

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

A SOLDIER'S GUIDE TO STAYING HEALTHY THE BALKANS

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A SOLDIER'S GUIDE TO STAYING HEALTHY IN THE BALKANS

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INTRODUCTION

This country-specific guide should be used in conjunction with [GTA 08-05-062, Guide to Staying Healthy](#), and provides 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.

THE BALKANS OVERVIEW

The Balkan Peninsula is located in Eastern Europe and includes the countries of [Albania](#), [Bosnia/Herzegovina](#), [Bulgaria](#), [Croatia](#), [Greece](#), [Macedonia](#), [Romania](#), [Serbia and Montenegro](#), and [Slovenia](#). <Not Kosovo?>(Although Turkey may be considered a Balkan state, it is not included in this guide.) The Balkans region is composed mostly of rugged mountain ranges with a few flat or rolling coastal and inland plains. The borders of the region include Austria, Hungary and Ukraine in the north; Italy and the Adriatic and Ionian Seas in the west; the Mediterranean and Aegean Seas in the south; and Turkey and the Black Sea in the east. The elevation ranges from sea level along the Adriatic, Black and Mediterranean Seas to nearly 9,600 feet in the Rila Mountains of Bulgaria. The climate is generally temperate with cold winters and hot, humid summers inland and mild winters and dry summers along the coast. Summer temperatures average between a low of 52° F and a high of 84° F. The winter temperatures average between a low of 28° F and a high of 57° F, although the mountainous regions are much colder with snow possible year-round. This region contains some of the wettest areas in Europe during the winter with an annual rainfall of more than 100 inches in the mountainous areas. Severe thunderstorms and flooding occur in the region. Cyclones are common during the winter in Albania, and tsunamis can occur along the southwestern coast. Destructive earthquakes occur throughout the region, and landslides have occurred in Bulgaria and Romania.

INFECTIOUS DISEASE RISK ASSESSMENT

The majority of the Balkan Peninsula has an INTERMEDIATE RISK except for Greece. Greece is LOW RISK for infectious diseases with an overall disease risk that can adversely impact mission effectiveness unless force health protection measures are implemented.

FOOD-BORNE AND WATER-BORNE DISEASES

DISEASE RISKS

The food-borne and water-borne diseases listed are all caused by consuming local food, water, or ice that contains bacteria, parasites or viruses to which most U.S. service members have little or no natural immunity. Sanitation varies with location, but typically is well below U.S. standards. You are at risk of contracting food- and water-borne diseases in Eastern Europe if you consume local food and water (including ice). The food- and water-borne diseases of greatest risk are—

- [Diarrhea \(bacterial and protozoal\)](#) (travelers' diarrhea). Diarrheal diseases are likely to occur. Field conditions (including lack of hand washing and primitive sanitation) may promote person-to-person spread.
- [Hepatitis A and E](#). These diseases can make you sick for a month or more. The risk is worse after flooding. Poor hygiene and sanitation can spread hepatitis A from person to person.
- [Brucellosis](#), [cholera](#), [tularemia](#) and [typhoid/paratyphoid fever](#) may also occur and may require up to a week of hospitalization.

VECTOR-BORNE DISEASES

DISEASE RISKS

The vector-borne diseases of **high risk** in the Balkans are [Crimean-Congo hemorrhagic fever](#) and [tick-borne encephalitis \(TBE\)](#), two very severe diseases caused by tick bites. Vector risk is especially high from March to October.

A discussion of diseases of intermediate risk follows:

- **Tick** bites can result in [Lyme disease](#), a debilitating febrile illness; and [Rickettsioses, tick-borne](#) (spotted-fever group), a debilitating febrile illness.
- **Mosquito**-borne viruses, more common in the warmer months, include California group viruses which are mild to moderately serious febrile illnesses; [Sindbis \(Ockelbo\) virus](#), a debilitating febrile illness; and [West Nile fever](#), another debilitating febrile illness.
- **Sand flies** can carry [leishmaniasis](#) (both cutaneous and visceral) and [sandfly fever](#).
- **Fleas** can transmit [Typhus – murine](#) (flea-borne).
- [Hantaviruses](#) are carried by **field rodents**. Exposure can cause hantavirus hemorrhagic fever with renal syndrome (HFRS), a very severe disease. You could develop HFRS if you are exposed to dust or aerosols in rodent-infested areas such as barnyards or fields during bivouac. Sleeping on the ground and contact with rodents or rodent habitats are risk factors.

PREVENTION

- When deployed to Eastern Europe, 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 tucked into boots, sleeves rolled down, and undershirt tucked into trousers. Use DEET insect repellent on exposed skin.
- When deployed to this region, sleep under a [permethrin-treated bed net](#) to repel insects and further reduce risks of vector-borne diseases.
- When using both DEET and sunscreen products, apply sunscreen 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.
- To prevent tick bites, avoid tick-infested areas when feasible, use personal protection measures, clear campsites of tall grasses and other low vegetation, and spray the area with an appropriate acaricide. Always read and follow label instructions.
- Environmental control (e.g., clearing forests, eliminating rodent burrows/breeding sites, relocating domestic animals away from sleeping sites) will reduce risk.
- Use the buddy system to search the total body area every 3-4 hours for attached ticks. Prompt removal of attached ticks may prevent disease transmission.

WATER-CONTACT DISEASES AND SKIN INFECTIONS

DISEASE RISKS

- [Leptospirosis](#) can occur among personnel wading or swimming in bodies of water such as lakes, streams, or irrigated fields. This serious febrile illness can require 1-7 days in the hospital.
- Skin irritations and infections, such as athlete's foot and ringworm, are common medical threats during any deployment and are commonly caused by fungi that thrive in moist conditions.

