

Department of Veterans Affairs

Information for Veterans Who Served in Operation Iraqi Freedom in 2003

May 2003

HEALTH CARE AND ASSISTANCE FOR U.S. VETERANS OF OPERATION IRAQI FREEDOM

As a result of Iraq's refusal to comply with United Nations' mandates regarding weapons of mass destruction, the U.S. began deploying troops to the Gulf region in late 2002. Coalition forces subsequently won a decisive victory over Saddam Hussein's regime during April 2003, in Operation Iraqi Freedom.

Like all hazardous deployments abroad, some service members will 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 will also suffer from the psychological effects that result from surviving a life-threatening experience, and some will return with symptoms that are difficult to explain.

This brochure addresses major health concerns for service during 2003 in Iraq, Kuwait, and surrounding areas, and answers questions that veterans, their families, and health care providers may have about this deployment. 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 access these programs.

Iraq Background

Formerly part of the Ottoman Empire, Iraq became an independent kingdom in 1932. A "republic" was proclaimed in 1958, but in actuality a series of military strongmen have ruled Iraq since then. Bordering the Persian Gulf, between Iran and Kuwait, Iraq is slightly more than twice the size of Idaho.

Iraq's climate is mostly desert, with mild to cool winters and dry, hot, cloudless summers. Northern mountainous regions along the Iranian and Turkish borders experience cold winters with occasionally heavy snows that melt in early spring, sometimes causing extensive flooding in central and southern Iraq. Iraq's terrain is mostly 1) broad plains; 2) reedy marshes along the Iranian border in the south with large flooded areas; and 3) mountains along the borders with Iran and Turkey.

Iraq's economy is dominated by the oil sector, which has traditionally provided about 95% of foreign exchange earnings. In the 1980s financial problems caused by massive expenditures in the eight-year war with Iran and damage to oil export facilities by Iran led the government to implement austerity measures, borrow heavily, and later reschedule foreign debt payments. Iraq suffered economic losses from the Iran war of at least \$100 billion. After hostilities with Iran ended in 1988, oil exports gradually

increased with the construction of new pipelines and restoration 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 drastically reduced economic activity. In early 2003, per capita output and living standards were still well below the 1991 War level.

The 1990-1991 War and Its Aftermath

Much was learned about the health risks in this region from the first Gulf War in 1991. There was a relatively low mortality rate among U.S. service members during this war. Rates of non-battle injuries and diseases were also remarkably low compared to prior military engagements involving U.S. service members. This public health success was attributed to early preventive medicine efforts, minimal contact with local populations, and virtually no consumption of alcohol.

Although wartime morbidity was low, as reports emerged after the war of increasing health problems among Gulf War veterans, it was 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 the VA and Department of Defense (DoD). Together these two programs have clinically evaluated over 100,000 Gulf War participants. (See www.va.gov/gulfwar).

Most veterans of the first Gulf War appear to be in good health, and those who have sought medical attention have a very wide diversity of common health problems that can be readily identified and effectively treated. However, during the dozen years since the end of the conflict some Gulf War veterans have presented with difficult-to-explain symptoms. The most commonly reported symptoms include: fatigue, headaches, joint and muscle pains, skin rash, shortness of breath, sleep disturbances, difficulty concentrating, and forgetfulness.

It was recognized that scientific research was also critical to respond to the concerns raised by Gulf War veterans and families. As of the first quarter of fiscal Year 2002, the Gulf War Veterans' Illnesses research portfolio included 224 projects, which cost over \$213 million. These Federal research projects are sponsored by VA, DoD, and the Department and 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 center programs. For additional information, see www.va.gov/resdev/prt/gulf_war_2001/.

Another important aspect of the comprehensive program developed after the 1991 Gulf War is the disability compensation program. 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 difficulty diagnosing illnesses. Consequently, Congress authorized payments to Gulf War veterans with certain chronic disabling symptoms that could not be diagnosed.

Other major components of the comprehensive program are education and outreach initiatives. VA has prepared a national newsletter, an educational course, brochures, fact sheets, exhibits and other material to educate and inform VA personnel and veterans about the program. For information about this program, see www.va.gov/gulfwar.

