

# Country list<sup>1</sup>

## Yellow fever vaccination requirements and recommendations; and malaria situation

### Introduction

The information provided for each country includes the country's stated requirements for mandatory yellow fever vaccination, WHO recommendation for travellers regarding yellow fever vaccinations and details concerning the malaria situation and recommended prevention of the disease.<sup>2,3</sup>

### Yellow fever

The risk of yellow fever transmission depends on the presence of the virus in the country either in humans, mosquitoes or animals. WHO will determine those areas where "a risk of yellow fever transmission is present" based on the following criteria: yellow fever has been reported currently or in the past plus vectors and animal reservoirs currently exist.

### Yellow fever vaccination

Yellow fever vaccination is carried out for two different purposes:

- 1) To prevent the international spread of the disease by *protecting countries* from the risk of importing or spreading the yellow fever virus. These are mandatory requirements established by the country.

The countries that require proof of vaccination<sup>2</sup> are those where the disease may or may not occur and where the mosquito vector and potential non-human

<sup>1</sup> For the purpose of this publication, the terms "country and countries" covers countries, territories and areas.

<sup>2</sup> Please note that the requirements for vaccination of infants over 6 months of age by some countries are not in accordance with WHO's advice (see Chapter 6). Travellers should however be informed that the requirement exists for entry into the countries concerned.

<sup>3</sup> WHO publishes these requirements for informational purposes only; this publication does not constitute an endorsement or confirmation that such requirements are in accordance with the provisions of the IHR (2005).

primate hosts of yellow fever are present. Consequently, any importation of the virus by an infected traveller could result in its propagation and establishment, leading to a permanent risk of infection for the human population. Proof of vaccination is often required for travellers coming from countries with risk of yellow fever transmission (including, sometimes, for travellers transiting through such countries). However, some countries require proof of vaccination from all travellers. The international yellow fever vaccination certificate becomes valid 10 days after vaccination and remains valid for a period of 10 years. Countries requiring yellow fever vaccination for entry do so in accordance with the International Health Regulations. Country requirements are subject to change at any time. Updates can be found at [www.who.int/ith](http://www.who.int/ith). The country list in this chapter contains information on yellow fever requirements as provided by countries.

Travellers who possess an exemption from yellow fever vaccination, signed by an authorized medical officer or an authorized health worker, may nevertheless be allowed entry into a country, but may be required to be quarantined for not more than six days, reckoned from the date of last possible exposure to infection, or be placed under surveillance or required to report fever or other symptoms to the competent authority. Such travellers should be provided with information on how to protect themselves from yellow fever vectors.

2) *To protect individual travellers* who may be exposed to yellow fever infection

As yellow fever is frequently fatal for those who have not been vaccinated, vaccination is recommended for all travellers (with few exceptions - see Chapter 6) visiting areas where there is a risk of yellow fever transmission. An individual risk assessment based on duration of travel, activities during travel, risk of exposure, medical history, age and previous immunization status is indicated.

**The fact that a country has no mandatory requirement for vaccination does not imply that there is no risk of yellow fever transmission.**

Annex 1 provides a summary list of countries with risk of yellow fever transmission in whole or in part as well as a list of countries that require proof of yellow fever vaccination as a condition for entry.

### Other diseases

*Cholera*. No country reports a requirement for a certificate of vaccination against cholera as a condition for entry. For information on selective use of cholera vaccines, see Chapter 6.

*Smallpox.* Since the global eradication of smallpox was certified in 1980, WHO does not recommend smallpox vaccination for travellers.

*Other infectious diseases.* Information on the main infectious disease threats for travellers, their geographical distribution, and corresponding precautions are provided in Chapter 5. Chapter 6 provides information on vaccine-preventable diseases.

### Malaria

General information about the disease, its geographical distribution and details of preventive measures are included in Chapter 7. Protective measures against mosquito bites are described in Chapter 3. Specific information for each country is provided in this section, including epidemiological details for all countries with malarious areas (geographical and seasonal distribution, altitude, predominant species, reported resistance). The recommended prevention is also indicated. The recommended prevention for each country is decided on the basis of the following factors: the risk of contracting malaria; the prevailing species of malaria parasites in the area; the level and spread of drug resistance reported from the country; and the possible risk of serious side-effects resulting from the use of the various prophylactic drugs. Where *Plasmodium falciparum* and *P. vivax* both occur, prevention of falciparum malaria takes priority.

The numbers I, II, III and IV refer to the type of prevention based on the table below.

|                 | Malaria risk  | Type of prevention   |
|-----------------|---|--|
| <b>Type I</b>   | Very limited risk of malaria transmission   | Mosquito bite prevention only  |
| <b>Type II</b>  | Risk of <i>P. vivax</i> malaria only; or fully chloroquine-sensitive <i>P. falciparum</i>   | Mosquito bite prevention plus chloroquine chemoprophylaxis   |
| <b>Type III</b> | Risk of <i>P. vivax</i> and <i>P. falciparum</i> malaria transmission, combined with emerging chloroquine resistance  | Mosquito bite prevention plus chloroquine+proguanil chemoprophylaxis   |
| <b>Type IV</b>  | (1) High risk of <i>P. falciparum</i> malaria, in combination with reported antimalarial drug resistance; or<br>(2) Moderate/low risk of <i>P. falciparum</i> malaria, in combination with reported high levels of drug resistance <sup>1</sup> | Mosquito bite prevention plus mefloquine, doxycycline or atovaquone-proguanil chemoprophylaxis (select according to reported resistance pattern) |

<sup>1</sup> Alternatively, when travelling to rural areas with multidrug-resistant malaria and only a very low risk of *P. falciparum* infection, mosquito bite prevention can be combined with stand-by emergency treatment.

## COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

### AFGHANISTAN

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—*P. falciparum* and *P. vivax*—exists from May through November below 2000 m. *P. falciparum* resistant to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**

### ALBANIA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

### ALGERIA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk is limited. Small foci of local transmission (*P. vivax*) have previously been reported in the 6 southern and south-eastern wilayas (Adrar, El Oued, Ghardaia, Illizi, Ouargla, Tamanrasset), with isolated local *P. falciparum* transmission reported from the two southernmost wilayas in areas under influence of trans-Saharan migration. One locally acquired case was reported in 2006.

Recommended prevention in risk areas: **I**

### AMERICAN SAMOA

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### ANDORRA

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### ANGOLA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

### ANGUILLA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

### ANTIGUA AND BARBUDA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

### ARGENTINA

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: yes. Yellow fever vaccination is recommended for all travellers  $\geq 9$  months of age who are going to the northern and north-eastern forested areas of Argentina, including Iguazu Falls and all areas bordering Brazil and Paraguay. These areas include all departments of Misiones and Formosa Provinces; and the Department of Bermejo in Chaco Province; Departments of Berón de Astrada, Capital, General Alvear, General Paz, Ituzaingó, Itatí, Paso de los Libres, San Cosme, San Miguel, San Martín and Santo Tomé in Corrientes Province; departments of Valle Grande, Ledesma, Santa Bárbara and San Pedro in Jujuy Province; and departments of General José de San Martín, Orán, Rivadavia and Anta in Salta Province.

**Malaria:** Malaria risk—exclusively due to *P. vivax*—is very low and is confined to rural areas along the borders with Bolivia (lowlands of Jujuy and Salta provinces) and with Paraguay (lowlands of Corrientes and Misiones provinces).

Recommended prevention in risk areas: **II**

#### ARMENIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. vivax*—may exist focally from June through October in some villages located in Ararat Valley, mainly in the Masis district. No risk in tourist areas. No indigenous cases reported since 2006.

Recommended prevention in risk areas: **I**

#### AUSTRALIA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age entering Australia within 6 days of having stayed overnight or longer in a country with risk of yellow fever transmission, as listed in the *Weekly Epidemiological Record*.

Yellow fever vaccine recommendation: no

#### AUSTRIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### AZERBAIJAN

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. vivax*—exists from June through October in lowland areas, mainly in the area between the Kura and the Arax rivers.

Recommended prevention in risk areas: **II**

#### AZORES *see* PORTUGAL

#### BAHAMAS

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Sporadic local transmission of *P. falciparum* has been reported in recent years on Great Exuma island only, subsequent to international importation of parasites. No risk on other islands.

Recommended prevention on Great Exuma: **I**

#### BAHRAIN

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### BANGLADESH

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk exists throughout the year in the whole country excluding Dhaka city. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **IV**

#### BARBADOS

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### BELARUS

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

## COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

### BELGIUM

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### BELIZE

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. vivax*—exists in all districts but varies within regions. Risk is highest in Toledo and Stan Creek Districts; moderate in Cayo; and low in Belize District, Corozal and Orange Walk. No resistant *P. falciparum* strains reported.

Recommended prevention in risk areas: **II**

### BENIN

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

### BERMUDA

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### BHUTAN

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk exists throughout the year in the southern belt of the country comprising five districts: Chhukha, Samchi, Samdrup Jonkhar, Geyleg-phug and Shemgang. *P. falciparum*

resistant to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**

### BOLIVIA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes - recommended for incoming travellers visiting risk areas such as the province of Beni, Cochabamba and Santa Cruz, and the subtropical part of La Paz province. This does not include the cities of La Paz or Sucre.

**Malaria:** Malaria risk—predominantly due to *P. vivax* (89%)—exists throughout the year in the whole country below 2500 m. Falciparum malaria occurs in Santa Cruz and in the northern departments of Beni and Pando, especially in the localities of Guayaramerín, Itinez and Riberalta. *P. falciparum* resistant to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **II**; in Beni, Pando and Santa Cruz, **IV**.

### BOSNIA AND HERZEGOVINA

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### BOTSWANA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from or having passed through countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists from November to May/June in the northern parts of the country: Boteti, Chobe, Ngamiland, Okavango, Tutume districts/sub-districts. Chloroquine-resistant *P. falciparum* reported.

Recommended prevention in risk areas: **IV**

**BRAZIL****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: yes - for travellers over 9 months of age going to the following areas at risk for yellow fever transmission, including the ENTIRE states of Acre, Amapá, Amazonas, Distrito Federal (including the capital city of Brasília), Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Rondônia, Roraima and Tocantins, and the designated areas of the following states: north-west and west Bahia, central and west Paraná, south-west Piauí, north-west and west central Rio Grande do Sul, far west Santa Catarina, and north and west São Paulo. Vaccination is recommended for travellers visiting Iguaçu Falls. Vaccination is not recommended for travel to the following coastal cities: Rio de Janeiro, São Paulo, Salvador, Recife and Fortaleza.

