

# Travel Health Brief



## Journey details

Destination	Arrival date	Destination	Arrival date
1 Thailand	09-Jan-2019	6 India	06-Apr-2019
2 Ghana	17-Jan-2019	<b>Return date</b>	06-Apr-2019
3 Poland	01-Feb-2019		
4 Madagascar	16-Feb-2019		
5 Brazil	22-Mar-2019		

## Vaccine and Malaria Summary



**From the details you have provided the following vaccination and malaria advice is summarised below. Please see full information in the Travel Health Brief to clarify these recommendations.**

REQUIRED vaccinations:	Yellow Fever (Important: Requirement may depend on the dates of travel - check details below)
RECOMMENDED vaccinations:	Diphtheria, Tetanus, Polio, Hepatitis A, Typhoid Fever
To be CONSIDERED:	Hepatitis B, Rabies, Meningococcal Meningitis (ACWY), Cholera, Japanese Encephalitis (JE), Tick Borne Encephalitis (TBE), Tuberculosis (TB)  You should also consider taking the appropriate travel health products for your journey. These may include Insect Repellent, Mosquito Nets, Sterile Needle Kits, Water Purifiers and Travellers Medical Kits. Your specialist MASTA Travel Health Nurse will advise you during your consultation.
MALARIA present:	Thailand, Ghana, Madagascar, Brazil, India

*Based on the information provided, this Travel Health Brief covers the main disease risks you may encounter during your trip, provides a full list of the vaccines you should consider and explains what you should do to protect yourself. Precisely which vaccines and malaria tablets are best for you requires personalised risk assessment based on trip details, activities and personal health information. Please consult a health care professional. MASTA travel clinics stock a full range of vaccines and malaria tablets and appointments are usually available at short notice - even close to your departure date.*

This brief contains advice for adults only; consult a healthcare professional for those under 18 years. Due to disease outbreaks, information can change. Consider recreating your brief before departure date to check for updates.



Disease monitoring and reporting in many areas is limited. Where specific geographical and outbreak information is available it will be listed in the vaccination and other health risks sections.

Travellers should be 'in date' for the standard UK vaccination schedule. Last minute travellers should still seek advice, many vaccines/malaria tablets may still be appropriate.

## REQUIRED vaccinations

*To clarify your requirements we advise you to read the information below. Please note, we do not advise yellow fever vaccination in children under 9 months of age, although in exceptional circumstances, it may be considered for children from 6 months of age (expert advice should be sought). Those who cannot be given the yellow fever vaccine for medical reasons, and children who are too young to be vaccinated should obtain a medical letter of exemption.*

If a yellow fever certificate is not required, vaccination may still be recommended if you are travelling to a yellow fever risk area. Visit <http://www.masta-travel-health.com/yf-maps/> to view map(s) of yellow fever distribution.

Based on your itinerary details, a yellow fever vaccination certificate is required for your journey. These regulations may be different for children under 1 year of age (check with your travel health adviser). For those travelling to yellow fever risk areas, vaccination is recommended from 9 months of age.

## Yellow Fever

### Disease and effects



#### Description

Viral infection spread by day-time biting mosquitoes. Present in parts of Africa and Central / South America.

#### Symptoms

In most cases causes flu-like symptoms and digestive disturbance. About 15-25% will develop severe disease with organ failure, jaundice and bleeding. In cases with severe symptoms, 20-50% are fatal.

### Certificate requirements



#### Madagascar, Ghana, India

### Vaccination options



Live vaccine, not suitable for everyone (check with healthcare professional). Flu-like side effects sometimes delayed 5-10 days after vaccination. Can cause more serious side effects in rare cases. Please read the following fact sheet for travellers [https://nathnacyzone.org.uk/media\\_lib/mlib-uploads/full/nathnac-yf-information-print-duplex-flip-on-short-edge.pdf](https://nathnacyzone.org.uk/media_lib/mlib-uploads/full/nathnac-yf-information-print-duplex-flip-on-short-edge.pdf)

**Level of protection:** ~ 95-100%

**Protection duration:** Lifetime.

### How to vaccinate



**How is it given:** Single injection which can only be given in registered yellow fever centres.

**Ideally start:** At least 10 days before travel. International Certificate of Vaccination becomes valid 10 days after administration and is valid for life.

## RECOMMENDED vaccinations

*Based on your travel plans the following diseases have been identified as a risk and vaccination is RECOMMENDED. For multi-country trips, only higher risk countries will be highlighted in the 'countries affected' section. Lower risk of the disease may exist in the other countries on your journey.*

## Diphtheria

### Disease and effects



#### Description

Bacterial infection affecting the respiratory tract usually spread through respiratory droplets. Increased risk in conditions of crowding and poor hygiene.

#### Symptoms

Usually ranges from a sore throat to a life-threatening illness. Can also affect the skin. 5-10% of people can die from complications.

### Countries affected



Thailand  
Ghana  
Madagascar  
Brazil

#### Recent outbreaks for Brazil

Jan-Dec 17: 42 suspected cases across 14 states.

