

U.S. Army Center for Health Promotion and Preventive Medicine

A SOLDIER'S GUIDE TO STAYING HEALTHY IN SOUTHWEST ASIA

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INTRODUCTION

This country-specific guide should be used in conjunction with [GTA 08-05-062, Guide to Staying Healthy](#), and is intended to provide information that can help reduce your risk of Disease and Non-battle Injuries (DNBI) when deployed. This health threat and countermeasure information is based on the most current data available from U.S. Department of Defense medical agencies at the time of production. In addition to the information in this guide, you should also receive force health protection, health threat, and preventive medicine countermeasures training/briefings prior to and, as required, throughout the length of your deployment.

SOUTHWEST ASIA OVERVIEW

Southwest Asia includes the countries of [Iran](#), [Iraq](#), [Israel](#), [Jordan](#), [Kuwait](#), [Lebanon](#), [Oman](#), [Qatar](#), [Saudi Arabia](#), [Syria](#), [United Arab Emirates](#) (UAE) and [Yemen](#). This region is composed of flat, barren desert and rugged mountainous areas. The borders of the region include Turkey and the Caspian Sea in the north; Afghanistan and Pakistan in the east; the Persian Gulf and Arabian Seas in the south; and the Mediterranean and Red Seas in the west. The elevation ranges from sea level along the coastal areas to 12,000 feet in the Zagros Mountains in Iran. The arid subtropical climate is one of the hottest in the world. The climate is hot and humid along the coast and hot and dry in the interior. Snow is possible in the northern mountain regions of Iran and Iraq and the eastern mountains of Lebanon. Flooding occurs in central and southern Iraq due to melting snows in the early spring. The climate generally has two distinct seasons: hot summer with temperatures between 53° F and 118° F and winter with temperatures between 30° F and 103° F. Temperatures can reach 130° F in the deserts of Oman and Yemen. Summer winds often create large sandstorms and dust storms that can last for several days at a time. The region is also prone to periodic droughts. Monsoon season occurs from May to September in the mountainous regions of western Yemen and southern Oman.

SOUTHWEST ASIA RISK ASSESSMENT

Based on a combination of all major infectious diseases that occur in a country, an [overall country risk level](#) is assigned from low to highest risk. Iraq and Yemen are HIGH RISK; Iran, Israel, Jordan, Lebanon, Oman, Qatar, Saudi Arabia, Syria, and UAE are INTERMEDIATE RISK; and Kuwait is LOW RISK for infectious diseases. Diseases of military importance to forces deployed to Southwest Asia include [hepatitis A and E](#), [typhoid fever](#), and diarrheal diseases such as [cholera](#), all acquired by consuming contaminated food, water, and dairy products; vector-borne diseases such as [malaria](#), [dengue fever](#), [Crimean-Congo hemorrhagic fever](#), [Rift Valley fever](#), [West Nile fever](#), [leishmaniasis](#), [sandfly fever](#), Boutonneuse fever, and Sindbis virus which are acquired through the bites of insects or ticks; [schistosomiasis](#) and [leptospirosis](#) from swimming, wading, or skin contact with contaminated water; [rabies](#) from animal contact; and [sexually transmitted diseases](#). Environmental factors also pose a significant health risk to deployed forces and include sewage, agricultural, and industrial contamination of water and food supplies; extreme night and day temperature changes; localized air pollution; and dust storms. Additionally, high altitude illnesses are a potentially significant DNBI in the mountainous regions, particularly the Elburz and Zagros Mountains in Iran and northeastern Iraq, the Hajar Mountains in Oman and UAE, the Hejaz Asir Mountains in western Saudi Arabia and Yemen, and the Lebanon Mountains in eastern Lebanon.

INCREASED REGIONAL DISEASE THREATS

The diseases of greatest risk throughout the region are bacterial diarrhea and hepatitis A. Increased vector-borne disease threats include Rift Valley fever in southwestern Saudi Arabia and in Yemen; malaria in Iran, Iraq, and Yemen; and West Nile fever in Israel. An increased risk of typhoid/paratyphoid fever, associated with contaminated food, water and ice, is present in Iran, Iraq, and Yemen. Iran has experienced an influx of refugees from drought-stricken and war-ravaged Afghanistan. These refugees may contribute to the spread of vector-borne diseases such as malaria, Crimean-Congo hemorrhagic fever, and respiratory illnesses such as diphtheria, tuberculosis, and measles. Avoidance of congregations of people and livestock is essential to reduce your risk of infection.

Coastal waters of the Persian Gulf contain hazardous marine animals including highly venomous sea snakes, poisonous jellyfish, and sea urchins with sharp or poisonous spines. Unless tactically required, swimming and wading while in Southwest Asia should be avoided.

FIELD SANITATION TEAM

Each company-sized unit has a Field Sanitation Team (FST) whose members are trained (40-hour course) and fully equipped IAW [AR 40-5](#), [FM 4-25.12](#), and [FORSCOM REG 700-2](#). Know who the members of your FST are, and know how they can assist in preventing medical threats to your health. Become familiar with FST equipment and training.

