

MILITARY EXPOSURES & YOUR HEALTH

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

2020

ISSUE #2



INTRODUCTION

Welcome to “Military Exposures & Your Health,” a biannual newsletter for Veterans who served from 1990 to the present. This issue highlights Sergeant Major Brian Davis, a Veteran with an impressive military career and experience with environmental health registries. This issue also presents Dr. Anisa Moore, an Environmental Health Clinician who has personally conducted almost 300 Airborne Hazards and Open Burn Pit Registry health exams through February 2020. In addition, you will find information about garrison exposures and health effects, an update on work on developing a single case definition for Gulf War illness, news on research findings, and more. You can find issues of “Military Exposures & Your Health” at <https://www.publichealth.va.gov/exposures/meyh/publications/index.asp>.

At the time of publication of this newsletter, the Coronavirus (COVID-19) has been affecting the nation. VA is committed to the health and safety of Veterans. During this pandemic, environmental health registry evaluations are deferred or offered via telehealth, depending on the location. Read the latest information on the Coronavirus (COVID-19) at: <https://www.va.gov/coronavirus/>

IN THIS ISSUE

What is a registry? VA offers a registry for you

Learn about registries, including VA’s six environmental health registries. [Page 2](#)

Sergeant Major Brian Davis – Seventeen deployments and eligibility for three registries Sergeant Major Brian Davis has had an impressive military career in the Army. He has joined environmental health registries related to his service. [Page 3](#)

VA and DOD - Working to encourage registry awareness and enrollment VA and DoD are planning focus groups, meetings, and more to increase awareness and encourage enrollment in the Airborne Hazards and Open Burn Pit Registry. [Page 4](#)

Gulf War Presumptions - VA presumes service connection and provides disability payments and health care benefits for certain medically unexplained illnesses and infectious diseases. [Page 4](#)

Epidemiology program research highlight: Risk of mortality among Veterans with service in Bosnia/Kosovo Researchers studied the cause-specific mortality risks among Veterans who deployed to Bosnia/Kosovo as part of peacekeeping forces. [Page 5](#)

WRIISC research highlight: Study sheds light on what Gulf War Veterans want to hear from their provider Researchers studied communication from health care providers to Veterans with Gulf War illness. [Page 5](#)

Airborne Hazards And Open Burn Pit Registry: Summaries of data available on the web Every six months, VA publishes

an updated summary of self-reported health information from the Airborne Hazards and Open Burn Pit Registry. [Page 6](#)

VA conducts research to develop a single case definition for Gulf War Illness VA is conducting studies and analyzing data in an effort to develop a single case definition for Gulf War illness. [Page 6](#)

Golden VA clinic in Colorado excels in completing Airborne Hazards and Open Burn Pit Registry medical exams VA’s Post Deployment Health Services interviewed Anisa Moore, MD, about Airborne Hazards and Open Burn Pit Registry health exams and her experience conducting them. [Page 7](#)

The French Veterans’ Health Observatory - Addressing military exposure concerns in France The French Veterans’ Health Observatory focuses on the health risks associated with environmental exposures among the French military community. [Page 8](#)

DOD identifies Veterans potentially exposed to chemical warfare agents Some Veterans were exposed to chemical warfare agents while handling or demolishing explosive ordnance during Operation Iraqi Freedom or Operation New Dawn. [Page 8](#)

VA researchers find Gulf War-Era Veterans’ health is worse among females compared to males Researchers compared health problems among male and female Gulf War-era Veterans. [Page 9](#)

Garrison exposures and health concerns Veterans may have concerns about health effects from garrison exposures, which are environmental exposures that may have been experienced while stationed on a military base. [Page 10](#)

WHAT IS A REGISTRY? VA OFFERS A REGISTRY FOR YOU

A registry is defined as a system for collecting and maintaining, in a structured record, data on specific persons from a defined population, which allows for preliminary research analyses and reviews. Two broad categories of health registries are disease-based registries and exposure-based registries. A disease-based registry organizes data based on the cases of a specific disease or condition, while an exposure registry organizes data based on people who have had a common exposure. For example, a disease-based registry would focus on cases of multiple sclerosis or cancer, while the registry for the World Trade Center 9/11 workers is an exposure registry.