**Malaria:** In the states outside "Legal Amazonia", the risk of malaria transmission is negligible or non-existent. Malaria risk—*P. vivax* (80%), *P. falciparum* (19%)—is present in most forested areas below 900 m within the nine states of the "Legal Amazonia" region (Acre, Amapá, Amazonas, Maranhão (western part), Mato Grosso (northern part), Pará (except Belém City), Rondônia, Roraima and Tocantins (western part)). Transmission intensity varies from one municipality to another, and is higher in jungle areas of mining, agricultural settlements less than 5 years old, and in some peripheral urban areas of Manaus, Pôrto Velho and Cruzeiro do Sul. Malaria also occurs on the periphery of large cities such as Boa Vista, Macapá, Marabá, Rio Branco and Santarém. Multidrug-resistant *P. falciparum* reported.

Recommended prevention in risk areas: **IV**

**BRITISH VIRGIN ISLANDS****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**BRUNEI DARUSSALAM****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission or having passed through areas

partly or wholly at risk of yellow fever transmission within the preceding 6 days.

Yellow fever vaccine recommendation: no

**BULGARIA****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**BURKINA FASO****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**BURMA see MYANMAR****BURUNDI****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**CAMBODIA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country except in Phnom Penh and close to Tonle Sap. Risk within the tourist area of Angkor Wat is limited. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported.

COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

Resistance to mefloquine and tolerance to artesunate reported in south-western provinces.

Recommended prevention in risk areas: **IV**

**CAMEROON**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**CANADA**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CANARY ISLANDS** *see* SPAIN

**CAPE VERDE**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Limited malaria risk—predominantly due to *P. falciparum*—exists from August through November in São Tiago island.

Recommended prevention in risk areas: **I**

**CAYMAN ISLANDS**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CENTRAL AFRICAN REPUBLIC**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**CHAD**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age travelling to southern areas of the Sahara desert.

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**CHILE**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CHINA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—including *P. falciparum* malaria—occurs in Hainan and Yunnan. Chloroquine and sulfadoxine–pyrimethamine resistant *P. falciparum* reported. Limited risk of *P. vivax* malaria exists in southern and some central provinces, including Anhui, Henan, Hubei, Guizhou and Jiangsu. The risk may be higher in areas of focal outbreaks. There is no malaria risk in urban areas.

Recommended prevention in risk areas: **II**; in Hainan and Yunnan, **IV**

**CHINA, HONG KONG SAR**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CHINA, MACAO SAR****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CHRISTMAS ISLAND**

(Indian Ocean)

**Yellow fever**

Same requirements as mainland Australia.

Yellow fever vaccine recommendation: no

**COLOMBIA****Yellow fever**

Country requirement: no

Yellow fever vaccination recommendation: yes; recommended for travellers visiting the following areas, considered at risk of yellow fever: middle valley of the Magdalena river, eastern and western foothills of the Cordillera Oriental from the frontier with Ecuador to that with Venezuela, Chocoano and Antioqueño, Urabá, foothills of the Sierra Nevada de Santa Narta, eastern plains (Orinoquia and Amazonia).

**Malaria:** Malaria risk—*P. vivax* (72%), *P. falciparum* (27%)—is high throughout the year in rural/jungle areas below 1600 m, especially in municipalities of the regions of Amazonia, Orinoquia, Pacífico and Urabá-Bajo Cauca. Transmission intensity varies by department, with the highest risk in Antioquia, Arauca, Chocó, Córdoba, Guaviare, Meta, Nariño, Putomayo, Valle del Cauca and Vichada. Chloroquine-resistant *P. falciparum* exists in Amazonia, Pacífico and Urabá-Bajo Cauca. Resistance to sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **III**; in Amazonia, Pacífico and Urabá-Bajo Cauca, **IV**

**COMOROS****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**198****CONGO****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**COOK ISLANDS****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**COSTA RICA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission. No certificate is required for travellers below the age of 9 months and over the age of 60, pregnant or lactating women, persons with immunosuppression, asymptomatic HIV infection, thymus diseases, history of adverse reactions associated with the yellow fever vaccine or of allergy to egg or gelatine.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—almost exclusively due to *P. vivax*—occurs throughout the year in the province of Limón, with highest risk in the canton of Matina followed by the cantons of Guacimo, Limón and Talamanca. Negligible or no risk of malaria transmission exists in the other cantons of the country.

Recommended prevention in risk areas: **II**

**CÔTE D'IVOIRE****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the

COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**CROATIA**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CUBA**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CYPRUS**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**CZECH REPUBLIC**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**DEMOCRATIC PEOPLE'S  
REPUBLIC OF KOREA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Limited malaria risk—exclusively due to *P. vivax*—exists in some southern areas.

Recommended prevention in risk areas: **I**

**DEMOCRATIC REPUBLIC  
OF THE CONGO (FORMERLY ZAIRE)**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the

whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**DENMARK**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**DJIBOUTI**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**DOMINICA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**DOMINICAN REPUBLIC**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. falciparum*—exists throughout the year, especially in the western provinces of Azua, Bahoruco and Dajabón and in La Altagracia province. Risk in other areas is low to negligible. There is no evidence of *P. falciparum* resistance to any antimalarial drug.

Recommended prevention in risk areas: **II**

**ECUADOR**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever

transmission. Nationals and residents of Ecuador are required to possess certificates of vaccination on their departure to an area with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes; recommended when travelling to provinces in the Amazon Basin (Orellana, Morona, Napo, Pastaza, Sucumbíos and Zamora) and to other areas in the eastern part of the Andes mountains. There is no risk of yellow fever transmission in the cities of Guayaquil and Quito or in the Galapagos islands.

