

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

A SOLDIER'S GUIDE TO STAYING HEALTHY OCEANIA

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A SOLDIER'S GUIDE TO STAYING HEALTHY IN OCEANIA

Table of Contents

	Page
INTRODUCTION.....	1
OCEANIA OVERVIEW	2
OCEANIA RISK ASSESSMENT	2
VECTOR-BORNE DISEASES	2
FOODBORNE AND WATERBORNE DISEASE	3
WATER-CONTACT DISEASES AND SKIN INFECTIONS	4
DANGEROUS PLANTS AND ANIMALS.....	4
CONTAGIOUS DISEASES.....	5
SEXUALLY TRANSMITTED DISEASES	5
HOT AND COLD WEATHER INJURIES	5
HEARING PROTECTION	6
TOXIC INDUSTRIAL CHEMICALS AND MATERIALS.....	6
HIGH ELEVATIONS	6
ORAL HEALTH	6
FIELD SANITATION TEAM.....	7
PRE-DEPLOYMENT HEALTH INFORMATION	7
INFORMATION ABOUT YOUR HEALTH CARE WHILE DEPLOYED	7
POST-DEPLOYMENT HEALTH INFORMATION.....	7

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 countermeasure training/briefings prior to and, as required, throughout the length of your deployment.

OCEANIA OVERVIEW

Oceania encompasses most of the island nations in the West Pacific Ocean Basin between latitude 30 degrees south and 15 degrees north and longitude 120 degrees west to 130 degrees east, except Australia, New Zealand, Papua New Guinea, and territories/possessions of the United States. Specifically, the following island nations make up Oceania: [Cook Islands](#), [Federated States of Micronesia](#); [Fiji](#); [French Polynesia](#); [Kiribati](#); [Marshall Islands](#); [Nauru](#); [New Caledonia](#); [Niue](#); [Palau](#); [Pitcairn Islands](#); [Samoa](#); [Solomon Islands](#); [Tokelau](#); [Tonga](#); [Vanuatu](#); and [Wallis and Futuna](#). Of the countries included in Oceania, the largest is Solomon Islands, with 27,540 square kilometers (17,075 square miles) of land or an area slightly larger than Maryland. The smallest is Tokelau, with 10 square kilometers (6.2 square miles). The Solomon Islands have the highest elevation (2,331 meters; 7,646 feet). The countries of Oceania are composed of two types of islands: volcanic which are mountainous, and atolls which rise only a few meters above sea level. Oceania is entirely in the tropics. The weather is very hot and humid with temperatures ranging from 20° C (68° F) and 30° C (86° F) throughout the year. The Solomons are subject to the Asian-influenced monsoon seasons. From November through February, the northwest monsoon from Asia brings heavy rain; from March through October, the southeast monsoon brings light rain. The rest of Oceania is subject to rains brought by the trade winds, with annual rainfall varying from 2,000 millimeters (80 inches) to 4,500 millimeters (175 inches). The year is divided into rainy (October through March) and dry (April through September) seasons, with less than 50 millimeters (2 inches) of rain a month in the dry season. Both drought and flooding occur frequently in Oceania. Typhoons, cyclones, and volcano eruptions also occur frequently. Tsunamis (tidal waves) can occur.

OCEANIA RISK ASSESSMENT

Based on a combination of all major infectious diseases that occur in a country, an [overall country risk level](#) is assigned. Countries can be rated as low, intermediate, high, or very high risk. Oceania is HIGH RISK for infectious diseases. All diseases are preventable when force health protection measures are followed. The greatest short-term health risks to personnel deployed to Oceania are associated with consumption of water contaminated with raw sewage or runoff containing fecal pathogens and industrial waste, and with high heat and humidity. This guide discusses specific disease and environmental risks and ways to eliminate or lessen those risks.

VECTOR-BORNE DISEASES

DISEASE RISKS

Vector-borne diseases are diseases that are contracted through the bite of an insect. The vector-borne diseases of greatest risk are—

- [Dengue fever](#), a serious disease that is contracted from the bite of a mosquito carrying the virus.
- [Malaria](#), a very serious illness that is contracted from the bite of a mosquito carrying the disease. It is only present in the Solomon Islands and Vanuatu.

Other vector-borne diseases that pose a lesser risk to you are [Ross River virus](#) from mosquitoes and [scrub typhus](#) from mites.

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.

PREVENTION

- There is medicine you must take to help prevent malaria. Take your malaria prevention pills when directed to do so. This is CRITICAL. Normally, you will begin taking medication before arriving in the area, while in the area, and after returning home.
- When deployed to this region, 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. Wear N-diethyl-meta-toluamide (DEET) 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 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 time to penetrate and bind to the skin first.

