

# IRAQI FREEDOM VETERANS

## *Information for Veterans Who Served in Iraq in 2003-04 and Beyond and Their Families*

[www.va.gov/GulfWar](http://www.va.gov/GulfWar)

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### **HEALTH CARE AND ASSISTANCE FOR U.S. VETERANS OF THE CONFLICT IN IRAQ**

As a result of Iraq's refusal to comply with United Nations' mandates, U.S. began deploying troops to the Gulf region in late 2002. Coalition forces subsequently won a decisive victory against the forces under the regime of Saddam Hussein, during April 2003, in Operation Iraqi Freedom. Coalition forces remain in Iraq today as part of ongoing peacekeeping/nation-building activities.

As in all hazardous deployments abroad, some service members return with deployment-related health problems. In Iraq, troops are especially at risk for traumatic injuries and infectious diseases. As in all wars, some returning troops can come back with mental health problems that can result from surviving any dangerous, life-threatening experience, and some return with symptoms that are difficult to explain.

This brochure describes the main health concerns for military service in this region beginning in 2003 in Iraq, Kuwait, and surrounding areas. It answers questions that veterans, their families, and health care providers may have. It also describes medical care programs that the Department of Veterans Affairs (VA) has developed for veterans returning from combat or peace-keeping missions, and how to learn more about these programs.

#### **Background on Iraq**

Formerly part of the Ottoman Empire, Iraq became an independent kingdom in 1932. A "republic" was proclaimed in 1958, but actually military strongmen have ruled Iraq since then. Bordering

the Persian Gulf, between Iran and Kuwait, Iraq is slightly larger than twice the size of Idaho.

Iraq's climate is mostly desert with mild to cool winters, and dry to hot, cloudy summers. Northern mountainous regions along the Iranian and Turkish borders have cold winters with occasional heavy snow that melt in early spring, sometimes causing extensive flooding in central and southern Iraq. The terrain of Iraq is mostly broad plains, reedy marshes, and mountains along the borders with Iran and Turkey.

Iraq's economy is dominated by oil, which has traditionally provided about 95 percent of foreign exchanged earnings. In the 1980s, financial problems caused by massive expenditures in the 8-year war with Iran (1980-1988) and damage to oil export facilities by Iran led the government to implement austerity measures, borrow heavily, and later delayed foreign debt payments. Iraq suffered economic losses from the war with Iran of at least \$100 billion. After the war with Iran ended in 1988, oil exports gradually increased with the construction of new pipelines and fixing of damaged facilities.

Iraq's invasion of Kuwait in August 1990, subsequent international economic sanctions, and damage from military action by an international coalition beginning in January 1991 and again in 2003, have drastically reduced economic activity, per capita output, and living standards.

#### **The 1990-1991 Gulf War and Beyond**

Much was learned about the health risks in this region from the first Gulf War in 1990-1991. There was a remarkably low death rate among U.S. service members during that war. Rates of non-battle injuries and diseases were also remarkably low compared



to all prior military engagements involving U.S. service members. This public health success was attributed to early preventive medical efforts, minimal contact with local populations, and virtually no consumption of alcohol.

Although wartime health problems were low, as reports came out after the war of increasing health problems among these veterans, it became clear that the government needed a comprehensive response to these concerns. One of the first responses was the establishment of Gulf War clinical evaluation programs by both VA and the Department of Defense (DoD). Together, these two programs have clinically evaluated more than 140,000 Gulf War participants. (See [www.va.gov/GulfWar](http://www.va.gov/GulfWar) for a report on this.)

Most veterans of the first Gulf War are in good health, and those who have sought medical attention have a wide diversity of common health conditions that can be readily identified and effectively treated. However, during the 13-plus years since the end of that conflict some Gulf War veterans have come to VA with difficult-to-explain symptoms including: fatigue, headaches, joint and muscle pains, skin rashes, shortness of breath, sleep disturbances, difficulty concentration, and forgetfulness. No specific cause has been found for most of these health problems. For more information, see the recent article in the American Journal of Preventive Medicine entitled, "After More than 10 Years of the Gulf War Veterans Medical Evaluations, What Have We Learned?" (*Am J Prev Med* 2004;26(5):443-452).