**Malaria:** Malaria risk—*P. vivax* (88%), *P. falciparum* (12%)—exists throughout the year below 1500 m, with moderate transmission risk in coastal provinces. There is no risk in Guayaquil, Quito and cities of inter-Andean region. *P. falciparum* resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **IV**

#### EGYPT

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission. The following countries and areas are regarded as countries with risk of yellow fever transmission;

Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Mali, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan (south of 15°N), Togo, Uganda, United Republic of Tanzania, Zambia.

America: Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela.

Air passengers in transit coming from these countries or areas without a certificate will be detained in the precincts of the airport until they resume their journey.

All arrivals from Sudan are required to possess either a vaccination certificate or a location certificate issued by a Sudanese official centre stating

that they have not been in Sudan south of 15°N within the previous 6 days.

Yellow fever vaccine recommendation: no

**Malaria:** Very limited *P. falciparum* and *P. vivax* malaria risk may exist from June through October in El Faiyûm governorate (no indigenous cases reported since 1998).

Recommended prevention: **none**

#### EL SALVADOR

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 6 months of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Very low malaria risk—almost exclusively due to *P. vivax*—exists in rural areas of migratory influence from Guatemala. Sporadic vivax malaria cases are reported from other parts of the country.

Recommended prevention in risk areas: **I**

#### EQUATORIAL GUINEA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

#### ERITREA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country below 2200 m. There is no risk in Asmara. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **IV**

COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

**ESTONIA**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**ETHIOPIA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country below 2000 m. *P. falciparum* resistance to chloroquine and sulfadoxine-pyrimethamine reported. There is no malaria risk in Addis Ababa.

Recommended prevention in risk areas: **IV**

**FALKLAND ISLANDS (MALVINAS)**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**FAROE ISLANDS**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**FIJI**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age entering Fiji within 10 days of having stayed overnight or longer in countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**FINLAND**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**FRANCE**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**FRENCH GUIANA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—*P. falciparum* (45%), *P. vivax* (55%)—is high throughout the year in nine municipalities of the territory bordering Brazil (Oiapoque river valley) and Suriname (Maroni river valley). In the other 13 municipalities transmission risk is low or negligible. Multidrug-resistant *P. falciparum* reported in areas influenced by Brazilian migration.

Recommended prevention in risk areas: **IV**

**FRENCH POLYNESIA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**GABON**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**GALAPAGOS ISLANDS see EQUADOR**

**GAMBIA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age arriving from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

#### GEORGIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. vivax*—exists focally from July to October in the south-eastern part of the country.

Recommended prevention in risk areas: **I**

#### GERMANY

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### GHANA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from all travellers.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

#### GIBRALTAR

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### GREECE

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### GREENLAND

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### GRENADA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### GUADELOUPE

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### GUAM

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### GUATEMALA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. vivax*—exists throughout the year below 1500 m. There is moderate to high risk in the departments of Alta Verapaz, Baja Verapaz, Escuintla, Izabal, Petén, Quiché (Ixcan) and Retalhuleu.

Recommended prevention in risk areas: **II**

#### GUINEA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine reported.

Recommended prevention: **IV**

## COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

### GUINEA-BISSAU

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission, and from the following countries:

Africa: Angola, Benin, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Madagascar, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Togo, Uganda, United Republic of Tanzania, Zambia.

America: Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Venezuela.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

### GUYANA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission with the exception of Trinidad and Tobago, Paraguay and Argentina. A YF certificate of vaccination is also required for travellers from Belize.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—*P. falciparum* (50%), *P. vivax* (50%)—is high throughout the year in all parts of the interior. Highest risk occurs in Regions 1, 7, 8 and 9; moderate risk in Region 2 and 10; and very low risk in Regions 3, 4, 5 and 6. Sporadic cases of malaria have been reported from the densely populated coastal belt. Chloroquine-resistant *P. falciparum* reported.

Recommended prevention in risk areas: **IV**

### HAITI

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. falciparum*—exists throughout the year in the whole country, including coastal and border zones. Risk in the main urban areas of Port-au-Prince is considered to be very low. No *P. falciparum* resistance to chloroquine reported.

Recommended prevention in risk areas: **II**

### HONDURAS

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over the age of 1 coming from countries with risk of yellow fever transmission, with the exception of Panama, from where it is only recommended.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria transmission risk due to *P. vivax* is high in the departments of Colón, Gracias a Dios and Islas de la Bahía; and moderate in Atlántida and Olancho. *P. falciparum* transmission risk is high in Colón, Comayagua, and Gracias a Dios; and moderate in Atlántida and Olancho.

Recommended prevention in risk areas: **II**

### HONG KONG SPECIAL ADMINISTRATIVE REGION OF CHINA see CHINA, HONG KONG SAR

### HUNGARY

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### ICELAND

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### INDIA

#### Yellow fever

Country requirement: Anyone (except infants up to the age of 6 months) arriving by air or sea without a certificate is detained in isolation for up to 6 days if that person (i) arrives within 6 days of departure from an area with risk of yellow fever transmission, or (ii) has been in such an area in transit (except those passengers and members

of the crew who, while in transit through an airport situated in an area with risk of yellow fever transmission, remained within the airport premises during the period of their entire stay and the Health Officer agrees to such exemption), or (iii) has come on a ship that started from or touched at any port in a yellow fever area with risk of yellow fever transmission up to 30 days before its arrival in India, unless such a ship has been disinfected in accordance with the procedure laid down by WHO, or (iv) has come by an aircraft which has been in an area with risk of yellow fever transmission and has not been disinfected in accordance with the provisions laid down in the Indian Aircraft Public Health Rules, 1954, or those recommended by WHO. The following countries and areas are regarded as risk of yellow fever transmission:

Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Mali, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Uganda, United Republic of Tanzania, Zambia.