VA's Post Deployment Health Services oversees six exposure registries, also called environmental health registries. Veterans who have served since 1990 may be eligible for the four following registries:

- [The Airborne Hazards and Open Burn Pit Registry](#)¹
- [The Gulf War Registry](#)²
- [The Depleted Uranium Follow-Up Program](#)³
- [The Toxic Embedded Fragment Surveillance Center](#)⁴

Veterans who served before 1990 may be eligible for one of the other two registries offered by Post Deployment Health Services:

- [The Agent Orange Registry](#)⁵
- [The Ionizing Radiation Registry](#)⁶

The Depleted Uranium Follow-Up Program, Toxic Embedded Fragment Surveillance Center, Ionizing Radiation Registry, and Agent Orange Registry are for specific exposures, while the Gulf War Registry and Airborne Hazards and Open Burn Pit Registry address a broad spectrum of exposures. For example,

The Airborne Hazards and Open Burn Pit Registry

For each person who completes the registry, the actual exposure experience will be different. This depends on which military base they lived, which year, local air pollution levels, activity, and prevailing weather conditions. The disease outcomes in the registry also vary. Currently, there are 55 broad disease categories in which participants have self-reported. One of these broad categories is cancer, of which 29 different types have been reported. [Learn more](#)⁹ about findings about reported exposures and health conditions from the registry.

airborne hazards-related illnesses can be caused by ambient air pollution, smoke, dust from the desert environment, or emissions from substances incinerated in burn pits.

Registries have several advantages. Participants who join and give their contact information provide a way for VA to reach them with updates. Registries can also be tools for surveillance. Individuals within the registry can be tracked and monitored for health trends within the group. Registries can also generate ideas (hypotheses) for research on associations between exposures and disease.

Self-reported registries, however, have limitations. They are subject to recall bias (misremembering), as the deployment events may have happened over a decade ago. Self-reported registries also tend to be self-selecting, meaning some types of people may be more motivated to participate than others. For example, those with significant health issues may be more likely to participate compared those who consider themselves healthy, and so the registry data may not represent the actual health of the population. Also, registry information can be used in research studies but are not usually studies in themselves. Finally, participation in a registry does not suffice for a compensation and pension examination. One does not need to enter a registry to put in a compensation claim.

Veterans who are interested in joining a registry should [contact an Environmental Health Coordinator](#)⁷ near them. Find more information about [registries](#)⁸ from VA's Post Deployment Health Services.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>
2. <https://www.publichealth.va.gov/exposures/gulfwar/benefits/registry-exam.asp>
3. https://www.publichealth.va.gov/exposures/depleted_uranium/followup_program.asp
4. https://www.publichealth.va.gov/exposures/toxic_fragments/index.asp
5. <https://www.publichealth.va.gov/exposures/agentorange/benefits/registry-exam.asp>
6. <https://www.publichealth.va.gov/exposures/radiation/benefits/registry-exam.asp>
7. <https://www.publichealth.va.gov/exposures/coordinators.asp>
8. <https://www.publichealth.va.gov/exposures/benefits/registry-evaluation.asp>
9. <https://www.publichealth.va.gov/docs/exposures/va-ahobp-registry-data-report-dec2019.pdf>

SERGEANT MAJOR BRIAN DAVIS – SEVENTEEN DEPLOYMENTS AND ELIGIBILITY FOR THREE REGISTRIES

Sergeant Major Brian Davis has had an impressive military career, having served in the Army since graduating high school in 1989. He completed 16 deployments in 28 years, beginning his service as a sniper in Panama with the Army Rangers and ending when he lost his vision during his 17th deployment to Afghanistan on Thanksgiving Day, 2017.

To help address his health concerns, Davis joined the [Gulf War Registry](#)¹ and the [Depleted Uranium Follow-Up Program](#)². Both Environmental Health Registry programs are related to his service and can provide information on how his health conditions are related to exposures.

Davis was wounded by shrapnel containing [depleted uranium](#)³ while serving in the 1990-1991 Gulf War. He was riding atop an armored personnel carrier because there wasn't enough room for him inside the vehicle. Two duffle bags were propped on either side of him to keep him from falling off the vehicle. During the journey, an M1 Abrams battle tank next to his vehicle ran over a mine.

One hundred and twenty-one pieces of shrapnel from the tank armor blasted into Davis's body. "The depleted uranium was from the side of metal, the armor on the M1 Abrams tank," he said. All the shrapnel was removed except for three pieces, which were too close to Davis's liver and spine for safe removal and are regularly monitored by VA.

"The duffle bags saved me," said Davis.

Davis signed up to participate in the Depleted Uranium Follow-Up Program after he left the military. He filled out the

preliminary paperwork with help from his wife. "It was easy to do everything. I had a phone call to let me know what was going on."

