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

# A SOLDIER'S GUIDE TO STAYING HEALTHY IN THE PHILIPPINES

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#### **Table of Contents**

**Page** INTRODUCTION......1 PHILIPPINES RISK ASSESSMENT......2 INCREASED REGIONAL DISEASE THREATS......2 HAZARDOUS ANIMALS AND PLANTS......4 HEAT INJURIES ......4 SKIN DISEASES ......4 SEXUALLY TRANSMITTED DISEASES .......5 HIGH ELEVATIONS ......5 ORAL HEALTH ......5 PRE-DEPLOYMENT HEALTH INFORMATION ......6 INFORMATION ABOUT YOUR HEALTH CARE WHILE DEPLOYED ......6 POST-DEPLOYMENT HEALTH INFORMATION......6

#### INTRODUCTION

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

#### PHILIPPINES OVERVIEW

The Philippines is a grouping of more than 7,100 islands, with a total land area of approximately 116,000 square miles, equaling an area slightly larger than Arizona. Eleven of these islands contain more than 94 percent of the land area, and only 462 islands have a land area of more than 1 square mile. Larger islands are mountainous, with narrow strips of lowlands along the coasts. Nearly all of the major islands have interior mountain ranges with average heights of 3,900 to 7,000 feet. The highest elevation is Mt. Apo, which reaches an elevation of approximately 9,800 feet. Most of the islands have active volcanoes. The climate in the Philippines is mostly tropical. Temperatures are uniform, with an average daily range between 79° and 82° F. The northeastern monsoon brings cool, dry air from December through February, while the southwestern monsoon brings heavy rain from May through November. In general, the western regions receive between 80 to 140 inches of precipitation annually, the eastern regions receive less than 120 inches, and the Cagayan Valley in northern Luzon and the Cotabato and Dayao-Agusan Valleys on Mindanao receive less than 70 inches annually.

#### PHILIPPINES RISK ASSESSMENT

Based on a combination of all major infectious diseases that occur in a country, an overall country risk level is assigned as low, intermediate, high, or highest risk. The Philippines is HIGH RISK for infectious diseases. Diseases of military importance to forces deployed to the Philippines include hepatitis A and E, typhoid/paratyphoid fever, and diarrheal diseases such as cholera, bacterial diarrhea, and protozoal diarrhea, all acquired by consuming contaminated food, water, and dairy products; vector-borne diseases such as malaria, dengue fever, Chikungunya fever, Japanese encephalitis, and scrub typhus which are acquired through the bites of mosquitoes and mites; 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; high heat and humidity; high levels of air pollution in urban areas; and natural disasters.

#### **INCREASED REGIONAL DISEASE THREATS**

There is significant risk in this country for acquiring incapacitating mosquito-borne diseases including dengue fever and malaria. These diseases are transmitted throughout the country year-round, day and night, in both urban and rural areas. The risk for dengue fever is highest in urban environments, and the risk for malaria is highest in rural areas. Although Manila and other major cities are malaria-free, do not stop taking your malaria prevention medication unless directed by your medical authority. The increased risk of these mosquito-borne diseases is elevated during and immediately after the rainy season when the mosquito population increases. Preventing exposure to mosquitoes and other biting vectors at all times and in all areas will help reduce your risk of acquiring vector-borne diseases.

The Philippines is considered one of the most disaster-prone countries in the world. The main hazards are typhoons, storm surges, floods, volcanoes, earthquakes, tsunamis (large tidal waves), and landslides. Although typhoons have been reported during every month of the year, they generally occur from June through November. It is not uncommon for 30 or more of these storms to occur during a single typhoon season.

Trash management has developed into a crisis in Manila due to lack of available disposal sites. The crisis has resulted in an increase in indiscriminate disposal, insect and rodent infestations, and water pollution. The situation will only worsen until an effective solution is employed.

#### 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 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.

#### FOOD-BORNE AND WATER-BORNE DISEASES

The diseases of greatest risk throughout the Philippines are bacterial diarrhea, hepatitis A and typhoid fever associated with contaminated food, water, and ice. Do not consume any food, ice, 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, ice, and food items available in this region, including dairy products, fish, fruits, and vegetables, may contain unsafe levels of pesticides, chemical fertilizers, heavy metals, 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.

#### **VECTOR-BORNE DISEASES**

There are several vector-borne diseases present throughout this region. Significant disease transmission is sustained year-round to include urban areas. The disease threats include <u>malaria</u>, <u>dengue fever</u>, Chikungunya fever, and <u>Japanese encephalitis</u> from mosquitoes and <u>scrub typhus</u> from mites. Many other diseases are spread by the bites of mosquitoes, ticks, sand flies, fleas, mites, and lice. Your 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. Malaria is widespread in this region. 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 tucked into boots, sleeves rolled down, and undershirt tucked into trousers. Wear DEET on exposed skin.

- 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. Venomous sea snakes are found throughout the Philippines coastal waters, including lakes and rivers. 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 spiders capable of inflicting a painful bite and one species capable of inflicting a life-threatening bite are present throughout the country. If possible, avoid sleeping on the ground. Shake out boots, bedding, and clothing prior to use, and never walk barefoot. If bitten, seek medical attention immediately.
- Venomous fish and jellyfish species, some of which can cause fatalities, are found throughout the Philippines. Avoid swimming or wading unless tactically required.
- 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, often with fruit similar in appearance to that of edible 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.

#### **HEAT INJURIES**

High heat and humidity is a significant medical threat when deployed to this region, especially during the early phase of deployment; acclimatization is critical. Individual and unit countermeasures are extremely important. See <a href="GTA 08-05-062">GTA 08-05-062</a> for appropriate countermeasures.

#### SKIN DISEASES

Skin irritations and infections, such as athlete's foot and ringworm, are frequent medical threats during any deployment and are commonly caused by fungi. The best prevention is to maintain clean, dry skin. See <a href="https://gray.org/gt/gt/91-95-062">GTA 08-05-062</a> for additional countermeasure information.

#### 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

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

#### **HIGH ELEVATIONS**

High altitude areas of operation are not likely in this country. If conducting operations at altitudes over 6,000 feet, see <u>GTA 08-05-062</u> and <u>GTA 08-05-060</u>, *A Soldier's Guide to Staying Healthy at High Elevations*, for appropriate countermeasures during high altitude operations.

### **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 <a href="Combat Arms Earplug">Combat Arms Earplug</a> (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.

#### 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 (<a href="DD FORM 2766">DD FORM 2766</a>) 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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