



## THAILAND OVERVIEW

Location – Thailand is located in Southeastern Asia, bordering the Andaman Sea and the Gulf of Thailand, southeast of Burma. Thailand is slightly larger than California.

Climate – Tropical monsoonal climate with four distinct seasons existing in most regions: dry during January and February, hot from March–May, wet from May–October, and cool during November and December. Temperatures rarely drop lower than 55° F or rise higher than 95° F. The humidity is highest from May to October.

Rainfall – Rainfall varies from 40 inches in the northern highlands and Korat Plateau to 120 inches in the western mountains and southern peninsula.

Terrain – Thailand is divided into five geographic regions. The southeast coast is a low fertile plain; the northeastern plateau is an undulating tableland with elevations from 400 to 700 feet; the northern and western mountains have peaks up to 8500 feet; the Central Basin is the most heavily populated area; and peninsular Thailand occupies the northern portion of the Malay Peninsula.

Forces of Nature – Typhoons, flooding, flash flooding

## RISK ASSESSMENT

Thailand is at **HIGH RISK\*** for infectious diseases. Without force health protection measures, mission effectiveness will be adversely impacted.

\*Based on a combination of all major infectious diseases that occur in a country, the Armed Forces Medical Intelligence Center (AFMIC) assigns an **overall country risk level** of low, intermediate, high, or very high risk, as compared to other countries.

## INFECTIOUS DISEASES

### Food-borne and Water-borne Diseases

Consuming contaminated food, water, or ice

**Diarrhea, bacterial** – A potential attack rate of over 50 percent a month could occur if local food, water or ice is consumed.

- Threat year-round; countrywide
- Symptoms – loose, watery or explosive bowel movements
- Recovery of 1–3 days with antibiotics

**Hepatitis A** – A potential attack rate of 1–10 percent could occur among unvaccinated personnel if local food, water or ice is consumed.

### Food-borne and Water-borne Diseases (Continued)

- Threat year-round; countrywide
- Symptoms – none to flu-like illness
- Severe, 1–4 weeks recovery, sometimes initially requiring hospitalization

Prevention – Consume only U.S. military-approved food, water, and ice; **hepatitis A vaccine** if directed by medical authority.

### Vector-borne Diseases

Greatest threat:

Dengue fever – High number of cases possible

- Threat year-round; especially during warmer, wetter months (May–October); countrywide, especially in rural and urban yards/homes
- Transmission – day-biting mosquitoes
- Symptoms – debilitating fever, severe muscle pain, severe headache, rash
- Hospitalization of 1–7 days likely

**Japanese encephalitis** – Small number of cases possible

- Threat year-round, especially during warm, wet months (May–October); countrywide, primarily in rural areas
- Transmission – night-biting mosquitoes
- Symptoms – often severe with permanent disability; fever, headache, brain inflammation, paralysis, seizures, coma, death
- Hospitalization of over 7 days, often requiring intensive care; many cases preclude return to duty.

**Malaria** – High number of cases possible

- Threat year-round, especially during warm, wet months (May–October); countrywide, primarily in rural areas
- Transmission – night-biting mosquitoes
- Symptoms – fever, chills, sweats; mild to severe, including coma and death
- Hospitalization of 1–7 days likely; prolonged recovery or death possible.

Others: A small, rare, or undetermined number of cases could occur: Chikungunya (mosquito-borne); murine typhus (flea-borne); rickettsioses (spotted fever group; tick-borne); scrub typhus (mite-borne).

Prevention – **DEET** on exposed skin; **permethrin-treated uniforms; permethrin-treated bed nets; malaria prevention pills, as prescribed (critical).**

### Animal Contact Diseases

**Rabies** – Exposure to virus-laden saliva of an infected animal through a bite, scratch or through breathing airborne droplets; risk is among the highest in the world.

- Threat year-round; countrywide
- Initial symptoms – pain, tingling, or itching from bite site; chills, fever, muscle aches
- Death likely in the absence of post-exposure prophylaxis

Prevention – Avoid all animals; if scratched or bitten, seek medical attention immediately; pre- and/or post-exposure vaccinations if prescribed by medical authority.

### Respiratory Diseases

Avian influenza (H5N1) – Rare cases could occur in U.S. forces exposed to poultry flocks.

- New, highly lethal flu strain emerging in Southeast Asia
- Cases have occurred in poultry and humans in Thailand, with a 50 percent fatality rate in humans.
- Transmission – close contact with infected poultry, or consumption of infected poultry products
- Not yet reported to be contagious (person-to-person transmission)

Prevention – Avoid any contact with indigenous poultry; consume only U.S. military-approved poultry and poultry products.

**Tuberculosis** – Breathing contaminated air droplets from other people (coughing/sneezing)

- Threat year-round; countrywide
- Highest threat from prolonged close contact with local populations
- Symptoms – none to cough, chest pain, breathlessness, night sweats
- Severe illness or death if not treated

Prevention – Avoid close contact with local populations; early detection/treatment reduces severity.

### Sexually Transmitted Diseases

**Hepatitis B** – Unprotected sexual contact with infected person; contact with infected blood/body fluids. Less than 1 percent per month attack rate could occur among unvaccinated personnel.

- Threat year-round; countrywide
- Symptoms – jaundice, fatigue, nausea
- Recovery of 1–4 weeks; occasional hospitalization; possible permanent liver damage