The Depleted Uranium Follow-Up program screens and monitors Veterans for health problems associated with exposure to depleted uranium. Through the program, Davis learned about options for more in-depth testing, a chance to be a part of research studies, and treatment options.

He also signed up for the Gulf War Registry in 1993 and saw a primary care doctor as a part of the process. The Gulf War registry includes an exposure and medical history and a physical exam. It is for Veterans who served in the Gulf during Operations Desert Shield, Desert Storm, Iraqi Freedom, or New Dawn.

Davis also plans to join the [Airborne Hazards and Open Burn Pit Registry](#)⁴. As a part of his service near Baghdad, he was involved in burning trash, including human waste and uniforms dipped in DEET to keep off sand flies. "You had to stir it to keep it burning. The smell came up. You put on a bandana, but still, the wind blew, and your face would get black smut."

Veterans with service in the Southwest Asia theater of operations at any time on or after August 2, 1990, or Afghanistan or Djibouti on or after September 11, 2001, can participate in the Airborne Hazards and Open Burn Pit Registry. This registry includes an online questionnaire and an in-person health exam.

Davis also served in Somalia in 1993 as an Army ranger, where he was shot in the shoulder, and in Bosnia and Rwanda.

On his last deployment, Davis was on a convoy on top of a mountain, leading his men in a daylight raid. His vehicle was on top of an IED pressure plate, and the IED exploded 12 feet from his vehicle's window. The pressure blinded him, and Davis was no longer able to stay in the military.

"Now I just see the world through different senses," said Davis. "I get great treatment from VA. I've had a great career, and I loved it."

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/gulfwar/benefits/registry-exam.asp>
2. https://www.publichealth.va.gov/exposures/depleted_uranium/followup_program.asp
3. https://www.publichealth.va.gov/exposures/depleted_uranium/index.asp
4. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>



Sergeant Major Brian Davis

VA AND DOD - WORKING TO ENCOURAGE REGISTRY AWARENESS AND ENROLLMENT

VA and the Department of Defense (DoD) have been working to increase awareness of and encourage enrollment in the [Airborne Hazards and Open Burn Pit Registry](#)¹ (AHOBPR).

- VA is planning multiple focus groups across the U.S. to better understand Veterans' and service members' familiarity with the AHOBPR and barriers or facilitators to participation. The focus group sessions will also aim to generate ideas on messaging and distribution channels to promote the registry. The focus groups will be invitation-only to ensure all potential audiences are represented and will include Veterans and active duty or Reservist service members representing all military branches.
- DoD sent an electronic notification encouraging active duty service members to participate in the AHOBPR in its August 2019 "Leave and Earnings Statement" notification. This effort resulted in a spike in the number of registry participants in late August.

- VA and DoD staff met with Veterans Service Organization (VSO) representatives, including representatives from the Iraq and Afghanistan Veterans of America, Disabled American Veterans, the Wounded Warrior Project, and Veterans of Foreign Wars, in October 2019. Together, they discussed the AHOBPR, including a registry overview and progress report, benefits, and communications efforts from VA and DoD.
- VA and DoD hold the Airborne Hazards Symposium, an annual meeting to discuss clinical care, surveillance, education and outreach, and research on airborne hazards and the AHOBPR. The symposium includes subject matter experts from VA and DoD and representatives from VSOs to provide insight on the needs of Veterans. The symposium is not open to the public because experts discuss internal processes and in-progress research among VA and DoD to improve care, communication, and research for Veterans and service members.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>

GULF WAR PRESUMPTIONS

For Veterans who served in Southwest Asia from August 2, 1990 to the present, VA presumes service connection and provides disability payments and health care benefits for certain medically unexplained illnesses and infectious diseases.

The following medically unexplained illnesses potentially qualify as presumptive conditions:

- Chronic Fatigue Syndrome
- Fibromyalgia
- Functional gastrointestinal disorders
- Undiagnosed illnesses, including abnormal weight loss, headache, and fatigue

Nine [infectious diseases](#)¹ potentially qualify as presumptive conditions (many must occur within a year of deployment):

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

VA provides additional information about [Gulf War Veterans' illnesses](#)² and about [qualifying for benefits](#)³.