India

#### Recent outbreaks for India

Dec 18: 2 deaths from suspected diphtheria.

#### Vaccination options



Part of the standard UK vaccination schedule. Boosters given to travellers as combined Diphtheria/Tetanus/Polio vaccine.

**Level of protection:** ~ 95-100%

**Protection duration:** 10 years.

**How is it given:** 5 vaccinations in the initial course. Most people will have completed a primary course as a child and will only require a booster dose.

**Ideally start:** 8 weeks before travel in those previously unvaccinated. Booster suitable for last minute travellers.

## Tetanus

### Disease and effects



#### Description

Bacterial infection usually contracted following contamination of a wound. It is present worldwide. Following a primary immunisation course, boosters are recommended every 10 years for travellers without easy access to good medical facilities.

#### Symptoms

Starts with malaise and then lockjaw. Neck stiffness, difficulty swallowing, rigid muscles and spasms follow. Death occurs in 10-20% of cases.

### Countries affected



Thailand  
Ghana  
Madagascar  
Brazil  
India

#### Vaccination options



Part of the standard UK vaccination schedule. Boosters given to travellers as combined Diphtheria/Tetanus/Polio vaccine.

**Level of protection:** ~ 95-100%

**Protection duration:** 10 years.

**How is it given:** 5 vaccinations in the initial course. Most people will have completed a primary course as a child and will only require a booster dose.

**Ideally start:** 8 weeks before travel in those previously unvaccinated. Booster suitable for last minute travellers.

## Polio

### Disease and effects



#### Description

Viral infection affecting the nervous system usually spread through contaminated food/water in areas with poor sanitation.

#### Symptoms

Usually causes no symptoms or mild flu-like symptoms. less than 1% develop paralysis which may rarely be fatal.

### Countries affected



Madagascar

#### Vaccination options



Part of the standard UK vaccination schedule. Boosters given to travellers as combined Diphtheria/Tetanus/Polio vaccine.

**Level of protection:** ~ 95-100%

**Protection duration:** 10 years.

**How is it given:** 5 vaccinations in the initial course. Most people will have completed a primary course as a child and will only require a booster dose.

**Ideally start:** 8 weeks before travel in those previously unvaccinated. Booster suitable for last minute travellers.

## Hepatitis A

### Disease and effects

#### Description

Viral liver infection usually spread through contaminated food/ water.

#### Symptoms

Usually mild in young children. Often more serious in older children and adults, causing fever, digestive disturbance and jaundice. Recovery can be prolonged. Rare complications include severe liver disease.

### Countries affected

Ghana  
Madagascar  
Brazil  
India

### Vaccination options

Can be given alone or combined with typhoid or hepatitis B vaccine.

**Level of protection:** ~ 90-99%

**Protection duration:** Up to 1 year after a single dose. 2nd dose at 6-12 months extends protection to at least 25 years.

**How is it given:** 1 injection: usually with a booster at 6-12 months. One of the combined vaccines has different schedules.

**Ideally start:** 2 weeks before travel. Can be given to last minute travellers.

## Typhoid Fever

### Disease and effects

#### Description

Bacterial infection usually spread through contaminated food/water

#### Symptoms

Causes fever, headache, digestive disturbance. Complications (10-15%) may include bowel perforation, pneumonia, brain or heart inflammation. Some may become carriers of the infection.

### Countries affected

Ghana  
Madagascar  
India

#### Recent outbreaks for India

Sep-Oct 18: 40 cases in Trichy, Tamil Nadu (SE).

### Vaccination options

Can be given alone or combined with hepatitis A. Oral live vaccine also available, but not suitable for everyone.

**Level of protection:** ~ 70-80%

**Protection duration:** 3 years (both injectable and oral vaccines).

**How is it given:** Single injection or oral vaccine: 3 capsules taken on alternate days.

**Ideally start:** 2-3 weeks before travel.

## Vaccinations to be CONSIDERED

*You need to CONSIDER vaccination for the following diseases depending on your activities, lifestyles or length of stay. Discuss these with your travel health adviser.*

## Hepatitis B

### Disease and effects

#### Description

Viral liver infection mainly spread through sex, unscreened blood transfusions, contaminated needles, poorly sterilised

medical/dental equipment. It is 100 times more infectious than HIV. Risk is highest for long-stay travellers, and those at risk due to their medical history, activities or work.

### Symptoms

Often has no symptoms. Some have fever, digestive disturbance and jaundice. Approximately 5% of adults will develop chronic infection, which can lead to cirrhosis and liver cancer.

### Countries affected

Thailand  
Ghana  
Poland  
Madagascar  
Brazil  
India

### Vaccination options

Can be given alone or combined with hepatitis A vaccine.

**Level of protection:** ~ 76-96%. Rapid schedule may have lower protection.

**Protection duration:** Lifelong following a primary course, additional 4th dose at 1 year for rapid schedule (0,7,21 days). Healthcare workers are recommended to have an additional dose at 5 years.