Health Risks to U.S. Service Members Serving in Iraq During 2003

According to DoD, troops may be exposed to a variety of infectious diseases. Environmental hazards also may pose a potential health risk to deployed forces, including exposure to sewage, agricultural and industrial contamination of water and food supplies, localized air pollution, and severe sand and dust storms.

The military is dealing with these risks by providing vaccinations, securing potable water and food, and using standard pest control procedures. The remarkably low rates of serious infectious diseases during the earlier Gulf deployment (1990-1991) were the result of rapid medical care, extensive preventive medicine efforts, use of insecticides and repellents, camp sanitation measures, and inspection of food and water supplies. DoD has implemented similar preventive health programs for the newest deployment. This fact sheet outlines the potential health risks and some of the DoD health programs developed for this new conflict.

Environmental Health Hazards. Some deployed service members might experience short-term health effects from exposure to sand, wind, and dust, particularly to skin, eyes, throat, and lungs. Dry air, dust and wind dry out the nose and throat and can cause nosebleeds, coughing, wheezing, and other short-term respiratory problems. However, sand exposure has not been found to be a long-term health risk for veterans of the first Gulf War in 1991. Also, sand exposure has not been shown to cause chronic lung problems among Western contract employees working in the Arabian Gulf.

Troops in the Gulf region also could face health risks from exposure to industrial chemicals and hazardous waste. DoD has further warned U.S. service members to be cautious of local plant and animal hazards, including poisonous snakes, scorpions, spiders, and plants with thorns, stinging hairs, or toxic coatings that can lead to skin irritation, rashes, infections, and poisoning if eaten.

Infectious Disease Hazards. Food shortages, inadequate public health programs, refugee movements, and crowds of malnourished people in Iraq increase the likelihood of spreading respiratory diseases such as diphtheria, tuberculosis, measles, and influenza. Refugee camps are commonly vulnerable to widespread gastrointestinal disease outbreaks, like typhoid fever and shigella dysentery.

Based in part upon U.S. experience with infectious diseases among Allied troops sent to Iraq in World War II, troops currently serving in Iraq could be at increased risk of sandfly fever, malaria, diarrheal diseases, typhoid fever, amoebic dysentery, giardiasis, viral hepatitis, and leishmaniasis. Routine traveler's type diarrhea may be a frequent health

problem, as it was during the 1991 Gulf War. Also, the common cold, influenza, and other upper respiratory tract infections are frequent during crowded troop deployments.

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

- Viral Hepatitis A and E, typhoid fever and diarrheal diseases, such as amoebic dysentery and giardiasis, from consuming contaminated food and water.
- Malaria, West Nile fever, and dengue fever from mosquito bites; Crimean-Congo hemorrhagic fever from tick bites.
- Tuberculosis from close person-to-person respiratory transmission.
- Leptospirosis from swimming, wading, or other skin contact with contaminated water.
- Rabies from direct animal contact.
- Leishmaniasis and sandfly fever from sand flies; and louse-borne typhus.

Leishmaniasis. Sandfly-transmitted leishmaniasis infection of the skin (cutaneous infection) is found in this region and causes a characteristic rash. Internal (visceral) leishmaniasis, is much less common. Twelve U.S. veterans of the 1990-91 Gulf War deployment were diagnosed as having viscerotropic leishmaniasis. Visceral leishmanial infection might show up later on as a chronic infection. Diagnosis often requires repeated and painful tissue sampling of bone marrow or lymph nodes to identify the parasite because currently there is no accurate blood test. Treatment for visceral leishmaniasis can be hazardous and is not recommended unless a confirmed infection is causing chronic health problems.

Preventive Measures. Deployed service members are directed not to consume 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 are provided 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 (applied to exposed skin), and permethrin (applied to clothing and bed nets).

