

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

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## A SOLDIER'S GUIDE TO STAYING HEALTHY IN CENTRAL ASIA

SHG 002-0302



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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.

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## CENTRAL ASIA OVERVIEW

Central Asia includes the countries of [Tajikistan](#), [Kyrgyzstan](#), [Uzbekistan](#), and [Turkmenistan](#). This region is a combination of sea-level coastline, flat deserts, subtropical valleys, and mountainous regions with peaks rising above 23,000 feet. The entire region is subject to earthquakes. The climate of Central Asia varies considerably depending upon elevation and season, from arctic (-50° F) weather in northern mountainous areas to temperate climates in higher and medium altitude valleys and plains, tropical climates in the coastal plains, and extreme heat (120° F) in the desert regions. The climate in any particular country depends on its proximity to major mountains or large bodies of water, its elevation, and local topography. Many of the mountainous regions are permanently covered with snow, ice, and glaciers.

## CENTRAL 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. Tajikistan is HIGH-RISK, and Kyrgyzstan, Turkmenistan, and Uzbekistan are INTERMEDIATE-RISK countries for infectious diseases. Diseases of military importance to forces deployed to Central 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](#), [Crimean-Congo hemorrhagic fever](#), [tick-borne encephalitis](#), [leishmaniasis](#), [West Nile fever](#), [sandfly fever](#) and [murine typhus](#) which are acquired through the bites of insects or ticks; [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 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 of Central Asia, which may impact individual and unit effectiveness.

## INCREASED REGIONAL DISEASE THREATS

The worst drought in several decades has caused water and food shortages in Central Asia. Internal conflict and recent antiterrorist activities combined with drought conditions are causing mass population movement from Afghanistan into the bordering countries of Central Asia. The combination of drought, displaced personnel, population migration, and increased congregations of people and refugees will significantly increase the likelihood of infectious disease transmission in Central Asia. Refugees entering Central Asia may spread vector-borne diseases such as malaria, as well as respiratory illnesses such as diphtheria, tuberculosis, and measles. Avoidance of congregations of personnel and livestock is essential to reduce your risk of infection. Drought and overcrowded conditions combined with poor sanitation significantly increase the risk of exposure to infectious diseases through greater use of contaminated water sources and by person-to-person spread. Displaced populations living in temporary camps with unsanitary conditions are extremely vulnerable to

widespread typhoid fever outbreaks. Drought conditions also result in congregation of livestock, increasing animal-to-human transmission of diseases such as anthrax by possible exposure to anthrax spores in the environment.

Consuming contaminated wheat products in this region may result in serious health effects. During drought conditions, toxic seeds from native wild plants are unintentionally harvested along with the wheat crop. These seeds contain a liver toxin that can contaminate wheat and milk products. As a result, toxins may be found in bread products made from local wheat and in the milk of animals that have consumed seeds from these plants.

## 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.

## VECTOR-BORNE DISEASES

There are several vector-borne diseases present in Central Asia. They include [malaria](#) and [West Nile fever](#) from mosquitoes, [leishmaniasis](#) and [sandfly fever](#) from sand flies, [Crimean-Congo hemorrhagic fever](#) and [encephalitis](#) from ticks, and [murine typhus](#) from fleas. 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.

## HOT AND COLD WEATHER INJURIES

Temperature extremes in this region may impact military operations. 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.

## SAND, WIND, AND DUST

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.

## 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 clean, dry skin. See [GTA 08-05-062](#) for additional countermeasure information.

## 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 Central 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.

## 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. Hepatitis B is widespread, and human immunodeficiency virus (HIV) also occurs. Though the immediate impact of hepatitis B and HIV 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. Central 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 and required for 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 at 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.

## **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.**



*Prepared by:*

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