**How is it given:** Usually given as 3 injections at monthly intervals.

**Ideally start:** Rapid schedules can be given over a minimum of 3 weeks for some travellers.

## Rabies

### Disease and effects

#### Description

Viral disease spread by the saliva of infected animals. Dog bites most commonly cause human infection, although any mammal can carry it. Even a lick on an open wound or a scratch is a risk. Risk highest for animal handlers, long-stay or remote travellers (i.e. where medical care is not readily available).

#### Symptoms

Fatal, usually within 1-3 weeks of symptoms appearing. Early symptoms include itching and tingling at the wound site, fever and headache. Later symptoms include paralysis, convulsions and coma.

### Countries affected

Thailand

#### Recent outbreaks for Thailand

Jan-Oct 18: 17 human deaths and an increase in animal cases. 2017: 14 deaths, mainly in central and northeastern areas.

GhanaPoland

Madagascar

Brazil

#### Recent outbreaks for Brazil

May 18: 12 cases in Para (NE). Mar 17: Death in Bahia (E) following bite from a vampire bat. Nov 16: Death in Ceara state (NE).

India

### Vaccination options

2 licensed vaccines available in the UK.

**Level of protection:** ~ 99-100%. All travellers must seek prompt medical advice if bitten/scratched. Post exposure vaccines may be necessary.

**Protection duration:** Life long protection for the majority of travellers but a single booster may be given to some following a risk assessment.

**How is it given:** 3 injections: usually @ 0, 7, and 21/28 days. A rapid schedule of 0, 3, 7 days with a 4th dose at 12 months can be considered if travelling at short notice.

**Ideally start:** 4 weeks before travel.

## Meningococcal Meningitis (ACWY)

### Disease and effects

#### Description

Bacterial infection affecting the brain usually spread by respiratory droplets. Highest infection rates usually occur during the dry season in the 'meningitis belt' of sub-Saharan Africa. Risk highest for long-stay travellers and those mixing closely with the local population.

## Symptoms

Causes sudden fever, nausea/ vomiting, headache, neck stiffness and distinctive rash. Coma, shock and death can follow without prompt treatment.

## Countries affected



### Ghana

Part of the 'meningitis belt'. Highest risk in the north of the country between Dec-Jun. See the CDC map of the African meningitis belt: [https://www.cdc.gov/travel-static/yellowbook/2016/map\\_3-11.pdf](https://www.cdc.gov/travel-static/yellowbook/2016/map_3-11.pdf)

### Recent outbreaks for Ghana

Jan-Sep 18: 888 cases (61 deaths). Jan-Jul 17: 827 cases (78 deaths).

## Vaccination options



2 conjugated vaccines available.

**Level of protection:** ~ 75-96%.

**Protection duration:** At least 5 years.

**How is it given:** Single injection

**Ideally start:** 10-14 days before travel.

## Cholera

## Disease and effects



### Description

Bacterial infection usually spread through contaminated food/water in areas with poor sanitation. Risk is highest for aid workers and travellers to remote areas reporting outbreaks with limited access to safe water and medical care.

### Symptoms

Usually mild in travellers. Serious illness causes watery diarrhoea. Can lead to severe dehydration.

## Countries affected



### ThailandGhanaMadagascar

### India

### Recent outbreaks for India

Jul 18: More than 300 cases (4 deaths) in Hoshiapur district, Punjab. Jul 18: Cases in Vadodara, Gujarat (W) and Mumbai. Feb 18: 54 cases (4 deaths) in Karnataka State.

## Vaccination options



Dukoral oral cholera vaccine.

**Level of protection:** ~ 85%

**Protection duration:** 2 years.

**How is it given:** 2 doses: 1 to 6 weeks apart.

**Ideally start:** At least 2 weeks before travel.

## Japanese Encephalitis (JE)

## Disease and effects



### Description

Potentially fatal viral infection affecting the nervous system spread by mosquitoes. Highest risk for long stay/rural travellers but cases are also reported in urban areas. The preferred breeding sites of the mosquito vectors are areas of greenery with a water source.

### Symptoms

Mostly causes mild flu-like symptoms. Encephalitis (brain inflammation) can develop in 1 in 300 cases. Up to a third of this group will develop residual neurological problems, and approximately a third will die.

## Countries affected



### Thailand

Widespread, greatest risk in the north. Highest incidence reported in the Chiang Mai Valley. Sporadic cases in the Bangkok suburbs. Occurs year-round but peaks from May-Oct, especially in the north.

### Recent outbreaks for Thailand

Jun 17: Confirmed case in Australian tourist to Phuket.

### India

Highest risk reported in Andhra Pradesh, Assam, Bihar, Goa, Haryana, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh and West Bengal. Widespread in all states except Arunachal, Dadra, Daman, Diu, Gujarat, Himachal Pradesh, Jammu, Kashmir, Lakshadweep, Meghalaya, Nager Haveli, Orissa, Punjab, Rajasthan and Sikkim. In the north cases peak from May-Oct but can be extended to year-round transmission in the south.