Although many pesticides, including permethrin and DEET, have been widely used for many years in the United States and elsewhere without health problems, some people

have expressed concerns about the possible long-term health consequences of pesticide exposure. DoD's pesticide policy specifies the use of only 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 pesticides commonly used by the military during deployments. They are also widely available at grocery, garden supply, and other stores. Both are approved for unrestricted use in the United States. Permethrin has very low human toxicity, and is widely used 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 no current indication 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 repel 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 be important to humans under extraordinary exposure conditions. Ongoing federally funded research efforts will help to clarify this matter.

Deployment Stress and Health. DoD advises service members deploying to Iraq that stress, fatigue, and depression during deployment could lead to injury and illness. Deployment-related stresses include jet lag, change of diet, longer work hours, carrying heavy gear, rapid and continuous pace of deployed military activities, and psychological stress. 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 troops and their families who are not alert to the impact of changes that occurred during separation. Further, the individual returning from deployment may still be experiencing the stressful effects of deployment. DoD advises service members to recognize symptoms of depression and anxiety, 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 present 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 military conflict, and the same types of health problems are frequently seen among civilians.

Veterans, their families and their health care providers must anticipate these deployment-related health problems among veterans returning from current deployments to Iraq and Afghanistan. In response, VA has established new Centers for the Study of War-Related Illnesses, and developed new clinical practice guidelines that give health care providers the critical tools they need to help veterans with difficult-to-diagnose illnesses.

Health Care Resources for Returning Veterans. VA has extended health care benefits for veterans who have served in combat. 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. Such veterans are eligible for 2 years after leaving the military for VA hospital care, medical services, and nursing home care for any illness, even if there is insufficient medical evidence to conclude that their illness was a result of their combat service (see Public Law 105-368, Section 102, codified at Title 38 United States Code (U.S.C.) 1710(e)(1)(D).)

This law means that combat veterans will have access to high-quality health care at VA medical facilities for 2 years, based on their service in combat. This law applies to combat veterans in the Reserves and National Guard. Under this authority, however, health care may not be provided for any disability that is found to have resulted from a cause other than the service at issue; for example, conditions existing before military service and conditions that began following military combat, like broken bones occurring after separation from active duty.

For locations of VA medical facilities, check the telephone book, or www.va.gov, or call 1-877-222-VETS (8387).

VA's War-Related Illness and Injury Study Centers. These two new centers, established in 2001 in Washington, DC, and East Orange, NJ, focus 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. VA primary care providers of veterans with undiagnosed illnesses can request an evaluation for appropriate patients at one of these Centers. To request a referral, the VA health care

provider must contact VA Central Office at 202-273-8463. The telephone number for the Washington Center is 800-722-8340; the Web site is <http://www.va.gov/WRIISC-DC/>. The telephone number for the East Orange location is 800-248-8005; the Web site is <http://www.wri.med.va.gov/>.

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, Vet Centers are open today 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, or call 1-877-222-VETS (8387).

VA's Website on Gulf War Veterans' Health Issues. VA's Website on Gulf War veterans' health issues is available at www.va.gov/gulfwar.

VA/DoD Clinical Practice Guideline. In 2002, VA and DoD produced a guideline for clinicians to help previously deployed veterans with medically unexplained symptoms, specifically chronic pain and fatigue. VA physicians are urged to use this information in the evaluation and care of veterans returning from the second war with Iraq. The guideline is available at www.oqp.med.va.gov/cpg/cpgn/mus/mus_base.htm.

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 its Veterans Health Administration, VA offers primary care, specialized care, and related medical and social support services for veterans. This care is provided by about 163 hospitals, over 800 ambulatory care and community-based clinics, 135 nursing homes, 43 domiciliaries, 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 contact 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. For health information also see the following:

U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) at <http://chppm-www.apgea.army.mil/>; World Health Organization (WHO) Updates available at www.who.int/disasters/; and

U.S. Army Center for Health Promotion and Preventive Medicine, "A Soldier's Guide to Staying Healthy in Southwest Asia at chppm-www.apgea.army.mil/deployment/shg/SWA.pdf.

This brochure was written by the VA Environmental Agents Service in April 2003, and does not include any development subsequent to that time.

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