health Coordinator](#)<sup>2</sup>.

In addition, sometimes fragments contain depleted uranium. Veterans can be screened for depleted uranium exposures and may be eligible for VA's [Depleted Uranium Follow-up Program](#)<sup>3</sup>. This program at the Baltimore VA Medical Center is designed to screen and monitor Veterans for health problems associated with exposure to depleted uranium. To be eligible, Veterans must have served in active duty during the Gulf War, Bosnia conflict, OEF, OIF, or OND.

### ARTICLE LINKS:

1. [https://www.publichealth.va.gov/exposures/toxic\\_fragments/surv\\_center.asp](https://www.publichealth.va.gov/exposures/toxic_fragments/surv_center.asp)
2. <https://www.publichealth.va.gov/exposures/coordinators.asp>
3. [https://www.publichealth.va.gov/exposures/depleted\\_uranium/followup\\_program.asp](https://www.publichealth.va.gov/exposures/depleted_uranium/followup_program.asp)

## NATIONAL ACADEMIES TO REVIEW LONG-TERM HEALTH EFFECTS OF ANTIMALARIAL DRUGS

[Mefloquine](#)<sup>1</sup> is a drug used for the prevention and treatment of malaria, and it is a recommended drug by the [Centers for Disease Control and Prevention \(CDC\)](#)<sup>2</sup>. Veterans and Veteran advocates have had concerns about some antimalarial drugs, and the brand of the antimalarial drug mefloquine called Lariam® in particular. The brand Lariam® is no longer sold in the United States, although other brands of mefloquine are available. To address concerns, VA has contracted with the National Academies of Sciences, Engineering, and Medicine to conduct a [study on the long-term health effects](#)<sup>3</sup> of antimalarial drugs.

Mefloquine is particularly helpful for those who are not able to take other medications to prevent malaria. It was approved by the Food and Drug Administration (FDA) in May 1989. In 2013, the FDA published a safety alert on mefloquine and added a black box warning (its strongest warning) to the drug label. The FDA notice said neurologic side effects can include dizziness, loss of balance (vestibular problems), or ringing in the ears (tinnitus). The safety alert

also discussed psychiatric side effects which can include feeling anxious and mistrustful (paranoia).

In addition to these short-term effects, advocates are also raising concerns about long-term effects, including posttraumatic stress disorder and possible suicidal ideation.

VA cares about these concerns and felt it was important to have an independent, nationally respected committee of experts study this issue. The study will be completed in 2020, and the findings will be published in a free, online report.

### ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/mefloquine-lariam.asp>
2. <https://www.cdc.gov/malaria/resources/pdf/fsp/drugs/mefloquine.pdf>
3. <https://www8.nationalacademies.org/pa/projectview.aspx?key=51379>





## THE AIRBORNE HAZARDS AND OPEN BURN PIT REGISTRY PROGRAM – MILESTONES AND FUTURE PLANS

The Airborne Hazard and Open Burn Pit Registry program reached its five-year anniversary in June 2019. With this milestone, VA has achieved many important goals and continues to strive for improvement.

### Registry Achievements

- The online registry is growing, with about 500 new participants each week. Last year (2018) had the second largest growth in participants by year, with 39,308 new participants. This was slightly less than the growth in 2016, with 40,298 new participants.
- VA has made improvements in increasing the number of registry participants who complete medical exams. As of March 2019, 6,125 out of 63,186 (or 9.7%) of non-active duty participants who expressed an interest in the exam have received an exam.
- Six medical centers have been able to complete registry medical exams for more than 60% of the local registry participants who expressed an interest in the exam. This includes medical centers in White River Junction, VT; Berkley, WV; Clarksburg, WV; Augusta, GA; San Juan, PR; and El Paso, TX. There are many other sites that have also conducted registry exams for a high percentage of their local participants. This goal is harder to achieve for facilities with large Veteran populations. We will continue to work to improve the overall percentage.
- On March 14-15, 2019, VA and the Department of Defense held its fifth Airborne Hazards Symposium to

discuss research, clinical care, and outreach efforts for the registry. This invitation-only event included presentations and breakout sessions to discuss specific topics. Representatives from Veterans Service Organizations/Military Service Organizations attended and provided suggestions on improving education and outreach for the registry.

- In 2017, the National Academy of Medicine (formerly known as the Institute of Medicine) reviewed the registry and made several recommendations. Based on these recommendations, VA developed a concise version of the participant's questionnaire responses focused on information that would be most useful in a routine clinical encounter, which is available for clinicians to download. VA is also evaluating whether and how registrants who did not complete the questionnaire differ from those who did, analyzing why some registrants did not complete the questionnaire, and using this information to formulate strategies to encourage registrants to finish and submit their responses.

### Future Plans for Improvement

- VA has received funding for a large effort to increase participation in the registry through communications. Planning is in the early stages, but VA intends to conduct focus groups to explore the barriers, motivators, and perceptions of the registry and to create a variety of promotional materials.
- VA is working to address two issues with the registry:
  - ◊ First, participant contact information is not automatically updated. If you are a participant and have a new home address, email, or telephone number, please log back into the

registry to update your contact information so we can reach you for updates.

- ◊ The second issue is once a participant signs the form, additional deployments cannot be added. For example, if a service member completed the registry in 2015 and deployed again in 2019, the 2019 deployment cannot be added. In the future, VA aims to be able to allow additional deployments to be added.
- In the fall of 2020, VA expects the National Academy of Medicine to release a report that will comprehensively review, evaluate, and summarize the available scientific and medical literature regarding the respiratory health effects of exposure to airborne hazards encountered during in-theater service. This will be an update from their 2011 report on burn pits. A committee of civilian experts is working on this report.

### Findings on Mortality from the Registry Data

*The AHOBPR is a dynamic system that updates a participant's status as they separate, retire, or pass away. As of March 14, 2019, 462 participants who completed the questionnaire have died. VA conducted a preliminary analysis which showed that most died of tragic but highly explainable causes such as a motor vehicle accident. A full analysis will be posted in the future.*



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