### Recent outbreaks for India

Jan-Oct 18: 488 cases (94 deaths) in Assam. May-Jun 18: 4 cases in Himachal Pradesh (N). Cases in 23 states including Kerala (S), Karnataka (SW), Madhya Pradesh (C) and Bihar (N).

### Vaccination options



A licensed vaccine available for adults and children. Consider for rural and/or long-stay travellers.

**Level of protection:** ~ 96%

**Protection duration:** 1-2 years.

**How is it given:** 2 injections preferably @ 0 and 28 days. Rapid schedule may be considered.

**Ideally start:** 4-6 weeks before travel.

## Tick Borne Encephalitis (TBE)

### Disease and effects



#### Description

Viral disease affecting the nervous system. Spread by infected ticks or unpasteurised dairy products. Ticks are most active in spring/summer. Risk highest for long-stay and rural travellers (e.g. hikers, campers, agricultural/forestry workers).

#### Symptoms

Causes flu-like symptoms which may lead to severe disease with infection/swelling of the brain or spinal cord. Sometimes causes paralysis or long term neurological problems.

### Countries affected



#### Poland

90% of cases reported in the two north eastern provinces adjacent to Lithuania and Belarus (Warminsko Mazurskie and Podlaskie). Especially high risk around Bialystok and Suwalki. Also a known risk area in the south west districts adjacent to the Czech Republic (Opolskie). The following map shows where cases were reported (2000-2010): <https://ecdc.europa.eu/en/publications-data/country-profile-poland-tick-borne-encephalitis-tbe>

### Vaccination options



Vaccine available.

**Level of protection:** ~ 90% after 2 doses.

**Protection duration:** 3-5 years following the 3rd dose.

**How is it given:** 2 injections 2 weeks to 3 months apart. A 3rd dose 5-12 months later for those at continued risk.

**Ideally start:** 3-4 weeks before travel.

## Tuberculosis (TB)

### Disease and effects



#### Description

Bacterial infection usually affecting the lungs, spread by close contact with infected people. Risk is highest in long stay travellers, living/working with local people especially healthcare workers.

#### Symptoms

Initial infection usually causes no symptoms. Disease occurs in a minority following reactivation of infection. This mainly affects the lungs causing cough, breathlessness, weight loss, tiredness and night sweats. Other organs can be affected.

### Countries affected



#### Thailand

#### Ghana

#### Madagascar

#### Brazil

#### India

### Vaccination options



Live vaccine, not suitable for everyone. The Mantoux skin test or IGRA blood test is usually needed before vaccination.

**Level of protection:** ~ 70-80% against some forms of TB. Less effective in adults. Vaccination is considered for those less than 35 years living/working with local population for 3 months or more.

**Protection duration:** Protection lasts 10-15 years. There are no benefits in boosting.

**How is it given:** Single injection given intradermally (under the skin). Usually leaves a scar.  
**Ideally start:** 3-6 weeks for protection to build, up to 12 weeks for the scar to heal.

Vaccinations are generally well tolerated. Commonly reported side effects include injection site tenderness, headache, and flu-like symptoms which usually resolve within 24-48hrs. Serious side effects and allergic reactions are rare.

## Malaria



The countries listed below have some risk of malaria. To understand your risk you will need to consider the regions you will be travelling to within each malarial country. The following section is divided into the A,B,C and D of malaria prevention: Awareness, Bite avoidance, Chemoprophylaxis (malaria tablets) and Diagnosis.

### Disease and effects

#### Description

A serious and sometimes fatal disease common in many tropical countries. Spread by mosquitoes which bite between dusk and dawn. About 1,750 people a year return to the UK with malaria.

#### Symptoms

Fever and flu-like symptoms. More serious forms may progress to organ failure and coma within 24 hours of symptoms first appearing - can be fatal.

### Countries affected

Thailand, Ghana, Madagascar, Brazil, India

### Malaria options

**Level of protection:** Varies between different tablets but usually around 90% if taken correctly.

Different malaria tablets have different side effects. A healthcare professional can help you choose the right regime depending on your medical history and journey details.

The following describes the geographical risk of malaria, country by country, for your journey. Information is compiled using various reliable sources including World Health Organisation, current UK Malaria Guidelines and local outbreak reports. Malaria maps are for guidance only. Malaria borders can change.



## Thailand



### Malaria map key

#### Special Malaria Risk

Low Risk and mosquito bite avoidance is recommended. Antimalarial tablets may be considered in EXCEPTIONAL circumstances for those at higher risk of malaria (such as long term travellers visiting friends and relatives), or of severe complications from malaria (such as the elderly > 70 years, immunosuppressed, those with complex co-morbidities, those with poorly functioning or no spleen, pregnant women, infants and young children).