ARTICLE LINKS:

1. https://www.publichealth.va.gov/exposures/gulfwar/infectious_diseases.asp

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

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



A parked helicopter as a sandstorm passes by

EPIDEMIOLOGY PROGRAM RESEARCH HIGHLIGHT: RISK OF MORTALITY AMONG VETERANS WITH SERVICE IN BOSNIA/KOSOVO

Researchers from VA's Epidemiology Program, Post Deployment Health Services, studied the cause-specific mortality risks among Veterans who deployed to Bosnia/Kosovo as a part of peacekeeping forces between 1996-2002. The study focused on causes of death found to be of concern in studies of military personnel from the U.S. and other countries who served in Bosnia/Kosovo. Exposures of concern included depleted uranium and pollution resulting from the destruction of industrial plants.

Researchers compared the cause-specific mortality among 53,320 Veterans who deployed to Bosnia/Kosovo to that of 117,267 non-deployed Veterans and to the general U.S. population. They focused on mortality from leukemia, respiratory disease, respiratory cancer, and heart disease.

The overall mortality of both Veterans who deployed to Bosnia/Kosovo and non-deployed Veterans was almost half of that of the U.S. population. Those who deployed did not have any increased risk of mortality from the diseases of concern compared to either the U.S. population or non-deployed Veterans, though researchers recommended continued follow-up of this group because some illnesses can emerge after the time period set for this study.

Read the [abstract with findings from this study](#)¹, "Mortality experience of US veterans following service as international peacekeepers in Bosnia/Kosovo theater, 1996-2002."

ARTICLE LINKS:

1. <https://www.ncbi.nlm.nih.gov/pubmed/31344627>



Mostar Bridge, Bosnia

WRIISC RESEARCH HIGHLIGHT: STUDY SHEDS LIGHT ON WHAT GULF WAR VETERANS WANT TO HEAR FROM THEIR PROVIDER

VA's War Related Illness and Injury Study Center (WRIISC) conducted a survey study, sampling 210 Veteran participants with Gulf War illness to determine what information shared by health care providers is the most helpful.

Veterans with [Gulf War illness](#)¹ have chronic, unexplained symptoms that can include fatigue, headaches, joint pain, indigestion, insomnia, dizziness, respiratory disorders, and memory problems. Gulf War illness is also known as "chronic multisymptom illness" or "undiagnosed illness."

Participants of the WRIISC study completed a questionnaire that asked them to explain the most helpful information gained during conversations with their health care providers. Participants thought acknowledgement and validation and specific treatment recommendations were particularly helpful, with 70 participants reporting that it was most helpful when their provider offered acknowledgement and validation, and 48 participants reporting

that specific recommendations for managing Gulf War illness or its symptoms were helpful. The findings also highlight missed communication opportunities, with a third of Veterans not finding anything helpful (63 participants).

The New Jersey WRIISC is working to improve communication between patients and health care providers by teaching providers across VA to acknowledge, validate, and provide specific treatment recommendations when treating Veterans with Gulf War Illness.

Learn more about this study, called "Helpful ways providers can communicate about persistent medically unexplained physical symptoms" by reading [the abstract](#)². Find out more about the research and provider education activities at the [WRIISC](#)³.

ARTICLE LINKS:

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

2. <https://www.ncbi.nlm.nih.gov/pubmed/30651073>

3. <https://www.warrelatedillness.va.gov/>

AIRBORNE HAZARDS AND OPEN BURN PIT REGISTRY: SUMMARIES OF DATA AVAILABLE ON THE WEB

VA publishes an updated summary of self-reported health information from the Airborne Hazards and Open Burn Pit Registry every six months. They include data on the exposures of most concern to registry participants, the most commonly reported medical conditions, and the demographic and military characteristics of the participants.

According to the most recent report, 191,044 Veterans have participated in the registry as of December 31, 2019. Out of this group, 178,604 (92.6 percent) reported a burn pit exposure during deployment, and 113,714 (58.9 percent) reported duties involving burn pits. Additionally, 132,379 (69.9 percent) were close enough to feel the blast from an improvised explosive device (IED).

The most common medical conditions reported were insomnia (154,425 respondents or 80.8 percent), neurological problems (136,378 respondents or 71.4 percent), and allergies (75,713 respondents or 39.6 percent).

Find the [report with data through December 31, 2019](#)¹. New summaries are posted on the bottom of the [registry web page](#)² as they become available.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/docs/exposures/va-ahobp-registry-data-report-dec2019.pdf>
2. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>

VA CONDUCTS RESEARCH TO DEVELOP A SINGLE CASE DEFINITION FOR GULF WAR ILLNESS

Gulf War illness affects about 30 percent of all Gulf War Veterans. Rather than a single condition, it is a cluster of medically unexplained chronic symptoms that can include fatigue, headaches, joint pain, indigestion, insomnia, dizziness, respiratory disorders, and memory problems.

