

# Brazil

## Medical Summary

*The health risk information presented here is summarized from Shoreland Travax<sup>®</sup>, a decision-support tool used by health care providers to perform a detailed health risk analysis based on specific locations, individual travel styles, and traveler risk behaviors. Travax provides practitioners current, independently researched malaria risk and prevention recommendations in a map-based format that goes beyond the annual WHO and US CDC statements included here. Not included here are current reports from Travax of disease outbreaks or environmental events that may pose elevated risks to travelers' health and safety. The Providers section of this site offers a directory of health care providers who utilize Shoreland Travax for travel health counseling. Learn more about the detailed reports and maps available from these practitioners (includes links to samples).*

## General Information

Brazil is a developing nation classified as upper middle income. Located in eastern South America (north of Paraguay and south of Venezuela), the climate is extremely diverse with classifications that range from humid temperate (no dry season) to humid equatorial (no dry season).

## Vaccinations

**Routine vaccinations** are essential due to a persistent rise of vaccine-preventable diseases (especially markedly high rates of diphtheria, pertussis, and measles) globally. Prior to travel, travelers should be up-to-date with the age-appropriate routine vaccinations recommended by their home country, which may include: COVID-19; *H. influenzae* type B (Hib); hepatitis A; hepatitis B; herpes zoster; human papillomavirus; influenza; measles, mumps, rubella; meningococcal; pneumococcal; polio; rotavirus; tetanus, diphtheria, pertussis (Tdap preferred; consider an early pertussis booster for high-risk travelers); varicella.

## Yellow Fever

Vaccination is usually recommended if you'll be traveling in areas where there is risk of yellow fever transmission.

- *Requirement:* No requirement for any traveler.
- *Official Status:* listed by WHO as a country where YF transmission risk is present.

## Other Vaccines

Depending on your itinerary, your personal risk factors, and the length of your visit, your health care provider may offer you vaccination against chikungunya, dengue, mpox, rabies, or typhoid fever.

## Malaria

The following is current information as reported by the World Health Organization (WHO) and the US Centers for Disease Control (CDC):

### WHO—*International Travel and Health* (current online update, Country List)

(2022) According to 2021 data, malaria risk due to *P. vivax* (83%), *P. falciparum* and mixed infections (17%) exists in most forested areas below 900 m within in eight states of the administrative region of Amazonas (Acre, Amapá, Amazonas, Maranhão, Mato Grosso [northern part], Pará, Rondônia and Roraima). Transmission intensity varies from one municipality to another and is higher in jungle-mining areas, in agricultural settlements, in indigenous areas, and in some peripheral urban areas, including the large cities of Cruzeiro do Sul, Manaus, Porto Velho, Boa Vista, Macapá, Marabá and Rio Branco. *P. vivax* and *P. falciparum* are co-circulating in the above-mentioned areas. *P. falciparum* circulating in Brazil is resistant to chloroquine, hence the use of this drug for chemoprophylactic purposes is not recommended. In the states outside the administrative region of Amazonas, the risk of malaria transmission is negligible or non-existent, but there is a residual risk of *P. vivax* transmission in Atlantic forest areas of the states of São Paulo, Minas Gerais, Rio de Janeiro and Espírito Santo. Detailed information on the epidemiological situation of malaria in Brazil is available at [www.saude.gov.br/malaria](http://www.saude.gov.br/malaria).

- Recommended prevention in *P. vivax* and *P. falciparum* risk areas: **C** – Risk of *P. falciparum* malaria. Mosquito-bite prevention plus atovaquone-proguanil or doxycycline or mefloquine chemoprophylaxis (select according to drug-resistance pattern, reported side-effects and contraindications).<sup>a, b</sup>
- Recommended prevention according to the level of risk in the area visited: **A** – Very limited risk of malaria transmission. Mosquito-bite prevention only.

<sup>a</sup>Alternatively, for travel to rural areas with low risk of malaria infection, mosquito bite prevention can be combined with stand-by emergency treatment (SBET).