America: Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela.

*Note.* When a case of yellow fever is reported from any country, that country is regarded by the Government of India as a country with risk of yellow fever and is added to the above list.

Yellow fever vaccine recommendations: no

**Malaria:** Malaria risk exists throughout the year in the whole country at altitudes below 2000 m, with overall 40% to 50% of cases due to *P. falciparum* and the remaining due to *P. vivax*. There is no transmission in parts of the states of Himachal Pradesh, Jammu and Kashmir, and Sikkim. Risk of falciparum malaria and drug resistance are relatively higher in the north-eastern states, in Andaman and Nicobar Islands, Chhattisgarh, Goa, Gujarat, Jharkhand, Karnataka (with exception of the city of Bangalore), Madhya Pradesh, Maharashtra (with the exception of the cities of Mumbai, Nagpur, Nasik and Pune), Orissa and West Bengal (with the exception of the city of Kolkata). *P. falciparum*

resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **III**; in the listed higher risk areas: **IV**

#### INDONESIA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 9 months of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk exists throughout the year in all areas of the five eastern provinces of Papua, West Papua, Maluku, North Maluku and East Nusa Tenggara. In the other parts of the country, there is malaria risk in some districts, except in Jakarta Municipality, big cities, and within the areas of the main tourist resorts. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported. *P. vivax* resistant to chloroquine reported.

Recommended prevention in risk areas: **IV**

#### IRAN (ISLAMIC REPUBLIC OF)

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk due to *P. vivax* and *P. falciparum* exists from March through November in rural areas of the provinces of Hormozgan, Kerman (tropical part) and the southern part of Sistan-Baluchestan. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **IV**

#### IRAQ

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Limited malaria risk—exclusively due to *P. vivax*—exists from May through November in areas in the north below 1500 m (Duhok, Erbil and Sulaimaniya provinces).

Recommended prevention in risk areas: **II**

COUNTRY LIST:YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

**IRELAND**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**ISRAEL**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**ITALY**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**JAMAICA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Very limited *P. falciparum* malaria risk may occur in the Kingston St Andrew Parish.

Recommended prevention in risk areas: I

**JAPAN**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**JORDAN**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**KAZAKHSTAN**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**KENYA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

For all travellers  $\geq$  9 months of age. The cities of Nairobi and Mombasa have lower risk of transmission than rural areas.

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Normally, there is little risk in the city of Nairobi and in the highlands (above 2500 m) of Central, Eastern, Nyanza, Rift Valley and Western provinces. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: IV

**KIRIBATI**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**KUWAIT**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**KYRGYZSTAN**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk – exclusively due to *P. vivax*—exists from June through October in some southern and western parts of the country, mainly in areas bordering Tajikistan and Uzbekistan—Batken, Jalal-Abad and Osh regions—and in the outskirts of Bishkek.

Recommended prevention in risk areas: I

**LAO PEOPLE'S DEMOCRATIC REPUBLIC**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country except in Vientiane. Chloroquine and sulfadoxine–pyrimethamine resistant *P. falciparum* reported.

Recommended prevention in risk areas: **IV**

#### LATVIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### LEBANON

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over the age of 6 months coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### LESOTHO

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### LIBERIA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

#### LIBYAN ARAB JAMAHIRIYA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### LIECHTENSTEIN

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### LITHUANIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### LUXEMBOURG

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### MACAO SPECIAL ADMINISTRATIVE REGION OF CHINA *see* CHINA, MACAO SPECIAL ADMINISTRATIVE REGION

#### MADAGASCAR

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country, with the highest risk in the coastal areas. Resistance to chloroquine reported.

Recommended prevention: **IV**

#### MADEIRA ISLANDS *see* PORTUGAL

#### MALAWI

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**MALAYSIA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age arriving within 6 days from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk exists only in limited foci in the deep hinterland. Urban and coastal areas are free from malaria. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported. Human *P. knowlesi* infection reported (see page 156).

Recommended prevention in risk areas: **IV**

**MALDIVES****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**MALI****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age travelling to southern areas of the Sahara desert.

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**MALTA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 9 months of age coming from countries with risk of yellow fever transmission. If indicated on epidemiological grounds, infants under 9 months of age are subject to isolation or surveillance if coming from an area with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**MARSHALL ISLANDS****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**MARTINIQUE****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**MAURITANIA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age travelling to southern areas of the Sahara desert.

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country, except in the northern areas: Dakhlet-Nouadhibou and Tiris-Zemour. In Adrar and Inchiri there is malaria risk during the rainy season (July through October). Resistance to chloroquine reported.

Recommended prevention in risk areas: **IV**

**MAURITIUS****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**MAYOTTE (FRENCH TERRITORIAL COLLECTIVITY)****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**MEXICO****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—almost exclusively due to *P. vivax*—exists throughout the year in some rural areas that are not often visited by tourists. There is high risk in some localities in the states of Chiapas and Oaxaca; moderate risk in the states of Chihuahua, Durango, Sinaloa and Tabasco; and low risk in Jalisco, Nayarit, Quintana Roo and Sonora.

Recommended prevention in risk areas: **II****MICRONESIA (FEDERATED STATES OF)****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**MONACO****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**MONGOLIA****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**MONTENEGRO****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**MONTSERRAT****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**MOROCCO****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Very limited malaria risk—exclusively due to *P. vivax*—may exist from May to October in certain rural areas of Chefchaouen Province (no indigenous cases reported since 2005).