Currently, there is no single case definition for Gulf War illness. The definitions that are most frequently used are referred to as the Centers for Disease Control and Prevention (CDC) definition and the Kansas definition. It has been recommended by various groups, including the National Academy of Medicine and the [Research Advisory Committee on Gulf War Veterans' Illnesses](#)¹, that VA develop a single case definition using information from VA's vast data holdings. A single case definition would help VA improve the way in which they identify and treat Gulf War illness, handle claims, and conduct research on Gulf War Veterans.

VA has been working on developing a [single case definition for Gulf War illness](#)². Currently, VA is conducting two major studies towards this effort:

1. The War Related Illness and Injury Study Center (WRIISC) in East Orange, NJ, is conducting a chart review study of all Gulf War Veterans who have visited a WRIISC clinic between 2001-2018 to determine a case definition that best fits their clinical presentation.

2. The Post Deployment Health Services (PDHS) Epidemiology Program is partnering with Robert Bossarte, PhD, MA, of the VISN 2 Center of Excellence for Suicide Prevention at the Canandaigua VA Medical Center and West Virginia University, and with other partners (e.g., Harvard University investigators and topic area consultants) to conduct an analytic project where large VA datasets including information on more than 500,000 Gulf War and Gulf Era (those who did not deploy to the Gulf War but served during the same time period) Veterans will be combined to identify the diagnoses, laboratory results, and other health factors of Gulf War Veterans with symptoms consistent with Gulf War illness.

In addition, PDHS has been analyzing data from the Gulf War Registry and VA health care utilization records to determine the prevalence of various illnesses among Gulf War and Gulf Era Veterans who use VA for healthcare. Illnesses that are being looked at include respiratory diseases, cancers, and chronic medical conditions associated with Gulf War illness.

ARTICLE LINKS:

1. <https://www.va.gov/rac-gwvi/>
2. <https://www.publichealth.va.gov/exposures/publications/gulf-war/gulf-war-2018/va-dod.asp>



Louisiana National Guard, 1991

GOLDEN VA CLINIC IN COLORADO EXCELS IN COMPLETING AIRBORNE HAZARDS AND OPEN BURN PIT REGISTRY MEDICAL EXAMS

The [Airborne Hazards and Open Burn Pit Registry](#)¹ (AHOBPR) allows Veterans who were deployed to Southwest Asia and/or Afghanistan to document their environmental exposures in an online questionnaire and then address any associated health concerns during a free, in-person exam with an Environmental Health Clinician at their local VA medical center.

The Golden VA Clinic began conducting AHOBPR exams in September 2018 and completed 687 exams as of February 1, 2020. Anisa Moore, MD, has personally conducted almost 300 of these exams since the clinic opened. She was the only AHOBPR examiner at the site until several others were hired in the summer of 2019.

Dr. Moore, who is Section Chief of the new Environmental Health Department at VA Eastern Colorado Health Care Services and Lead Environmental Health Clinician for Veterans Integrated Service Network (VISN) 19, is passionate about helping Veterans by conducting AHOBPR exams. VA's Post Deployment Health Services talked to Dr. Moore about AHOBPR health exams and her experience conducting them.

How long does the average exam take for Veterans?

Moore: We schedule 90 minutes for most AHOBPR exams. Many of the Veterans who request these exams have done so because they have specific symptoms or concerns that they want to address, and we find that we need a full 90 minutes to address these

concerns and perform a comprehensive history and physical. In addition to a 90-minute visit with the Environmental Health Clinician, we also schedule all AHOBPR Veterans for same-day, in-clinic spirometry (breathing tests) and labs.

What are some health concerns that Veterans have shared with you related to airborne hazards?

Moore: In my experience, the top four health concerns are:

1. Breathing problems (e.g., shortness of breath, decreased exercise tolerance, or chronic cough)
2. Congestion (e.g., runny nose or post-nasal drip)
3. Gastrointestinal problems (e.g., difficulty swallowing, diarrhea, constipation, or abdominal pain)
4. Cancers (e.g., either an existing cancer diagnosis or concerns about developing cancer in the future)

About how many exams do you conduct per week?

Moore: I conduct three to four AHOBPR exams a day, and most of our other examiners perform two to three AHOBPR exams a day. To increase our productivity, we combine AHOBPR and Gulf War exams for Veterans who are eligible for both.

What do you like most about your role in conducting AHOBPR exams?