<sup>b</sup>In certain areas with multidrug-resistant malaria, mefloquine chemoprophylaxis is no longer recommended. At present, these areas include Cambodia, south-eastern Myanmar and Thailand.

*WHO Country List footnote:* When available, the date of the most recent update or confirmation is indicated in parentheses in the country list. If no accurate date is indicated, the most recent update or confirmation was provided prior to 2013.

## CDC—Health Information for International Travel (current online edition)

### Transmission areas

- All areas in the states of Acre, Amapá, Amazonas, Rondônia, and Roraima
- Present in the states of Maranhão, Mato Grosso, and Pará, but rare cases in their capital cities (São Luis [capital of Maranhão], Cuiabá [capital of Mato Grosso], Belém [capital of Pará])
- Rare cases and sporadic foci of transmission in rural and forested areas in the states of Espírito Santo, Goiás, Minas Gerais, Mato Grosso do Sul, Piauí, Rio de Janeiro, São Paulo, and Tocantins
- No malaria transmission in the cities of Brasília (the capital), Rio de Janeiro, or São Paulo
- No malaria transmission at Iguaçu Falls

### Drug resistance<sup>2</sup>

- Chloroquine

### Species

- *P. vivax* (90%)
- *P. falciparum* (10%)

### Recommended chemoprophylaxis

- Atovaquone-proguanil, doxycycline, mefloquine, tafenoquine<sup>3</sup>
- Areas with rare cases: No chemoprophylaxis recommended (insect bite precautions and mosquito avoidance only)<sup>4</sup>

<sup>2</sup> Refers to *P. falciparum* malaria, unless otherwise noted.

<sup>3</sup> Tafenoquine can cause potentially life-threatening hemolysis in people with glucose-6-phosphate-dehydrogenase (G6PD) deficiency. Rule out G6PD deficiency with a quantitative laboratory test before prescribing tafenoquine to patients.

<sup>4</sup> Mosquito avoidance includes applying topical mosquito repellent, sleeping under an insecticide-treated mosquito net, and wearing protective clothing (e.g., long pants and socks, long-sleeve shirt). For additional details on insect bite precautions, see Sec. 4, Ch. 6, Mosquitoes, Ticks & Other Arthropods.

## Other Concerns

### Travelers' Diarrhea

Moderate risk exists throughout the country, including in deluxe accommodations. Community sanitation and food safety measures may be inadequate. Some itineraries (e.g., remote destinations, austere accommodations) and activities (e.g., ecotourism, eating street or local-market food) further increase risk.

Travelers should observe food and beverage precautions, which reduce the likelihood of illness.

Travelers should carry loperamide for self-treatment of diarrhea and, if risk is moderate to high, an antibiotic to add if diarrhea is severe. Consult a knowledgeable health care provider regarding which antibiotic is appropriate for you and most effective for your destination.

## Other Food-Borne Illnesses

Precautions to prevent brucellosis, seafood poisoning may be needed.

## Insect- and Arthropod-Borne Diseases

Chagas' disease (American trypanosomiasis), leishmaniasis, mayaro virus, onchocerciasis, Oropouche fever, Rocky Mountain spotted fever, West Nile virus, Zika may pose a risk. Personal protective measures are important.

## Other Disease and Health Risks

Additional concerns include air pollution, anthrax disease, hantavirus, helminths, hepatitis C, leptospirosis, marine hazards, melioidosis, plague, schistosomiasis, sexually transmitted infections, snakebites, tuberculosis.

## Safety and Security

### Key Safety Risks

- Road conditions and traffic collisions
- Public transportation
- Petty crime
- Heightened crime risk for women
- Food and beverage spiking
- Theft of vehicles
- Scams
- Natural disasters

### Key Security Threats

- Risk of cross-border threats in areas bordering Colombia and Venezuela
- Violent crime
- Random acts of armed violence

### Emergency Contacts

The police emergency number is 190; major cities have English-speaking tourist police.