## Research

Scientific research is critical to respond to the many health-related questions and concerns raised by Gulf War veterans. It has been estimated that more one billion dollars has been invested in understanding and treating Gulf War veterans' illnesses.

Federal research projects are sponsored by VA, DoD, and the Department of Health and Human Services. The scope of this research is broad, ranging from small pilot studies to large-scale epidemiology studies involving large populations and major research centers.

By law, VA reports annually to Congress on the results, status, and priorities of all federal gov-

ernment research activities related to the health consequences of military service in the first Gulf War. For additional information, see the report at [www.va.gov/resdev/prt/GulfWar2002](http://www.va.gov/resdev/prt/GulfWar2002).

## Disability Compensation

Another important aspect of VA's comprehensive program for Gulf War veterans is disability compensation. While VA was able to provide monetary benefits to Gulf War veterans with service-connected illnesses, some ill veterans could not qualify for these benefits because they had difficult-to-diagnose conditions and no diagnosis.

Consequently, at VA's request, Congress authorize VA to compensate veterans of the first Gulf War with certain chronic disabling symptoms, even when they could not be proven to be service connected.

Other major comprehensive programs are education and outreach. VA has produced or prepared a national newsletter, an academic course, brochures, fact sheets, exhibits, a web site, and other material to educate and inform VA personnel as well as Gulf War veterans about issues concerning these veterans. For more information about the program, see [www.va.gov/GulfWar](http://www.va.gov/GulfWar) or call toll-free nationwide: 1-800-273-1000.

## Health Risks to U.S. Service Members Serving in Iraq 2003-2004 and Beyond

According to the Department of Defense (DoD), troops deployed to Iraq face a wide variety of potential health hazards, including exposure to sewage, agricultural and industrial contamination of water and food, air pollution, and severe sand and dust storms.

DoD is addressing these health hazards by providing vaccinations, carefully watching their drinking water and food, and using standard pest control procedures. The remarkably low rates of serious infection disease among U.S. military personnel during the 1990-1991 Gulf War deployment were the results of rapid medical care, extensive preventive medicine efforts, use of insecticides and repellents, sanitation measures, and inspection of food and water. DoD is using similar preventive health programs in Afghanistan.

**Environmental Health Hazards.** Some deployed service members have experienced short-term health problems from exposure to sand, wind, and dust, particularly to skin, eyes, throat, and lungs. Dry air, dust, and wind can cause nosebleeds, coughing, wheezing, and other short-term respiratory difficulties. However, sand exposure has not been found to be a long-term health risk for veterans of the first Gulf War (1990-1991). Troops also face health risks from exposure to industrial chemicals and hazardous waste. DoD also warned service members to be cautious of local plants and animals, including poisonous snakes, scorpions, spiders, and plants with thorns, stinging hairs, or toxic coatings that could lead to skin irritations, rashes, infections, and poisoning.

**Infectious Diseases.** Food shortages, inadequate public health programs, refugee movements, cold weather, and crowds of malnourished and diseased people have increased the likelihood of spreading illnesses, including diphtheria, tuberculosis, measles, and influenza.

Based in part upon U.S. experience with infectious diseases among American troops and their allies sent to the Persian Gulf region during World War II, troops in Iraq are expected to be at increased risks of sandfly fever, malaria, diarrheal diseases, including cholera, typhoid fever, amoebic dysentery, giardiasis, viral hepatitis, and cutaneous leishmaniasis. Common traveler's diarrhea may be a frequent health problem as it was during the first Gulf War (1990-1991). Also, the common cold, influenza, and other upper respiratory tract infections were common during crowd troops deployments.

U.S. troops are well protected against most infectious diseases through vaccination and other preventive measures. However, potential infectious diseases of concern include the following:

- Hepatitis A and E, typhoid fever and diarrheal diseases such as cholera, amoebic dysentery, and giardiasis from food/water (Water contamination with human/animal waste is considered to be widespread).
- Tuberculosis from close person-to-person respiratory transmission.