*Mefloquine resistant malaria in rural, forested borders with Cambodia, Laos and Myanmar (Burma). Doxycycline or atovaquone-proguanil are recommended.*

#### Low Malaria Risk

Protection against mosquito bites is advised.

*Elsewhere low or no risk (including Chiang Rai, Chiang Mai, Bangkok, Koh Phangan, Koh Samui, Pattaya and the Kwai bridge).*

Does not consider risk in neighbouring countries.

## Ghana



### Malaria map key

#### High Malaria Risk

Antimalarial tablets are RECOMMENDED.  
Protection against mosquito bites is also advised.

*All areas (mainly P. falciparum).*

Does not consider risk in neighbouring countries.

## Madagascar



### Malaria map key

#### High Malaria Risk

Antimalarial tablets are RECOMMENDED.  
Protection against mosquito bites is also advised.

*All areas (mainly P. falciparum).*

Does not consider risk in neighbouring countries.



### Malaria map key

#### Special Malaria Risk

Low Risk and mosquito bite avoidance is recommended. Antimalarial tablets may be considered in EXCEPTIONAL circumstances for those at higher risk of malaria (such as long term travellers visiting friends and relatives), or of severe complications from malaria (such as the elderly > 70 years, immunosuppressed, those with complex co-morbidities, those with poorly functioning or no spleen, pregnant women, infants and young children).

*Amazon Basin, including in the city of Manaus.*

#### Low Malaria Risk

Protection against mosquito bites is advised.

*Outside the Amazon Basin.*

#### No Malaria Risk

General insect bite avoidance.

*Iquacu Falls.*

Does not consider risk in neighbouring countries.



### Malaria map key

#### Special Malaria Risk

Low Risk and mosquito bite avoidance is recommended. Antimalarial tablets may be considered in EXCEPTIONAL circumstances for those at higher risk of malaria (such as long term travellers visiting friends and relatives), or of severe complications from malaria (such as the elderly > 70 years, immunosuppressed, those with complex co-morbidities, those with poorly functioning or no spleen, pregnant women, infants and young children).

*For the rest of India (including Goa and the Andaman and Nicobar Islands) there is a low risk of malaria chloroquine plus proguanil would be an option, subject to individual risk assessment.*

#### High Malaria Risk

Antimalarial tablets are RECOMMENDED. Protection against mosquito bites is also advised.

*Assam and Orissa; the districts of East Godavari, Srikakulam, Vishakhapatnam and Vizianagaram in the state of Andhra Pradesh; and the districts of Balaghat, Dindori, Mandla and Seoni in the state of Madhya Pradesh (see map).*

#### Low Malaria Risk

Protection against mosquito bites is advised.

*States of Himachal Pradesh, Jammu and Kashmir, and Sikkim.*

#### No Malaria Risk

General insect bite avoidance.

*Lakshadweep islands.*

Does not consider risk in neighbouring countries.

### Malaria advice

- Use an effective insect repellent and apply it regularly
- Wear long sleeved shirts and long trousers, especially in the evening
- Use a plug-in insecticide vapouriser
- Air conditioning can deter mosquitoes; or consider sleeping under a mosquito net treated with insecticides



### RECOMMENDED Antimalarial tablets

Check maps/descriptions to ensure you are visiting high malaria risk areas (or are in a higher risk group visiting a special risk malaria area). One of the following schedules may be recommended for your whole journey as swapping between drugs should generally be avoided. The schedules/doses for children will vary.

#### Doxycycline 100mg capsule/tablet daily

- Start 2 days before entering the first malarial area of your trip
- Continue whilst there and for 4 weeks after leaving the last malarial area
- Should not be taken by children under 12 years or breastfeeding women. It may be considered in some circumstances in the very early stages of pregnancy under expert advice. Rarely, can make the skin sensitive to sunlight. A high factor sunscreen may help prevent this. Take with or after food with plenty of cool fluid. Do not lie down for 1 hour after taking.

#### Atovaquone 250mg/proguanil 100mg - 1 tablet daily

- Start 1-2 days before entering the first malarial area of your trip.
- Continue whilst there and for 1 week after leaving the last malarial area.
- Take with food or a milky drink.

#### Mefloquine 250mg (Lariam) - 1 tablet weekly

- Start at least 10 days (preferably 2-3 weeks) before entering the first malarial area of your trip.
- Continue whilst there and for 4 weeks after leaving the last malarial area.
- Mefloquine is not suitable for everybody. Swallow whole, preferably after a meal with plenty of liquid.

### ALTERNATIVE Antimalarial tablets

If any of the above antimalarial drugs are not suitable for you, you must discuss alternative drugs with your travel health adviser.

Alternative drugs may not be as effective.

## Malaria symptoms and treatment

The most important symptom to remember is a raised temperature of 38°C or higher starting at least 1 week after first potential exposure to malaria. Other symptoms are variable and cannot be relied on. If you do develop a fever a week or more after exposure to malaria, you must seek medical attention as soon as possible. If you cannot get to medical attention within 24 hours and your condition is deteriorating, you should consider emergency self-treatment. Discuss treatment options with your travel health adviser.