FOOD-BORNE AND WATER-BORNE DISEASES

Do not consume any food, water, or beverages (to include bottled water) that have not been approved by the U.S. military. Assume all non-approved food, ice, and water is contaminated. Water and food items available in Southwest Asia, including dairy products, fish, fruits, and vegetables, may contain unsafe levels of pesticides, chemical fertilizers, bacteria, and viruses. Contamination with human or animal waste is widespread. Even a one-time consumption of these foods or water may cause severe illness. See [GTA 08-05-062](#) for appropriate countermeasures

VECTOR-BORNE DISEASES

There are several vector-borne diseases present throughout this region. These diseases are widespread but more common in coastal areas during warmer months, especially April through November. They include [malaria](#), [dengue fever](#), [West Nile fever](#), [Rift Valley fever](#), and Sindbis fever from mosquitoes; [leishmaniasis](#) and [sandfly fever](#) from sand flies; and [Crimean-Congo hemorrhagic fever](#) and Boutonneuse fever from ticks. Many other diseases are spread by the bites of mosquitoes, ticks, sand flies, fleas, mites, and lice. Your local medical authority will determine if these diseases or other vector-borne diseases are a threat in your specific location and provide appropriate countermeasures.

- Take your malaria prevention pills when directed to do so. This is CRITICAL. Normally, you will begin taking medication prior to arriving in the area, while in the area, and after returning home.
- Use the [DOD Insect Repellent System](#) detailed in [GTA 08-05-062](#) to reduce your risk of acquiring a vector-borne disease. Wear permethrin-treated uniforms with trousers bloused and sleeves down.
- When deployed to this region, [sleep under a permethrin-treated bed net](#) to repel insects and further reduce risks of vector-borne diseases. Many insects in this region feed during the night, including mosquitoes that transmit malaria.
- When using both DEET and sunscreen products, apply sunscreen to the skin first so it does not interfere with the effectiveness of the DEET. After 30 minutes to an hour, apply the DEET. This allows the sunscreen to penetrate and bind to the skin first.

SAND, WIND, AND DUST

Severe sandstorms and dust storms are common throughout the region. Sand, wind, and dust cause health problems, particularly to skin, eyes, throat and lungs. Take care of problems early to avoid infection. Dry air, dust and wind dry out the nose and throat and can also cause nosebleeds, coughing and wheezing. Cracked, chapped fingers reduce manual dexterity. Body areas (such as ears, armpits, groin, elbows, knees, feet, and the area under breasts) that collect dust and sand are susceptible to chafing, abrasion and infection. High winds can turn tent pegs and loose objects into flying missiles (which may not be visible in blowing sand).

- Take a daily sponge bath, using an approved water source.
- Wash your face and eyelids several times per day.
- Carry at least two pairs of glasses and a copy of your prescription. Do not wear contact lenses; [AR 40-63](#) prohibits contact lens use during a military deployment.
- Breathe through a wet face cloth, or coat the nostrils with a small amount of petroleum jelly to minimize drying of mucous membranes. Protect your lips with lip balm.
- Shield your face with cloth materials to protect from blowing dust and sand.
- Wear goggles to protect your eyes from wind, dust and sand or when traveling in open vehicles.
- Wear gloves and use moisturizing skin lotion to protect your hands.

HOT AND COLD WEATHER INJURIES

Temperature extremes in this region may impact military operations. Southwest Asia is one of the hottest places on earth during the summer months. Heat is the overall greatest medical threat when deployed to this region, especially during the early phase of deployment; acclimatization is critical. Individual and unit countermeasures are extremely important. Cold injuries can also occur in the coastal and mountainous areas of this region. The effects of cold weather are more severe in high mountainous areas due to reduced oxygen and lower air pressure. When deploying to the mountainous

areas in this region, check with your unit on the requirement for packing the extended cold weather clothing system. See [GTA 08-05-062](#) for appropriate countermeasures.

HAZARDOUS ANIMALS AND PLANTS

- Several species of highly poisonous snakes, which are well camouflaged and very aggressive, live in the region. Consider any snake encountered as poisonous, and do not handle. Seek immediate medical attention if bitten; untreated snakebites may cause serious illness or death within 1 hour.
- Several species of scorpions and spiders, some with potentially fatal venom, are present throughout the region. If possible, avoid sleeping on the ground. Shake out boots, bedding, and clothing prior to use, and never walk barefoot. If bitten or stung, seek medical attention immediately.
- Some regional plants have thorns, stinging hairs, or toxic resins that may puncture the skin or introduce poison into the skin causing skin irritation, rashes or infections. Avoid skin contact with plants when tactically feasible.
- Contact with the smoke from the burning of these plants can also cause skin rashes and damage to your lungs.
- Clean your clothing after contact with harmful plants. Decontaminate clothing by washing with soap and water.
- Some regional plants may cause systemic poisoning if leaves, berries, flowers, or other plant parts are chewed or swallowed. Symptoms include dizziness, vomiting, irregular heartbeat, and delirium or hallucinations.

