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

A SOLDIER'S GUIDE TO STAYING HEALTHY IN AFGHANISTAN AND PAKISTAN

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INTRODUCTION

This country-specific guide should be used in conjunction with <u>GTA 08-05-062</u>, <u>*Guide to*</u> <u>Staying Healthy</u>, 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.

AFGHANISTAN OVERVIEW

Afghanistan is approximately the size of Texas and is divided into three geographic regions. The elevation ranges from 500 feet above sea level in the Southwestern Plateau to 25,000 feet in the Central Highlands. Afghanistan has a mostly dry climate marked by seasonal, regional, and daily temperature extremes. The country also has the "Wind of 120 Days," which blows from June through September at velocities that occasionally exceed 110 mph. In the west, mean daily maximum temperatures in summer (April through September) and winter (October through March) generally are 20° F warmer than those in Kabul; extreme winter highs and lows are 100° F and -3° F, respectively. Countrywide, the extreme summer high temperature is 118° F in the west, and the extreme low temperature is -4° F in Kabul. The rainy season lasts from October through April. Although rainfall usually is scant, periodic heavy rains combined with melting snow have caused flooding. Generally, no area receives more than 15 inches of rain annually.

PAKISTAN OVERVIEW

Pakistan is approximately twice the size of California and is divided into four geographic regions. The elevation ranges from sea level to 26,000 feet in the Himalayan mountain ranges. Pakistan has significant daily, regional, and seasonal temperature variations. Tropical cyclones, causing devastating flooding and wind damage, may occur during June and July. Daily variations of 20° to 30° F occur throughout most of the interior regions. During the dry, cool winter (December through February), mean daily temperatures are 57° F on the Indus Plain, 68° F along the coast, and 4° F in the northern mountains. During the summer (March through May), mean daily temperatures are 84° F along the coast, 95° F in the desert region and on the Indus Plain, and 32° F in the mountains. The monsoon seasons, June through July and October through November, bring periodic flooding and deliver an annual average rainfall of 60 inches in the Northern Highlands, 5 inches in the Baluchistan Plateau, 15 inches in the river valleys, 6 to 8 inches along the coast, and 4 inches in the desert region.

AFGHANISTAN AND PAKISTAN 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. Afghanistan and Pakistan are HIGH-RISK countries for infectious diseases and high altitude illnesses. Diseases of military importance to forces deployed in Afghanistan and Pakistan 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, leishmaniasis, West Nile virus, sandfly fever and louse-borne typhus which are acquired through the bites of various insects and ticks; tuberculosis acquired from person-to-person respiratory transmission; 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 severe sandstorms and dust storms. Additionally, high altitude illnesses are a potentially significant DNBI in the mountainous regions of Afghanistan and Pakistan.

INCREASED REGIONAL DISEASE THREATS

Civil and military conflicts over the last three decades and recent antiterrorist activities have decimated the Afghan public health infrastructure. This situation has worsened by the recent departure of many relief agencies. Three years of continuous drought has led to widespread crop failures and water shortages. There are approximately 1 million internally displaced persons and another 4-5 million refugees who have fled from Afghanistan into bordering countries. The combination of food shortages, lack of an adequate public health infrastructure, refugee movement, and increased congregations of malnourished people significantly increase the likelihood of infectious disease transmission.

Overcrowding associated with cold weather and congregations of displaced persons is highly conducive to the transmission of respiratory illnesses such as diphtheria, tuberculosis, measles, and influenza. Tuberculosis rates in Afghanistan are among the highest in the world. Avoidance of congregations of people and livestock is essential to reduce your risk of infection. 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 the risk of animalto-human transmission of diseases such as anthrax by possible exposure to anthrax spores in the environment.

Do not consume any locally produced raw or processed grain or dairy products. During periods of extended drought, chemically treated grains meant for seed only or grains that were harvested or stored inadequately may enter local food channels. These grains may be contaminated with toxic pesticides, weed seeds and mold spores. Consuming bread products or milk from animals that have consumed contaminated grains may result in serious chronic or acute health effects.

FIELD SANITATION TEAM

Each company-sized unit has a Field Sanitation Team (FST) whose members are trained (40-hour course) and fully equipped IAW <u>AR 40-5</u>, <u>FM 4-25.12</u>, and <u>FORSCOM</u> <u>REG 700-2</u>. 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 Afghanistan and Pakistan. They include <u>malaria</u>, <u>dengue fever</u>, and <u>West Nile virus</u> from mosquitoes; <u>leishmaniasis</u> and <u>sandfly fever</u> from sand flies; <u>Crimean-Congo hemorrhagic fever</u> from ticks; and <u>louse-borne typhus</u> from the human body louse (head lice or pubic lice play no role in transmission). 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 <u>DOD Insect Repellent System</u> detailed in <u>GTA 08-05-062</u> 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, <u>sleep under a permethrin-treated bed net</u> 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.

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.

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; <u>AR 40-63</u> 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. 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 <u>GTA 08-05-062</u> for appropriate countermeasures.

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 Afghanistan and Pakistan, 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 <u>GTA 08-05-062</u> for appropriate countermeasures.

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 <u>GTA 08-05-062</u> for appropriate countermeasures.

HIGH ELEVATIONS

High altitude illnesses can kill. Afghanistan and Pakistan 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 <u>GTA 08-05-062</u> and <u>GTA 08-05-060</u>, <u>A Soldier's Guide to Staying Healthy at High Elevations</u>.

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 <u>Combat Arms Earplug</u> (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

• <u>Complete the Pre-Deployment Health Assessment (DD FORM 2795)</u> 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 (<u>DD FORM 2766</u>) 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

• <u>Complete the Post-Deployment Health Assessment (DD FORM 2796)</u> 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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