Other risks for your journey



## Travellers' Diarrhoea

### Disease and effects



#### Description

For countries listed here there is a 'significant' risk. It is caused by eating or drinking contaminated food or water. It is the most common illness in people travelling from the UK to developing countries. Please be aware that other moderate and low risk countries are not listed.

#### Countries affected



##### Thailand

##### *Recent outbreaks for Thailand*

One of the top 5 countries for UK travellers to develop travellers diarrhoea.

##### Ghana

##### Madagascar

##### Brazil

##### India

##### *Recent outbreaks for India*

One of the top 5 countries for UK travellers to develop travellers diarrhoea.

#### Ways to reduce risk



Avoid high risk foods (salads, shellfish, undercooked meat and unpasteurised dairy products). Drink safe water. Wash hands regularly. Consider taking a travellers' diarrhoea treatment kit containing antidiarrhoeal drugs, antibiotics and oral rehydration solution. TD Kits contain prescription drugs and are not suitable for everyone.

## Dengue Fever

### Disease and effects



#### Description

Viral infection spread by day-time biting mosquitoes.

#### Symptoms

Symptoms may include fever, headache, muscle pain and in some cases a rash.

#### Countries affected



##### Thailand

##### *Recent outbreaks for Thailand*

Jan-Dec 18: More than 80,000 cases (107 deaths).

##### Ghana

##### Madagascar

##### Brazil

##### *Recent outbreaks for Brazil*

Jan-Dec 18: More than 241,000 cases (142 deaths).

##### India

##### *Recent outbreaks for India*

Jan-Sep 18: More than 40,800 cases across many states. Jan-Nov 18: Over 11,000 cases in Punjab (N).

#### Ways to reduce risk



Avoid day-time biting mosquito bites.

## African Trypanosomiasis (Sleeping Sickness)

### Disease and effects



#### Description

Spread by the bite of the tsetse fly, which is active during the daytime. The flies inhabit rural areas - woodland and thickets of the savannah, and dense vegetation along streams. They are attracted to moving objects (e.g. safari vehicles) and dark colours.

### Symptoms

A skin ulcer may occur at the site of the bite and swollen lymph nodes may appear. The disease can progress to affect the brain, causing confusion and poor coordination. The disease is fatal if left untreated.

### Countries affected

**Ghana**

### Ways to reduce risk

Insect repellents offer limited protection. Avoid infested areas, these are usually well known to local residents. Tsetse flies can bite through lightweight clothing, wear close weave clothing in neutral colours that blend with the background.

## Chikungunya

### Disease and effects

#### Description

Viral infection spread by day-time biting mosquitoes.

#### Symptoms

Symptoms may include fever, headache, tiredness, rash and muscle/joint pain. The symptoms usually last a few days. Some people experience persistent joint pain and fatigue lasting weeks or months.

### Countries affected

**Thailand**

#### *Recent outbreaks for Thailand*

Jan-Dec 18: Over 2,000 cases with provinces in the south most affected.

**Madagascar**

#### *Recent outbreaks for Brazil*

Jan-Nov 18: More than 82,000 cases.

**India**

#### *Recent outbreaks for India*

Jan-Sep 18: More than 30,100 suspected cases.

### Ways to reduce risk

Avoid day-time biting mosquito bites.

## Leishmaniasis

### Disease and effects

#### Description

Spread by the bite of infected sandflies. The risk of these bites is highest from dusk to dawn in rural areas although the outskirts of some cities may also be affected.

#### Symptoms

Cutaneous leishmaniasis - Skin sores. Visceral leishmaniasis - affects some of the internal organs of the body.

### Countries affected

**Thailand**

**Ghana**

**Brazil**

#### *Recent outbreaks for Brazil*

Jan-Jun 18: 63 cases in Alagoas State (NW). 2017: 48 cases reported from the same state.

**India**

### Ways to reduce risk

Use effective repellents. Sandflies are small enough to get through the holes in a standard mosquito net. Insecticide treated nets can reduce this risk.

## Lyme Disease

### Disease and effects

## Description

Spread by the bite of infected tick, mainly in forested and moorland areas, but ticks can also be found in suburban parklands.

## Symptoms

An expanding rash at the site of tick bite may occur. More serious illness can include arthritis or neurological problems, including facial paralysis.

## Countries affected

Poland

Brazil

## Ways to reduce risk

Avoid areas that are highly infested with ticks. Cover skin with clothing in high risk areas and use an effective insect repellent. Check skin regularly for ticks, remove them with fine-tipped tweezers.

## Lymphatic Filariasis

## Disease and effects

### Description

Caused by microscopic worms which are spread by mosquitoes. The risk to most travellers is low. Travellers who visit risk areas for extended periods (3 months+) who are intensively exposed to infected mosquitoes are at greater risk of infection.