Moore: I absolutely LOVE doing AHOBPR exams—in fact, they are my very favorite registry exam to perform. Here's why:

1. AHOBPR exams contribute to our knowledge about the health impacts of inhalational exposures. My own husband was deployed to Kuwait and Saudi Arabia in 1990-1991 as a part of Desert Storm/Desert Shield, so you'd better believe I care about

research that could identify the health impacts of deployment-related, inhalational exposures on him and other Veterans.

2. AHOBPR exams yield a high return of individual diagnostic information. I have found all sorts of pathology (thyroiditis, eosinophilic esophagitis, Fanconi syndrome, various cancers, hypertrophic obstructive cardiomyopathy, etc.) just by listening to Veterans and doing a careful history and physical with a review of systems.
3. Most importantly, the Veterans are deeply appreciative of AHOBPR exams. I frequently get hugs and thank you notes from Veterans after their exams. In fact, I had a retired lieutenant colonel tell me his AHOBPR exam was the most thorough medical exam he had ever had.

How does a Veteran go about scheduling an exam at your clinic?

Moore: Veterans contact our Environmental Health Coordinator via phone or e-mail.



Anissa Moore, MD

continued on page 8

Is there anything else you would like to tell me about your work with the AHOBPR?

Moore:AHOBPR exams are unique to the VA; these exams are simply not available in the community or private sector. Veterans who participate in AHOBPR exams should know that they are helping not only themselves, but all Veterans, by contributing to research on the health impacts of military environmental exposures.

If you have completed an AHOBPR questionnaire and would like to schedule your AHOBPR exam, contact your local VA [Environmental Health Coordinator](#)². Learn more about the [AHOBPR](#)³.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>
2. <https://www.publichealth.va.gov/exposures/coordinators.asp>
3. <https://www.publichealth.va.gov/exposures/burnpits/registry.asp>

THE FRENCH VETERANS' HEALTH OBSERVATORY - ADDRESSING MILITARY EXPOSURE CONCERNS IN FRANCE

By Colonel Raphael Grippi, PharmD, MBA, French Health Liaison Officer

Similar to U.S. military Veterans, French military Veterans have also encountered environmental exposures during service and have concerns about the impact of these exposures on their health. Much like VA's Post Deployment Health Services, the French have the Veterans' Health Observatory, an interdepartmental body (including Defense, Health, and Veterans representatives) directly attached to

the General Secretariat for Administration of the Ministry of the Armed Forces. Its activities focus on the health risks associated with environmental exposures among the French military community. The Observatory's activities provide

us with a better understanding of similar issues faced by U.S. service members and their allies.

The Observatory's main activities are:

- To create a comprehensive database of deployed military personnel for the use of health studies
- To manage scientific health studies, including:
 - ◊ Epidemiological research on the health of Veterans involved in nuclear testing in the Pacific
 - ◊ An epidemiological study on the health impacts of containment in nuclear submarines
 - ◊ Studies on Gulf War illness and its potential link to the use of depleted uranium or pyridostigmine as a prophylaxis for neurotoxic chemical warfare agents (findings demonstrated no Gulf War illness among deployed French soldiers)

The Observatory includes a network of civilian and military experts and correspondents. It is headed by a Delegate (a physician from the Armed Forces Health Service, appointed by the French Secretary General) and assisted by a Deputy Delegate (an executive of



Paris, France



Colonel Raphael Grippi

the French Ministry of Health). A steering committee sets the Observatory's policy and approves proposals for health studies. A scientific council of independent experts guarantees the credibility of the work carried out by the Observatory.

DOD IDENTIFIES VETERANS POTENTIALLY EXPOSED TO CHEMICAL WARFARE AGENTS

Some Veterans were exposed to [chemical warfare agents](#)¹ (CWAs) while handling or demolishing explosive ordinance during Operation Iraqi Freedom or Operation New Dawn. They may have been exposed while working as explosive ordinance disposal personnel, during an Improvised Explosive Device (IED) attack, or during the open-air demolition or transport of CWAs. Potential CWAs that Veterans may have been exposed to include sulfur mustard, lewisite, and nerve agents, such as sarin. In addition, Veterans may have been exposed to weaponized toxic industrial chemicals, such as ammonia, chlorine, benzamine and nitric acid.

The Department of Defense (DoD) has worked hard to identify service members potentially exposed

continued on page 8

to CWAs. DoD searched 1.8 million Post-Deployment Health Assessments (PDHAs) and 1.1 million Post-Deployment Health Reassessments (PDHRa) using key words related to a chemical exposure. DoD identified 7,923 individuals with medical records that showed potential exposures. Since medical records may be incomplete, DoD created a hotline for Veterans and service members to call in and report exposure to a CWA.