Recommended prevention: **none****MOZAMBIQUE****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV****MYANMAR (FORMERLY BURMA)****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission. Nationals and residents of Myanmar are required to possess certificates of vaccination on their departure to an area with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year at altitudes below 1000 m, excluding the main urban areas of Yangon and Mandalay. Risk is highest in remote rural, hilly and forested areas. *P. falciparum* resistant to chloroquine and sulfadoxine–pyrimethamine reported. Mefloquine resistance reported in Kayin state and the eastern part of Shan state. *P. vivax* with reduced sensitivity to chloroquine reported. Human *P. knowlesi* infection reported (see page 156).

Recommended prevention in risk areas: **IV****NAMIBIA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission. The countries, or parts of countries, included in the endemic zones in Africa and South America

## COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

are regarded as areas with risk of yellow fever transmission. Travellers on scheduled flights that originated outside the countries with risk of yellow fever transmission, but who have been in transit through these areas, are not required to possess a certificate provided that they remained at the scheduled airport or in the adjacent town during transit. All passengers whose flights originated in countries with risk of yellow fever transmission or who have been in transit through these countries on unscheduled flights are required to possess a certificate. The certificate is not insisted upon in the case of children under 1 year of age, but such infants may be subject to surveillance.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists from November to June in the following regions: Ohangwena, Omaheke, Omusati, Oshana, Oshikoto and Otjozondjupa. Risk throughout the year exists along the Kunene river and in Caprivi and Kavango regions. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **IV**

### NAURU

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

### NEPAL

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. vivax*—exists throughout the year in rural areas of the 20 Terai districts bordering with India, with occasional outbreaks of *P. falciparum* from July to October. Seasonal transmission of *P. vivax* takes place in 45 districts of the inner Terai and mid hills. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **III**

### NETHERLANDS

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### NETHERLANDS ANTILLES (BONAIRE, CURAÇAO, SABA, ST EUSTASIUS, ST. MARTIN)

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 6 months of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

### NEW CALEDONIA AND DEPENDENCIES

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

*Note.* In the event of an epidemic threat to the territory, a specific vaccination certificate may be required.

Yellow fever vaccine recommendation: no

### NEW ZEALAND

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### NICARAGUA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. vivax* (92%)—exists throughout the year in a number of municipalities. Moderate to high risk municipalities are mostly in Chinandega, Managua, Matagalpa, León, RA Atlántico Norte and RA Atlántico Sur. Cases are reported from other municipalities in the central and western department but the risk in these areas is considered low or negligible. No chloroquine-resistant *P. falciparum* reported.

Recommended prevention in risk areas: **II**

**NIGER****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age and recommended for travellers leaving Niger.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age travelling to southern areas of the Sahara desert.

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Chloroquine-resistant *P. falciparum* reported.

Recommended prevention: **IV**

**NIGERIA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**NIUE****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**NORFOLK ISLAND** *see* AUSTRALIA**NORTHERN MARIANA ISLANDS****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**NORWAY****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**OMAN****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Sporadic transmission of *P. falciparum* and *P. vivax* reported until 2003, and again in 2007 (4 cases of *P. vivax* only), subsequent to international importation of parasites.

Recommended prevention: **none**

**PAKISTAN****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from any part of a country in which there is a risk of yellow fever transmission; infants under 6 months of age are exempt if the mother's vaccination certificate shows that she was vaccinated before the birth of the child.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—*P. vivax* and *P. falciparum*—exists throughout the year in the whole country below 2000 m. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **IV**

**PALAU****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age coming from countries with risk of yellow fever transmission or from countries in any part of which there is a risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**PANAMA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers coming from countries with risk of yellow fever transmission

Yellow fever vaccination recommendation: yes; for all travellers over 9 months of age travelling to

## COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

the provinces of Comarca Emberá, Darién, Kuna Yala (old San Blas) and Panama east of the Canal Zone, excluding the Canal Zone, Panama City and San Blas Islands.

**Malaria:** Malaria risk—*P. vivax* (97%); *P. falciparum* (3%)—exists throughout the year in provinces along the Atlantic coast and the border with Colombia: Bocas del Toro, Colon, Darién, Ngobe Bugle, Panama and Veraguas. In Panama City, the Canal zone, and in the other provinces there is no or negligible risk of transmission. Chloroquine-resistant *P. falciparum* has been reported in Darién and San Blas provinces.

Recommended prevention in risk areas: **II**; in eastern endemic areas: **IV**

### PAPUA NEW GUINEA

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country below 1800 m. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported. *P. vivax* resistant to chloroquine reported.

Recommended prevention in risk areas: **IV**

### PARAGUAY

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over the age of 1 coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age.

**Malaria:** Malaria risk—almost exclusively due to *P. vivax*—is moderate in certain municipalities of the departments of Alto Paraná, Caaguazú and Canindeyú. In the other departments there is no or negligible transmission risk.

Recommended prevention in risk areas: **II**

### PERU

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: yes; recommended for those who intend to visit the jungle areas of the country below 2300m. Travellers who will only visit the cities of Cuzco and Machu Picchu do not need vaccination.