### Symptoms

Many people have no symptoms. Some experience fluid collection and swelling, mostly of the legs or genitals.

## Countries affected

Thailand

Ghana

Madagascar

Brazil

India

## Ways to reduce risk

Avoid mosquito bites.

## Onchocerciasis (river blindness)

## Disease and effects

### Description

Spread by the bite of an infected blackfly. Risk is low for most travellers. Long-stay rural travellers staying in areas near rapidly flowing streams / rivers are at greatest risk.

### Symptoms

Many people have no symptoms. Some experience skin itching or nodules, eye lesions (which can cause blindness).

## Countries affected

Brazil

## Ways to reduce risk

Avoid blackfly bites with clothing and an effective repellent.

## Schistosomiasis (Bilharzia)

## Disease and effects

### Description

Parasitic worm infection that can penetrate intact skin when swimming or wading in freshwater lakes and rivers. Left untreated the worm eggs travel to the intestine, liver or bladder, causing inflammation or scarring.

### Symptoms

Most people have no symptoms in the early stage of infection. However, some experience an itchy skin rash soon after contact with infected water and some experience fever, cough, and muscle aches within 1-2 months. Long term infection can lead to problems with the liver, bladder or bowel.

## Countries affected

Ghana  
Madagascar  
Brazil  
India

Low risk for most travellers.

## Ways to reduce risk

Avoid wading, swimming, or other contact with freshwater in affected countries. If exposed, screening tests and effective treatment are available.

## Sexually Transmitted Infections (STIs)

### Disease and effects

#### Description

Travellers tend to be at greater risk of contracting STIs. Many countries report a high incidence of STIs such as HIV, hepatitis B, chlamydia, gonorrhoea and syphilis.

#### Symptoms

There may be no early symptoms with a number of STIs. If you have possibly been exposed, consider screening tests with your GP or local GUM clinic.

## Countries affected

### Thailand

1.1% of adults aged 15-49yrs are HIV positive.

### Ghana

1.5% of adults aged 15-49yrs are HIV positive. 6.3% of sex workers are reported to have active syphilis.

### Poland

### Madagascar

16.7% of sex workers are reported to have active syphilis.

### Brazil

### India

## Ways to reduce risk

Sexual contact with a new or unknown partner is ill-advised. Condoms offer good but not 100% protection. Condoms bought in developing countries may not be reliable, buy them in the UK and take them with you.

## South American Trypanosomiasis (Chagas' Disease)

### Disease and effects

#### Description

Spread by the bite of "cone nose" bugs that usually feed at night. Bugs live in cracks in poor quality houses such as those with mud lined walls or thatched roofs. The disease can also be spread by food or drink contaminated by the faeces of these bugs.

#### Symptoms

Initial symptoms are often mild or absent. Some people develop a sore at the site of the bite. In advanced stages heart and digestive problems may occur.

## Countries affected

### Brazil

#### Recent outbreaks for Brazil

Dec 18: 14 cases in Tocantins State (C). Aug 18: 18 cases (1 death) in Pará.

## Ways to reduce risk

Avoid camping/sleeping outdoors and overnight stays in high-risk dwellings. Sleep under insecticide-treated bed nets. Food and water precautions are recommended to prevent the very rare form of food-borne Chagas' disease.

## West Nile Fever

### Disease and effects



#### Description

Viral infection spread by the bite of an infected mosquito.

#### Symptoms

Most people have mild symptoms or no symptoms at all. Up to 20% of people may experience a flu-like illness. Approximately 1 in 150 develop more severe illness with brain infection.

### Countries affected



**Thailand**

**Ghana**

**Poland**

**Madagascar**

**Brazil**

Risk believed to be low. One case confirmed in Piauí State (NE) in 2014.

**India**

### Ways to reduce risk



Avoid mosquito bites

## Zika Virus

### Disease and effects



#### Description

Viral infection spread by day-time biting mosquitoes. May also be transmitted sexually.

#### Symptoms

Symptoms may include rash, conjunctivitis, muscle and joint pain. Severe neurological complications occasionally reported. Infection during pregnancy can cause birth defects such as microcephaly. See national guidelines regarding pregnant travellers.

### Countries affected



**Thailand**

Moderate Risk: Pregnant women should consider postponing non-essential travel until after pregnancy. Couples should follow guidance on prevention of sexual transmission <https://www.gov.uk/guidance/zika-virus-preventing-infection-by-sexual-transmission>. Avoid conception while travelling and for up to 6 months on return (8wks if only female has travelled to risk areas). See Public Health England website for more details: <https://www.gov.uk/government/collections/zika-virus-zikv-clinical-and-travel-guidance>

#### Recent outbreaks for Thailand

Sep 17: 60 cases in Bangkok. Jul-Sep 17: Suspected cases in Phichit Province (C). Aug-Nov 16: 686 cases from 12 provinces.