TOXIC INDUSTRIAL CHEMICALS AND MATERIALS

When deployed, you may face health risks from industrial chemicals and materials as a result of activities by terrorists or warring parties; accidents related to improper design, maintenance, or operation of indigenous industrial facilities; inadvertent exposure to toxic waste materials in the environment; or improper handling or disposal of hazardous materials with which our own forces deploy. The degree of health risks depends upon many parameters. Consult your medical authority for additional information.

SEXUALLY TRANSMITTED DISEASES

[Sexually transmitted diseases](#) are highly prevalent in this region. Gonorrhea, chlamydia, and other infections are common, and may affect a high percentage of personnel who have sexual contact. Human immunodeficiency virus (HIV) and hepatitis B occur throughout the region. Though the immediate impact of HIV and hepatitis B on an operation is limited, the long-term impact on your individual health is substantial. See [GTA 08-05-062](#) for appropriate countermeasures.

HIGH ELEVATIONS

High altitude illnesses can kill. Southwest Asia operations occurring at elevations over 6,000 feet can seriously impact unit and individual effectiveness. Serious illness or death can result if you ascend rapidly without allowing for acclimatization. Remain well hydrated; individual water requirements are greater at higher altitudes.

- When deployed to high mountain areas, be observant of the common symptoms of mountain sickness: headache, nausea, vomiting, dizziness, fatigue, irritability, and coughing. Seek medical attention immediately if you experience any of these symptoms.
- Pyridostigmine bromide tablets may increase the chance of dizziness or fainting during the first 24 hours at high altitude if you are not acclimatized.
- Lower oxygen levels at high altitudes (“thin air”) combined with the heavier work requirements when wearing mission-oriented protective posture (MOPP) gear can increase your risk of high altitude illnesses. When wearing MOPP gear at higher altitudes, you may require more time and concentration to perform assigned tasks.
- For appropriate countermeasures during high altitude operations, see [GTA 08-05-062](#) and [GTA 08-05-060, A Soldier's Guide to Staying Healthy at High Elevations](#).

HEARING PROTECTION

It is essential that you use properly fitted hearing protection during military operations. Exposure to high-intensity noise may cause hearing loss that can adversely affect your combat effectiveness and individual readiness. Good hearing is essential to mission success. If you are a dismounted soldier, the [Combat Arms Earplug](#) (NSN 6515-01-466-2710) will protect you from the impact noise of weapons fire while only slightly interfering with voice communications and detection of combat sounds such as vehicle noise, footfalls in leaves, and the closing of a rifle bolt. While not as effective as the Combat Arms Earplug in preserving your ability to hear important mission-related sounds, noise muffs or standard earplugs are very effective in preventing noise-induced injury. If you are a member of vehicle or helicopter crews, your combat vehicle crew or aircrew helmets have built-in hearing protectors.

ORAL HEALTH

Dental disease is a common problem during deployments due to the challenge of maintaining good oral hygiene. You should deploy with toothbrush, dental floss, and fluoride toothpaste. Daily flossing and twice daily brushing of teeth is the best way to ensure prevention of periodontal disease and to decrease your risk of problems such as trench mouth and tooth decay. In difficult tactical environments, teeth should be brushed at least once a day. Seek medical attention immediately at the onset of any dental problems.

SKIN DISEASES

Skin irritations and infections, such as athlete's foot and ringworm, are common medical threats during any deployment and are commonly caused by fungi. The best prevention is to maintain clean, dry skin. See [GTA 08-05-062](#) for additional countermeasure information.

PRE-DEPLOYMENT HEALTH INFORMATION

- [Complete the Pre-Deployment Health Assessment \(DD FORM 2795\)](#) to assess your state of health before deployment and to assist health care providers in identifying your medical needs and providing present and future medical care to you.
- You will not have access to your health care record during the deployment. The Adult Preventive and Chronic Care Flowsheet ([DD FORM 2766](#)) will be used as your deployment health record. This document will include information on all your immunizations, any medications you are currently taking, and any ongoing medical problems that you may have. When you go through readiness processing, ensure that all appropriate information is documented on your DD FORM 2766. When you return home, this information will be placed in your regular health record.

INFORMATION ABOUT YOUR HEALTH CARE WHILE DEPLOYED

- It is important that you know where to seek health care while deployed. This may or may not be through the same channels as your home station. Ask your chain of command for more information.
- While deployed, you must maintain your health and seek care whenever an illness or injury threatens your ability to complete your tasks. Your unit is depending on you. It is always better to seek care early so that your problems can be documented appropriately and taken care of immediately.

POST-DEPLOYMENT HEALTH INFORMATION

- [Complete the Post-Deployment Health Assessment \(DD FORM 2796\)](#) to assess your state of health after deployment and to assist health care providers in identifying your medical needs and providing present and future medical care to you.
- If you become sick after you return home, tell your physician that you were deployed.
- Complete malaria medications as directed, and receive follow-on medical care/tests as directed.

Contact your Preventive Medicine or Medical Support Unit for more information.



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