- Leptospirosis from swimming, wading, or other skin contact with contaminated water.
- Rabies from animal contact.
- Sexually transmitted diseases.

**Leishmaniasis.** Sandfly-transmitted leishmaniasis infection of the skin (cutaneous infection) is common in this region and causes a characteristic rash. Internal (visceral) leishmaniasis, is much less common. More than 600 cases of the skin form of leishmaniasis (cutaneous) were reported by DoD in the first year of Operation Iraqi Freedom. Fortunately, DoD have reported a much lower rate in the second year of the conflict. The skin lesions caused by the cutaneous form usually go away on their own after many months. While cutaneous leishmaniasis is not life threatening, the skin lesions may take months, or even years, to heal and can result in permanent scarring.

Visceral leishmania infection might show up later on as a chronic infection, and leishmaniasis should therefore be considered when suggested by a physician. Diagnosis may require repeated and painful tissue sampling of bone marrow or lymph nodes to identify the parasite because currently there is no accurate skin or blood test. Treatment for visceral leishmaniasis can be hazardous and is not recommended unless a confirmed infection is causing chronic health problems. Therefore, treatment of cutaneous leishmaniasis may be necessary in some cases.

**Preventive Measures.** Deployed service members are directed not to consume any locally produced raw or unprocessed food products. Troops are instructed that local water and food items including dairy products, fish, fruits, and vegetables, may contain unsafe levels of pesticides, chemical fertilizers, bacteria, and viruses. U.S. troops receive potable water and clean food supplies on deployment.

**Pesticides and Health.** To protect against insect-, tick- and other pest-borne illnesses, individual U.S. service members are provided standard countermeasures. These include anti-malaria pills (when indicated), the insect repellents DEET, and permethrin.

Although many pesticides, including permethrin and DEET, have been widely used for many years in the U.S. and elsewhere without apparent health problems, some scientists and non-scientists have expressed concerns about the possible long-term health consequences of pesticide exposure. DoD's pesticide policy specifies the controlled use of only those pesticides that have been approved by the Environmental Protection Agency (EPA) or the Food and Drug Administration (FDA) for general use in the United States. Permethrin and DEET are commonly used pesticides that are widely available at grocery, garden supply, and other stores. Both are approved for unrestricted use in the U.S.

Permethrin has very low human toxicity, and is widely used in the U.S. for protection against insect pests. However, following very large exposure by swallowing or inhaling, clinical signs of permethrin poisoning can become evident within a few hours. Even in rare cases of human permethrin poisoning there is little evidence of long-term health problems following recovery from the initial poisoning.

The common insect repellent DEET is estimated to be used by at least 50 million Americans each year to keep away insect pests such as mosquitoes and ticks. There have been a few reports of tingling, mild irritation, and skin peeling following repeated skin application. In adults, ingestion of enormous doses of DEET has been associated with immediate toxic effects, but no long-term health effects have been documented.

Some researchers have suggested that exposures to a combination of pesticides and other compounds might cause health problems not seen with exposure to the same compounds individually. Such effects may not be important to humans except under extraordinary exposure conditions. Ongoing federally funded research efforts will help to clarify this matter.

Although there have been media reports that the anti-malaria drug Lariam could cause mental health problems for soldiers who take it, such effects are not common and should only occur while the drug is being taken or shortly after discontinuation of the drug.

**Deployment Stress and Health.** The current deployment in Iraq is clearly very stressful to U.S.

troops serving there. DoD research shows significant rates of post-traumatic stress disorder (PTSD) and other mental health problems among troops, and VA is well prepared to respond to the mental health needs of returning veterans.

DoD has advised service members deploying to Iraq that stress, fatigue, and depression during deployment can lead to health problems.