**Malaria:** Malaria risk—*P. vivax* (85%), *P. falciparum* (15%)—exists throughout the year in rural areas at altitudes below 2000m. The 23 highest risk districts are concentrated in the departments of Ayacucho, Junín, Loreto, Madre de Dios and San Martín. Ninety eight percent of *P. falciparum* cases are reported from Loreto, the department situated in the Amazon which also harbours 18 of the highest risk districts in the country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention in risk areas: **II** in *P. vivax* risk areas; **IV** in Department of Loreto.

### PHILIPPINES

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk exists throughout the year in areas below 600 m, except in the 22 provinces of Aklan, Albay, Benguet, Biliran, Bohol, Camiguin, Capiz, Catanduanes, Cavite, Cebu, Guimaras, Iloilo, Northern Leyte, Southern Leyte, Marinduque, Masbate, Eastern Samar, Northern Samar, Western Samar, Sequijor, Sorsogon, Surigao Del Norte and metropolitan Manila. No risk is considered to exist in urban areas or in the plains. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported. Human *P. knowlesi* infection reported in the province of Palawan (see page 156).

Recommended prevention in risk areas: **IV**

### PITCAIRN

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**POLAND****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**PORTUGAL****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission. The requirement applies only to travellers arriving in or bound for the Azores and Madeira. However, no certificate is required from passengers in transit at Funchal, Porto Santo and Santa Maria.

Yellow fever vaccine recommendation: no

**PUERTO RICO****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**QATAR****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**REPUBLIC OF KOREA****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Limited malaria risk—exclusively due to *P. vivax*—exists mainly in the northern areas of Gangwon Do and Kyunggi Do Provinces.

Recommended prevention in risk areas: **I****REPUBLIC OF MOLDOVA****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**REUNION****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year

of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**ROMANIA****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**RUSSIAN FEDERATION****Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Very limited malaria risk—exclusively due to *P. vivax*—may exist in areas under influence of intense migration from southern countries in the Commonwealth of Independent States.

Recommended prevention: **none****RWANDA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV****SAINT HELENA****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**SAINT KITTS AND NEVIS****Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

COUNTRY LIST:YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

**SAINT LUCIA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**SAINT PIERRE AND MIQUELON**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**SAINT VINCENT AND THE GRENADINES**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**SAMOA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**SAN MARINO**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**SAO TOME AND PRINCIPE**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year. Chloroquine-resistant *P. falciparum* reported.

Recommended prevention: **IV**

**SAUDI ARABIA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in most of the South-western Region (except in the high-altitude areas of Asir Province). No risk in Mecca or Medina cities. Chloroquine-resistant *P. falciparum* reported.

Recommended prevention in risk areas: **IV**

**SENEGAL**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. There is less risk from January through June in the central western regions. Resistance to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: **IV**

**SERBIA**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**SEYCHELLES**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission within the preceding 6 days.

Yellow fever vaccine recommendation: no

**SIERRA LEONE**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from all travellers .

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

#### SINGAPORE

##### Yellow fever

Country requirement: certificates of vaccination are required from travellers over 1 year of age who, within the preceding 6 days, have been in or have passed through any country with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** One case of human *P. knowlesi* infection reported (see page 156).

Recommended prevention in risk areas: **I**

#### SLOVAKIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### SLOVENIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### SOLOMON ISLANDS

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year except in a few eastern and southern outlying islets. *P. falciparum* resistant to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**

#### SOMALIA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Risk is relatively low and seasonal in the north. It is higher in the central and southern part of the country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

#### SOUTH AFRICA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the low altitude areas of Mpumalanga Province (including the Kruger National Park), Northern Province and north-eastern KwaZulu-Natal as far south as the Tugela River. Risk is highest from October to May. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**

#### SPAIN

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### SRI LANKA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Relatively low malaria risk—*P. vivax* (88%), *P. falciparum* (12%)—exists throughout the year, except in the districts of Colombo, Galle, Gampaha, Kalutara, Matara and Nuwara Eliya. *P. falciparum* resistant to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **III**

#### SUDAN

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 9 months

## COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

of age coming from countries with risk of yellow fever transmission. A certificate may be required from travellers leaving Sudan.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age travelling to southern areas of the Sahara desert, excluding the city of Khartoum.

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Risk is low and seasonal in the north. It is higher in the central and southern part of the country. Malaria risk on the Red Sea coast is very limited. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

### SURINAME

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—*P. falciparum* (48%), *P. vivax* (47%)—has decreased in recent years. It occurs throughout the year in the interior of the country beyond the coastal savannah area, with highest risk mainly along the eastern border and in gold mining areas. In Paramaribo city and the other seven coastal districts, transmission risk is low or negligible. Chloroquine, sulfadoxine–pyrimethamine and mefloquine resistant *P. falciparum* reported. Some decline in quinine sensitivity also reported.

Recommended prevention in risk areas: **IV**

### SWAZILAND

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in all low veld areas (mainly Big Bend, Mhlume, Simunye and Tshaneni). Chloroquine-resistant *P. falciparum* reported.

Recommended prevention in risk areas: **IV**

### SWEDEN

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### SWITZERLAND

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

### SYRIAN ARAB REPUBLIC

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Very limited malaria risk—exclusively due to *P. vivax*—may exist from May through October in foci along the northern border, especially in rural areas of El Hasaka Governorate (no indigenous cases reported since 2005).

Recommended prevention: **none**

### TAJIKISTAN

#### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. vivax*—exists from June through October, particularly in southern border areas (Khatlon Region), and in some central (Dushanbe), western (Gorno-Badakhshan), and northern (Leninabad Region) areas. Chloroquine and sulfadoxine–pyrimethamine resistant *P. falciparum* reported in the southern part of the country.