FOOD-BORNE AND WATER-BORNE DISEASES

DISEASE RISKS

Food-borne and water-borne diseases are caused by eating food or drinking water that is contaminated with certain bacteria, parasites or viruses. You are at great risk of contracting food- and water-borne diseases in this area. The food- and water-borne diseases of greatest risk are—

- [Diarrhea \(bacterial\)](#) or travelers' diarrhea. The risk is worse after flooding.
- [Hepatitis A](#). This is a food- or water-borne disease that can make you sick for a month or more. It can also be transmitted from person to person when hygiene and sanitation are bad.
- [Typhoid/paratyphoid fever](#). This is a serious illness acquired by consuming food or water contaminated with the bacteria that causes the disease. A person can have typhoid without showing symptoms and can unknowingly pass it on to others.

Other food- or water-borne diseases that pose a lesser risk to you are [diarrhea \(protozoal\)](#) and [hepatitis E](#).

PREVENTION

- Assume all non-approved food, ice, and water is contaminated. You should not drink local tap water, fountain drinks, or ice cubes. Do not eat any food or drink any water or a beverage (including bottled water) that has not been approved by the U.S. military as these may be contaminated. Even a one-time consumption of these foods or water may cause severe illness.

- Be aware that there are vaccines for hepatitis A and typhoid, but they are not 100 percent effective.
- See [GTA 08-05-062](#) for appropriate countermeasures.

WATER-CONTACT DISEASES AND SKIN INFECTIONS

DISEASE RISKS

Water-contact diseases are most often acquired by swimming or wading in contaminated water. The water-contact disease that poses a risk is [leptospirosis](#). Leptospirosis is caused by bacteria in water. Skin irritations and infections, such as athlete's foot and ringworm, are also 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.

DANGEROUS ANIMALS AND PLANTS

RISKS

- Hazards to lagoon and ocean bathers include corals, stinging jellyfish, poisonous fish, and highly venomous sea snakes. Large sharks and saltwater crocodiles may also be present in shallow waters around some islands.
- Some islands have insects, centipedes, and scorpions that can inflict painful bites or stings.
- Consumption of coral reef fish may lead to ciguatoxin poisoning. Symptoms include vomiting, diarrhea, and numbness in the extremities.
- 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

- Avoid walking or bathing at unapproved beaches.
- Avoid eating fish from unapproved sources. Seek medical treatment immediately should symptoms of ciguatoxin fish poisoning appear.
- Avoid contact with all animals. Keep living quarters free of rodents, and stay clear of buildings infested with rodents. If bitten, seek medical attention immediately.
- Although terrestrial venomous snakes are rare or nonexistent throughout Oceania, consider any snake encountered as poisonous, and do not handle.

- If possible, avoid sleeping on the ground. Shake out boots, bedding, and clothing prior to use, and never walk barefoot.
- Avoid skin contact with plants when possible. Clean your clothing with soap and water after contact with animals or harmful plants.

CONTAGIOUS DISEASES

DISEASE RISKS

Contagious diseases are diseases you catch from other people. 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. If you have a positive skin test, you may still be treated even if you have no symptoms.

PREVENTION

- Avoid contact with sick people, especially people who are coughing.
- Avoid touching your eyes, mouth and the inside of your nose.
- Always cover your mouth with your sleeve when you cough.
- Wash your hands as often as possible.
- Seek medical attention if you are sick to prevent spreading germs to others.

SEXUALLY TRANSMITTED DISEASES

DISEASE RISKS

Soldiers are at a high risk of contracting [hepatitis B](#). Soldiers are also at risk of contracting sexually transmitted diseases ([STDs](#)) such as [gonorrhea](#), [chlamydia](#), and human immunodeficiency virus ([HIV](#))/[acquired immune deficiency syndrome \(AIDS\)](#). 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.

PREVENTION

- There is a vaccine for hepatitis B but not for any other STD. ●**Anyone deployed to the region should not have unprotected sex and should not share needles.**
- Those deployed should see [GTA 08-05-062](#) for appropriate countermeasures.

HOT AND COLD WEATHER INJURIES

Heat injuries are possible when deployed to this region, especially in the desert and during the early phase of deployment; acclimatization is critical. Individual and unit countermeasures are extremely important. Cold injuries can also occur in the 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.

HEARING PROTECTION

It is essential that you use properly fitted [hearing protection](#) during military operations. Exposure to high-intensity noise may cause 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 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.

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 material with which our own forces deploy. The degree of health risks depends upon many parameters. Consult your medical authority for additional information.

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.
- Pyridostigmine bromide tablets may increase the chance of dizziness or fainting during the first 24 hours at high altitude if you are not acclimatized.
- 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*](#).

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.

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 affects your work. Your unit is depending on you. It is always better to seek care early so your problems can be documented appropriately and taken care of immediately. When problems are caught early, they are usually easier to treat.

POST-DEPLOYMENT HEALTH INFORMATION

- [Complete the Post-Deployment Health Assessment \(DD FORM 2796\)](#) to assess your 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 doctor 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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