Deployment-related stresses include jet lag, change of diet, longer work hours carrying heavy gear, rapid and continuous pace of deployed military activities, psychological stress, and working in a hostile environment. According to DoD, service members particularly at risk include those who are exposed to human suffering, death, or combat, or who are distracted by worries about home and family.

Service members are warned that though return from deployment can be festive and cheerful, a homecoming can turn into a stressful event for personnel and their families who are not alert to the impact of changes that occurred during separation. Further, individuals returning from deployment may still be experiencing the effects of deployment. DoD has advised service members to recognize symptoms of depression, including changes in or withdrawn behavior, excessive tiredness or insomnia, changes in appetite, or feelings of despair.

Preventive measures include seeking help from health care professionals, a chaplain, or other medical personnel, maintaining physical fitness, increasing sleep when possible, proper using of over-the-counter medications, avoiding alcohol and tobacco products, and establishing a reliable support network of family and friends.

**Deployment-Related Health Effects.** Most veterans seeking health care at VA medical facilities come in with common diagnoses and receive effective treatments. However, based on experience with veterans returning from previous U.S. conflicts abroad, it is now understood that some veterans will return from hazardous military deployments with difficult-to-diagnose but nevertheless serious symptoms. In fact, concerns about chronic physical symptoms have arisen after every major

conflict, and the same types of health problems are frequently seen among civilian Americans.

Veterans, their families and their health care providers must anticipate these deployment-related health problems in veterans returning from the current deployment to Southwest Asia and Afghanistan. Several years ago in response to this situation, VA established two War Related Illness and Injury Study Centers (WRIISCs), and developed new clinical practice guidelines that give health care providers the critical tools they need to help veterans with difficult-to-diagnose illnesses (Readers can learn more at [www.va.gov/EnvironAgents](http://www.va.gov/EnvironAgents)).

### **Health Care for Returning Veterans**

VA has extended health care benefits for those veterans who have served in a combat Theater of Operations. Based on what was learned from veterans from previous conflicts, VA has developed new programs for providing treatment and other assistance to those veterans.

In 1998, VA was authorized to provide a broad range of health care services to U.S. veterans who served on active duty in a designated theater of combat operations. For 2 years after leaving the military, combat veterans are eligible for VA hospital care, medical services, and nursing home care for any illness, possibly related to wartime deployment. Veterans must contact VA to receive these services.

This law means that combat veterans will have access to high-quality health care at VA medical facilities for 2 years, following separation from the military, without having to prove that their health problems are related to their combat service or to toxic exposures during their active service. For locations of VA medical facilities, check the telephone book, or [www.va.gov](http://www.va.gov), or call **1-877-222-VETS (8387)**.

**VA Health Care Use by Iraqi Freedom Veterans.** In a VA report, issued in 2004, analysts found that among about 140,000 OIF veterans who have separated from active duty 15 percent (about 21,000) had sought health care from VA. About 13,700 health care visits have been made by OIF veterans no particular health care problem stands

out among these veterans. It is important to note that those who have been diagnosed by VA are not necessarily representative of all OIF veterans.

**VA's War Related Illness and Injury Study Centers (WRIISCs).** These two WRIISCs in Washington, DC, and East Orange, NJ, are focusing on the difficult-to-diagnose illnesses seen in veterans following all wars. Information regarding these and future centers can be obtained by contacting the nearest VA medical center, or on line at [www.va.gov/EnvironAgents](http://www.va.gov/EnvironAgents).

**VA's Vet Centers.** There are more than 200 community-based Vet Centers located around the country. This program was originally developed in response to the readjustment needs of returning Vietnam veterans. Based upon their successes, today Vet Centers are open to other veterans who served in combat and who suffer from psychological war trauma. They also offer accessible readjustment counseling, extensive case management and referral activities, and other supportive social services. For many veterans who might not otherwise seek VA assistance, the Vet Centers serve as a local resource for VA health care. Phone numbers for local VA Vet Centers can be found in the telephone book, or go to [www.va.gov](http://www.va.gov), or call **1-877-222-VETS (8387)**.