These efforts resulted in DoD contacting and interviewing 1,790 Veterans and service members using an in-depth telephone screening questionnaire about their exposure to CWAs. Next, DoD invited 324 individuals to receive an in-person medical examination at Walter Reed National Military Medical Center in Bethesda, MD. This exam was also available for all Veterans who requested to be seen at Walter Reed. VA documented these exams in VA medical records for those enrolled in VA health care. Each Veteran who had an exam at Walter Reed also received a letter from VA providing additional information. These Veterans are encouraged to seek health care for conditions that are associated with their exposure and to submit a claim for service-connected benefits. DoD will be sending out a follow-on letter approximately five years after the original examination.

If you are among those identified as exposed to CWAs and you are enrolled in VA's health care system, please keep your contact information up-to-date with VA. If you are not enrolled in VA's health care system, please contact your local VA Medical Center for assistance. If you have any additional concerns or questions regarding CWAs or toxic industrial chemical exposure, please contact VA's Post Deployment Health Services at (202)-266-4695, or the U.S.

Army Public Health Center at usarmy.apg.medcom-aphc.mbx.emp@mail.mil.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/chemical-warfare-agents-oif.asp>

VA RESEARCHERS FIND GULF WAR-ERA VETERANS' HEALTH IS WORSE AMONG FEMALES COMPARED TO MALES

VA researchers conducted a national study on the health of Gulf War-era Veterans and found that health problems, including migraine headaches, dermatitis, and arthritis, were more common among female Veterans compared to male Veterans. The exception was for certain diseases related to cardiovascular health and diabetes, which are generally more common among U.S. males.

Erin K. Dursa, PhD, MPH, and her research team in VA's Epidemiology Program, Post Deployment Health Services, found that both deployed and non-deployed females had more health problems compared to males.

Females deployed to the Gulf War were 6.21 times more likely to have repeat bladder infections, 3.27 times more likely to have fibromyalgia, and 1.82 times more likely to have asthma, compared to deployed males.

Females who served during the Gulf War but were not deployed were 4.74 times more likely to have repeat bladder infections, 4.15 times more likely to have fibromyalgia, and 2.09 times more likely to have asthma, compared to non-deployed males.

"Over 40,000 females were deployed to the 1990-1991 Gulf War, serving in a variety of military occupations, an unprecedented event at the time, and little is known about their health," said Dursa. "This study highlights the fact

that female Gulf War Veterans have significant medical needs, particularly among those who were deployed during the war."

The findings from this study are illustrated in an [infographic](#)¹.

Dursa and her team obtained study findings from a survey that asked about the health and exposures of Gulf War era Veterans at multiple points in time. The findings came from 14,252 Veterans who responded to the most recent survey, 20 percent of whom were female.

Read the [abstract with findings from this study](#)², "Health Status of Female and Male Gulf War and Gulf Era Veterans: A Population-Based Study." [Read more about the overall study](#)³, "Follow-up Study of a National Cohort of Gulf War and Gulf Era Veterans." In addition, VA provides a variety of health care services for female Veterans. Learn about these [health care services](#)⁴.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/epidemiology/studies/gw-health-compare.asp>
2. <https://www.ncbi.nlm.nih.gov/pubmed/31253241>
3. <https://www.publichealth.va.gov/epidemiology/studies/gulf-war-follow-up.asp>
4. <https://www.womenshealth.va.gov/WOMENSHEALTH/index.asp>



Gulf War Veterans

GARRISON EXPOSURES AND HEALTH CONCERNS

Veterans may have concerns about health effects from garrison exposures, which are environmental exposures that may have been experienced while stationed on a military base.

Some examples of garrison exposure concerns that have recently been raised among Veterans are exposure to perfluoroalkyl and polyfluoroalkyl substances (PFAS) on military bases and exposure to volatile organic compounds (VOCs) at the U.S. Marine Corps Base Camp Lejeune in North Carolina.

PFAS: PFAS are a large family of synthetic chemicals found in many manufactured products, including carpets, food packaging, and adhesives. Almost everyone has detectable levels of PFAS in their blood.

Since the 1970's, military firefighters have used fire-fighting foams containing PFAS to fight fuel fires during training and emergency responses. This led to the contamination of ground water on several military bases, as well as in surrounding communities. There have been several recent actions to address the issue, including changes in DoD policies and procedures to discontinue the use of foams containing PFAS in training activities and efforts to develop new, fluorine-free alternatives.