Recommended prevention in risk areas: **III**

### THAILAND

#### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 9 months of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk exists throughout the year in rural, especially forested and hilly, areas of the whole country, mainly towards the international borders, including the southernmost provinces.

There is no risk in cities (e.g. Bangkok, Chiangmai city, Pattaya), Samui island and the main tourist resorts of Phuket island. However, there is a risk in some other areas and islands. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported. Resistance to mefloquine and to quinine reported from areas near the borders with Cambodia and Myanmar. Human *P. knowlesi* infection reported (see page 156).

Recommended prevention in risk areas: I; in areas near Cambodia and Myanmar borders: IV

#### THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### TIMOR-LESTE

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. *P. falciparum* resistant to chloroquine and sulfadoxine-pyrimethamine reported.

Recommended prevention: IV

#### TOGO

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from all travellers over 1 year of age.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Chloroquine-resistant *P. falciparum* reported.

Recommended prevention: IV

#### TOKELAU

Same requirements as New Zealand.

(Non-self governing territory of New Zealand)

#### TONGA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### TRINIDAD AND TOBAGO

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes; for all travellers over 9 months of age whose itinerary includes Trinidad. Vaccination is not recommended for those visiting only Tobago.

#### TUNISIA

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

#### TURKEY

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. vivax*—exists from May to October in the south-eastern part of the country. There is no malaria risk in the main tourist areas in the west and south-west of the country.

Recommended prevention in risk areas: II

#### TURKMENISTAN

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—exclusively due to *P. vivax*—exists from June to October in some villages located in the south-eastern part of the country bordering Afghanistan. No indigenous cases reported since 2006.

Recommended prevention in risk areas: I

COUNTRY LIST: YELLOW FEVER VACCINATION REQUIREMENTS AND RECOMMENDATIONS

**TUVALU**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**UGANDA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country including the main towns of Fort Portal, Jinja, Kampala, Mbale and Kigezi. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

**UKRAINE**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**UNITED ARAB EMIRATES**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**UNITED REPUBLIC OF TANZANIA**

**Yellow fever**

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country below 1800 m. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**

**UNITED KINGDOM (WITH CHANNEL ISLANDS AND ISLE OF MAN)**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**UNITED STATES OF AMERICA**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**URUGUAY**

**Yellow fever**

Country requirement: a yellow fever certificate is required for travellers coming from countries with risk of yellow fever transmission

Yellow fever vaccine recommendation: no

**UZBEKISTAN**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Sporadic autochthonous cases of *P. vivax* malaria are reported in some locations in southern and eastern parts of the country.

Recommended prevention in risk areas: **I**

**VANUATU**

**Yellow fever**

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Low to moderate malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. *P. falciparum* resistant to chloroquine and sulfadoxine–pyrimethamine reported. *P. vivax* resistant to chloroquine reported.

Recommended prevention: **IV**

**VENEZUELA (BOLIVARIAN REPUBLIC OF)**

**Yellow fever**

Country requirement: no.

Yellow fever vaccine recommendation: yes

**Malaria:** Malaria risk due to *P. vivax* (81%) and *P. falciparum* (19%) is moderate to high throughout the year in some rural areas of Amazonas, Bolívar, Delta Amacuro, Monagas and Sucre states. There is low risk in Apure, Anzoátegui, Táchira and Zulia. Risk of *P. falciparum* malaria is mostly restricted to municipalities in jungle areas of Amazonas (Alto Orinoco, Atabapo, Atures, Autana, Manapiare, Rio Negro) and Bolívar (Cedeño, Heres, Gran Sabana, Piar, Raul Leoni, Rocio, Sifontes and Sucre). Chloroquine

and sulfadoxine–pyrimethamine resistant *P. falciparum* reported.

Recommended prevention in risk areas: **II** in *P. vivax* risk areas; **IV** in *P. falciparum* risk areas.

#### VIET NAM

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists in the whole country, excluding urban centres, the Red River delta, the Mekong delta, and the coastal plain areas of central Viet Nam. High-risk areas are the highland areas below 1500 m south of 18°N, notably in the 4 central highlands provinces Dak Lak, Dak Nong, Gia Lai and Kon Tum, Binh Phuoc province, and the western parts of the coastal provinces Quang Tri, Quang Nam, Ninh Thuan and Khanh Hoa. Resistance to chloroquine, sulfadoxine–pyrimethamine and mefloquine reported.

Recommended prevention in risk areas: **IV**

#### VIRGIN ISLANDS (USA)

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

#### WAKE ISLAND

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

(US territory)

#### YEMEN

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers over 1 year

of age coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year, but mainly from September through February, in the whole country below 2000 m. There is no risk in Sana'a city. Malaria risk on Socotra Island is very limited. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**; Socotra Island: **I**

#### ZAIRE SEE DEMOCRATIC REPUBLIC OF THE CONGO

#### ZAMBIA

##### Yellow fever

Country requirement: no

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists throughout the year in the whole country. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention: **IV**

#### ZIMBABWE

##### Yellow fever

Country requirement: a yellow fever vaccination certificate is required from travellers coming from countries with risk of yellow fever transmission.

Yellow fever vaccine recommendation: no

**Malaria:** Malaria risk—predominantly due to *P. falciparum*—exists from November through June in areas below 1200 m and throughout the year in the Zambezi valley. In Harare and Bulawayo, the risk is negligible. Resistance to chloroquine and sulfadoxine–pyrimethamine reported.

Recommended prevention in risk areas: **IV**