**VA's Website on Iraq Veterans Health Issues.** VA's Website on Operation Iraqi Freedom as well as Operations Desert Shield/Storm health issues is available at [www.va.gov/GulfWar](http://www.va.gov/GulfWar) and [AboutVA/Orgs/VHA/VHAProg.htm](http://www.va.gov/AboutVA/Orgs/VHA/VHAProg.htm). There is also a great deal of information for returning OIF veterans at [www.va.gov](http://www.va.gov).

**VA Health Care and Assistance for Veterans.** VA is here to help all U.S. veterans. VA's mission is to serve America's veterans and their families with dignity and compassion and be their principal advocate in ensuring they receive medical care, benefits, social support, and lasting memorials in recognition of their service to this Nation.

**Additional Information.** Through the Veterans Health Administration, VA offers primary care, specialized care, and related medical and social support services for veterans. This care is provided by about 157 hospitals, over 860 outpatient clinics, 134 nursing

homes, 42 residential rehabilitation treatment centers, 206 readjustment counseling (Vet) centers and various other facilities. VA also conducts research on veteran health issues, and fosters education of health care providers. More information about the range of services available at the local VA facilities can be obtained through the telephone book, or by checking online at [www.va.gov](http://www.va.gov). Also see the following:

“The World Factbook 2004 – “Iraq” available online at <http://www.odci/publications/faxctbook/index.html>;

U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) at [chppm-www.apgea.army.mil/](http://chppm-www.apgea.army.mil/);

World Health Organization (WHO) Updates available at [www.who.int/disasters/](http://www.who.int/disasters/); and

U.S. Army Center for Health Promotion and Preventive Medicine, “A Soldier’s Guide to Staying Healthy in South West Asia (SHG 003-1203) at [chppm-www.apgea.army.mil/deployment/shg/SWA.pdf](http://chppm-www.apgea.army.mil/deployment/shg/SWA.pdf).

### **Toll-Free Telephone Contact Numbers:**

General Information About VA Benefits	<b>1-800-827-1000</b>
Health Benefits Provided by VA	<b>1-800-222-8387</b>
VA’s Gulf War Helpline	<b>1-800-749-8387</b>
DoD’s Gulf War Veterans Hotline	<b>1-800-796-9699</b>
DoD’s Direct Veterans Hotline	<b>1-800-497-6261</b>

### **Selected Veterans Service Organizations:\***

The American Legion ( <a href="http://www.legion.org">www.legion.org</a> )	<b>1-800-433-3318</b>
Veterans of Foreign War ( <a href="http://www.vfw.org">www.vfw.org</a> )	<b>1-800-VFW-1899</b>
Disabled American Veterans ( <a href="http://www.dav.org">www.dav.org</a> )	<b>1-877-426-2838</b>
Paralyzed Veterans of America ( <a href="http://www.pva.org">www.pva.org</a> )	<b>1-800-424-8200</b>
AMVETS ( <a href="http://www.amvets.org">www.amvets.org</a> )	<b>1-877-726-8387</b>
Vietnam Veterans of America ( <a href="http://www.vva.org">www.vva.org</a> )	<b>1-800-882-1316</b>

### **VA on the Internet (in addition to the site mention earlier):**

Compensation and Pension	<a href="http://www.vba.va.gov/bln/21/">www.vba.va.gov/bln/21/</a>
VA Benefits Application	<a href="http://vabenefits.vba.va.gov/vonapp">vabenefits.vba.va.gov/vonapp</a>
Health Benefits and Services	<a href="http://www.va.gov/vbs/health/">www.va.gov/vbs/health/</a>
Department of Defense	<a href="http://www.defenselink.mil">www.defenselink.mil</a>
DoD’s GulfLINK	<a href="http://www.gulflink.osd.mil">www.gulflink.osd.mil</a>

\* These are some of the larger organizations. VA does not endorse or recommend one group over another. Other groups (unlisted here) have also been helpful to Iraqi veterans.

This brochure was written by the VA Environmental Agents Service in late November 2004 and does not include any development subsequent to that time.