Scientific and medical evidence on the health effects of PFAS are currently inconclusive, but research on these chemicals is ongoing. VA is partnering with other federal agencies to assess published information and new findings as they become available. Also, VA researchers are exploring opportunities to study the health of Veterans who may have been exposed either through their job duties (e.g., firefighters) or contaminated water. Read more about [PFAS](#)¹.

Camp Lejeune: Veterans who were stationed or lived at Camp Lejeune for at least 30 days between August 1, 1953 and December 31, 1987 are eligible for health care and disability benefits due to possible exposure to VOCs (i.e., trichloroethylene, perchloroethylene, vinyl chloride, and benzene) in the drinking water. This water contamination was a result of improper disposal of dry-cleaning waste and leaking underground storage tanks on the base.

Health Care: Veterans are eligible for health care for 15 conditions, including female infertility, hepatic steatosis, miscarriage, neurobehavioral effects, myelodysplastic syndromes, renal toxicity, scleroderma, and some cancers. Family members are eligible for health care funding assistance for these conditions.

Disability Benefits: VA has established presumptive service connection for Veterans, Reservists, and National Guard members with a diagnosis of adult leukemia, aplastic anemia and other myelodysplastic syndromes, bladder cancer, kidney cancer, liver cancer, multiple myeloma, non-Hodgkin's lymphoma, and Parkinson's disease. Read more about [Camp Lejeune](#)².

Other potential garrison exposures have raised concern among Veterans. Please see "Potential Garrison Exposures" on the next page for more information. For specific exposures at select military bases or garrisons, please see "Exposures from Specific Garrisons" on the next page.

VA consults with the Environmental Protection Agency (EPA) on garrison exposure issues. The EPA's mission is to protect human health and the environment. If you want to know more about possible garrison exposures on specific bases, visit [EPA's superfund](#)³ web pages.

ARTICLE LINKS:

1. <https://www.publichealth.va.gov/exposures/pfas.asp>
2. <https://www.publichealth.va.gov/exposures/camp-lejeune/index.asp>
3. <https://www.epa.gov/superfund>



Camp Lejeune

continued on page 11

Potential Garrison Exposures

These exposures may have occurred in garrison or while deployed:

Industrial Solvents (<https://www.publichealth.va.gov/exposures/solvents/index.asp>)

CARC Paint (<https://www.publichealth.va.gov/exposures/carc-paint/index.asp>)

PFAS - Perfluoroalkyl and polyfluoroalkyl substances (<https://www.publichealth.va.gov/exposures/pfas.asp>)

Polychlorinated Biphenyls (PCBs) (<https://www.publichealth.va.gov/exposures/pcb/index.asp>)

Fuels (Petroleum, Oils, Lubricants) (<https://www.publichealth.va.gov/exposures/fuels/index.asp>)

LORAN Radiation (<https://www.publichealth.va.gov/exposures/radiation/sources/loran.asp>)

Asbestos (<https://www.publichealth.va.gov/exposures/asbestos/index.asp>)

Lead (<https://www.publichealth.va.gov/exposures/lead/index.asp>)

Military Occupational Exposure to Radiation (<https://www.publichealth.va.gov/exposures/radiation/sources/occupational.asp>)

Exposures from Specific Garrisons

Below are known exposures that occurred at specific garrisons. Being stationed at one of these bases does not necessarily mean an exposure occurred. Exposure varies by timeframe and specific duties at the garrison.

Waste Incinerator in Atsugi, Japan (<https://www.publichealth.va.gov/exposures/sand-dust-particulates/atsugi.asp>)

Fukushima Nuclear Accident 2011 (<https://www.publichealth.va.gov/exposures/radiation/sources/fukushima.asp>)

Camp Lejeune: Past Water Contamination (<https://www.publichealth.va.gov/exposures/camp-lejeune/index.asp>)

Kunia "Tunnel" Field Station (<https://www.publichealth.va.gov/exposures/kunia.asp>)

Fort McClellan (<https://www.publichealth.va.gov/exposures/fort-mcclellan/>)

Qarmat Ali (<https://www.publichealth.va.gov/exposures/qarmat-ali/index.asp>)

C-123 Airplanes and Agent Orange Residue
(<https://www.publichealth.va.gov/exposures/agentorange/locations/residue-c123-aircraft/index.asp>)



U.S. Department
of Veterans Affairs