PREVENTION

- Do not swim or wade in water that has not been treated with chlorine; if you must enter untreated water, wear protective clothing and footwear.
 - Never go barefoot.
 - Clean your skin and clothing after wading or swimming in freshwater ponds or streams.
 - To prevent skin infections, maintain clean, dry skin.
- See [GTA 08-05-062](#) for additional countermeasure information.

ANIMAL-CONTACT DISEASES

DISEASE RISKS

Cases of human [anthrax](#) are rare in the area but result from direct contact with infected animals. The cutaneous or gastrointestinal type of anthrax (caused by eating the infected animal) is often fatal. [Rabies](#) is a serious illness that is contracted from the bite of an animal carrying the disease. It is rare in the area but fatal without treatment. There is also a small risk of getting [Q fever](#) from direct or indirect contact with local barnyard animals, usually by inhaling dust downwind of infected animals.

PREVENTION

- Avoid contact with all animals.
- If you are bitten, seek medical attention immediately.
- Keep living quarters free of rodents, and stay clear of buildings infested with rodents.
- Always check dug-in fighting positions for potentially dangerous animals.
- Clean your skin and clothing after contact with animals or dust.

HAZARDOUS ANIMALS AND PLANTS

RISKS

- Several species of highly poisonous snakes, which are well camouflaged and very aggressive, live in the region. 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.
- 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. Contact with the smoke from the burning of these plants can also cause skin rashes and damage to your lungs.
- 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.

PREVENTION

- Consider any snake, spider or scorpion encountered as poisonous, and do not handle. If you are bitten or stung, seek medical attention immediately.
- If possible, avoid sleeping on the ground.
- Shake out boots, bedding, and clothing prior to use.
- Never walk barefoot.

- Avoid skin contact with plants when tactically feasible.
- Clean your clothing after contact with harmful plants.
- Decontaminate clothing by washing with soap and water.

ORAL HEALTH

[Dental disease](#) is a common problem during deployments because it is not easy to take care of your mouth. You should deploy with toothbrush, dental floss, and fluoride toothpaste. You should brush your teeth twice a day and floss your teeth once a day. This is the best way to prevent gum disease, 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. You are more vulnerable to other diseases when your mouth is not healthy.

HEARING PROTECTION

It is essential that you use properly fitted [hearing protection](#) during military operations. Exposure to high-intensity noise and especially weapons fire may cause permanent hearing loss. 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 at 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.

RESPIRATORY AND SEXUALLY TRANSMITTED DISEASES RISKS

- There is a risk of being exposed to the bacteria that causes [tuberculosis](#) (TB). Breathing in the bacteria that someone coughed or sneezed into the air spreads TB. Being exposed to the bacteria will cause a positive skin test even if you do not become sick.
- Soldiers are also at risk of contracting sexually transmitted diseases ([STDs](#)) such as [gonorrhea](#), [chlamydia](#), human Immunodeficiency virus/acquired immune deficiency syndrome ([HIV/AIDS](#)) and [hepatitis B](#). HIV/AIDS and hepatitis B are potentially fatal STDs that can also be passed by sharing needles. Though the immediate impact of HIV/AIDS and hepatitis B on an operation is limited, the long-term impact on your individual health is great.

HOT AND COLD WEATHER INJURIES

Temperature extremes in this region may impact military operations. Heat injuries are possible during the summer months, especially in people not acclimatized to warmer temperatures. Cold injuries are the more serious threat in this region with the effects of cold weather being more severe in high mountainous areas due to reduced oxygen and lower air pressure. When deploying to 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.

HIGH ELEVATIONS

- Military operations occurring at elevations over 6,000 feet can be dangerous due to low levels of oxygen. Serious illness or death can result if you increase your elevation rapidly without allowing for acclimatization. Remain well hydrated; you need more fluids at higher altitudes.
- Symptoms of mountain sickness include headache, nausea, vomiting, dizziness, fatigue, irritability, and coughing. Seek medical attention immediately if you experience any of these symptoms.
- When wearing mission-oriented protective posture (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*](#).

WIND AND DUST

Black winds, named after the large amount of dust carried by the wind, are quite common in the winter along the Danube River Basin. Wind and dust cause health problems, particularly to skin, eyes, throat and lungs. Take care of problems early to avoid infection. High winds can turn loose objects into flying missiles (which may not be visible in blowing dust). To help avoid problems—

- 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.
- Wear goggles to protect your eyes from wind and dust or when traveling in open vehicles.
- Wear gloves and use moisturizing skin lotion to protect your hands.

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 industrial facilities; accidental exposure to toxic waste materials; or improper handling or disposal of hazardous material deployed with our own forces. The degree of risk depends upon many factors. Consult your medical authority for additional information. Environmental contamination may present short- and long-term health risks to personnel deployed to Eastern Europe. The greatest short-term health risks are water contaminated with raw sewage or runoff containing fecal pathogens, agricultural chemicals, municipal or industrial wastes. The main long-term health risks are air and water contamination in urban and industrial areas.

- Industrial production and civil conflicts have resulted in extensive environmental contamination and infrastructure damage. The pollution is most severe in large cities and manufacturing centers. Inadequate waste collection, disposal and storage; unregulated landfills; and untreated wastewater contribute to the contamination.
- The industrial release of chemicals into water and soil has contaminated food supplies. Ochratoxin A and lead have been detected in crops, and arsenic has been found in the drinking water in some areas. Fish and meat may be contaminated with mercury in Slovenia.
- There are limited financial resources and infrastructure to comply with environmental standards.

FIELD SANITATION TEAM

Each company-sized unit has a Field Sanitation Team (FST) whose members are trained (40-hour course) and fully equipped according to [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.

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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