

# India

## 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

India is a developing nation classified as lower middle income. Located in southern Asia (between the Arabian Sea and the Bay of Bengal), the climate is extremely diverse with classifications that range from humid equatorial (no dry season) to subtropical dry winter.

## Vaccinations

Routine vaccinations are essential due to a persistent global rise of vaccine-preventable diseases (**especially markedly high rates of diphtheria, pertussis, and measles**). Prior to travel, travelers should be up-to-date with the age-appropriate and risk-based routine vaccinations recommended by their home country, which may include:

- COVID-19
- *H. influenzae* type B (Hib)
- Hepatitis A
- Hepatitis B: Protection is especially important for those at increased risk.
- Herpes zoster
- Human papillomavirus
- Influenza
- Measles, mumps, rubella: A single early dose is recommended for travelers aged 6-11 months.
- Meningococcal
- Pneumococcal
- Polio
- Rotavirus
- Tetanus, diphtheria, pertussis: Tdap preferred; consider an early pertussis booster for high-risk travelers.
- Varicella

## Yellow Fever

Although yellow fever does not occur in India, an official yellow fever vaccination certificate may be required depending on your itinerary.

- *Requirement:* A certificate proving yellow fever vaccination is required for travelers aged  $\geq 9$  months arriving within 6 days of departure from countries with risk of YF transmission. Note: At the discretion of the local Health Officer, this requirement may apply to air passengers who have transited risk countries and to persons who arrive on craft (plane or ship) originating in or transiting risk countries that were not properly disinfected following WHO guidelines or Indian regulations. In addition, some airlines may impose a boarding requirement for a vaccination certificate for passengers transiting a risk country en route to India.

## 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, cholera, dengue, Japanese encephalitis, mpox, rabies, typhoid fever, or a one time polio booster if you haven't previously received one for travel.

## 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)

(2019) Malaria risk due to *P. falciparum* and *P. vivax* exists throughout the year in the entire country below 2000 m. The majority of malaria in India is reported from the eastern and central parts of the country and from states which have large forest, hilly and tribal areas. These states include Odisha, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra and some north-eastern states such as Tripura, Meghalaya and Mizoram. There is no transmission in parts of the states of Himachal Pradesh, Jammu and Kashmir, and Sikkim.

- Recommended prevention in 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>

<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

- Throughout the country, including the cities of Bombay (Mumbai) and New Delhi (the capital)
- No malaria transmission in areas > 2,000 m (> 6,500 ft) elevation, which include areas in Arunachal Pradesh, Himachal Pradesh, Jammu and Kashmir, Kerala, Ladakh, Sikkim, Tamil Nadu, or Uttarakhand

#### Drug resistance<sup>1</sup>

- Chloroquine

#### Species

- *P. falciparum* (60%)
- *P. vivax* (40%)
- *P. malariae* and *P. ovale* (rare)

#### Recommended chemoprophylaxis

- Atovaquone-proguanil, doxycycline, mefloquine, tafenoquine<sup>2</sup>

<sup>1</sup> Refers to *P. falciparum* malaria, unless otherwise noted.

<sup>2</sup> Tafenoquine can cause potentially life-threatening hemolysis in people with glucose-6-phosphate-dehydrogenase (G6PD) deficiency. Test for G6PD deficiency with a quantitative laboratory test before prescribing tafenoquine to patients.

## Other Concerns

### Travelers' Diarrhea

High risk exists throughout the country, including in deluxe accommodations. Community sanitation and food safety measures are generally 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

Leishmaniasis, Lyme disease, 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, avian influenza, Crimean-Congo hemorrhagic fever, hantavirus, helminths, leptospirosis, marine hazards, melioidosis, monkey bites, Nipah virus, plague, schistosomiasis, sexually transmitted infections, snakebites, tuberculosis.

## Safety and Security

### Key Safety Risks

- Road conditions and traffic collisions
- Public transportation
- Maritime safety
- Petty crime
- Heightened crime risk for women
- Heightened crime risk for LGBTQ+ travelers
- Food and beverage spiking
- Scams
- Cybersecurity
- Natural disasters

### Key Security Threats

- Terrorist attacks by domestic and/or transnational groups
- Risk of violent civil unrest
- Risk of violent protests
- Potential spillover of armed conflict
- Cross-border threats in areas bordering Pakistan
- Explosions in public places
- Landmines/unexploded ordnance
- Occasional violent crime

### Emergency Contacts

The national emergency number is 112.