**Brazil**

Moderate Risk: Pregnant women should consider postponing non-essential travel until after pregnancy. Couples should follow guidance on prevention of sexual transmission <https://www.gov.uk/guidance/zika-virus-preventing-infection-by-sexual-transmission>. Avoid conception while travelling and for up to 6 months on return (8wks if only female has travelled to risk areas). See Public Health England website for more details: <https://www.gov.uk/government/collections/zika-virus-zikv-clinical-and-travel-guidance>

#### Recent outbreaks for Brazil

Jan-Nov 18: Over 7,500 cases. Over 2,200 cases in Rio de Janeiro state.

**India**

Except for Rajasthan State which is High Risk, the rest of India is considered Moderate Risk: Pregnant women should consider postponing non-essential travel until after pregnancy. Rajasthan State only is High Risk: Pregnant women should postpone non-essential travel until after pregnancy. For travel to all areas in India, couples should follow guidance on prevention of sexual transmission <https://www.gov.uk/guidance/zika-virus-preventing-infection-by-sexual-transmission>. Avoid conception while travelling and for up to 6 months on return (8wks if only female has travelled to risk areas). See Public Health England website for more details: <https://www.gov.uk/government/collections/zika-virus-zikv-clinical-and-travel-guidance>

#### Recent outbreaks for India

2018: More than 280 cases from Rajasthan (NW), Madhya Pradesh (C) and Gujarat State (W).

### Ways to reduce risk



Avoid mosquito bites and follow national guidance regarding condom use.

## Altitude Illness

### Disease and effects



#### Description

Some regions on your journey are at high altitude. Altitude illness is common above 2,500m and it can affect anyone, it is not dependent on age, gender or level of fitness. It is caused by the reduced partial pressure of oxygen at altitude.

#### Symptoms

Symptoms of acute mountain sickness, a mild form of the condition: headache, loss of appetite, feeling sick and tiredness. If ignored it may lead to fluid accumulating in the lungs or brain - potentially life threatening.

### Countries affected



**Poland**

**Madagascar**

**Brazil**

**India**

### Ways to reduce risk



If travelling to high altitudes, gradual ascent is recommended.

### Latest Health News



## Thailand

Health officials have reported an increase in chikungunya with more than 2,000 cases recorded, Jan-Dec 18. The southern provinces of Satun, Narathiwat, Songkla, Pattani and Phuket are most affected.

Media sources have reported more than 5,200 cases (21 deaths) of measles, Jan-Dec 18. Yala and Pattani provinces in the south have been most affected. Measles is a viral infection which causes a red blotchy rash and occasionally more serious disease. 2 doses of the MMR vaccine are recommended to provide protection against the disease. The travel consultation is good opportunity to ensure that all travellers are in-date with their primary vaccinations.

Dengue fever is a continuing problem with more than 80,000 cases (107 deaths) across all 77 provinces, Jan-Dec 18. Nakornpathom (C), Nakornsawan (C) and Nakornsripathammarat (S) are recording high numbers of cases. Over 29,000 cases (2 deaths) were reported, Jan-Dec 17.

17 human deaths from rabies have been reported nationally, Jan-Oct 18. There has been a large increase in animal cases reported in 24 of Thailand's provinces, including Bangkok and Chiang Rai, Jan-Mar 18. 14 deaths were recorded during 2017.

Health authorities have reported more than 1,800 cases (21 deaths) of leptospirosis across 69 provinces, Jan-Sep 18. Almost half the cases have been recorded in agricultural workers. Leptospirosis is transmitted by contact with the urine of infected animals usually in water. Outbreaks often occur after natural disasters and flooding. About 10% of those infected progress onto a severe form known as Weil's disease which can involve multiple organs. Avoid swimming or wading in potentially contaminated fresh water. It is treated with antibiotics.

A yellow fever certificate is required from travellers aged 9 months or over having transited through an airport of a country with a risk of yellow fever (see map: [www.masta-travel-health.com/yf-maps/](http://www.masta-travel-health.com/yf-maps/)).

There are excellent private hospitals in Thailand but they can be expensive. Public hospitals and clinics in Thailand are not always up to UK standards, particularly outside Bangkok and in the coastal islands. Many hospitals require guarantee of payment before they will start treatment. Make sure you have adequate travel health insurance and accessible funds to cover the cost of any medical treatment abroad and repatriation.

Studies have shown that the number of cases of scrub typhus is increasing, with 2,185 cases reported nationally, Oct 17-Jan 18. Scrub typhus is an illness caused by a Rickettsia bacteria that is spread by mites on rodents. Symptoms vary but often include headache, fever and rashes. Travellers should minimize exposure by avoiding rodents and using insect repellents.

Health officials have reported 4 deaths from rotavirus, Jan 18. Rotavirus infection is the most common cause of severe diarrhoea in children worldwide. It can also cause vomiting and nausea. Exercise good hand hygiene and stay well hydrated. A vaccine is given routinely to babies in the UK.

Health officials have reported 1 confirmed and 1 suspected case of anthrax in Tak Province (W), Nov 17. These are the first cases since 2001. Anthrax is a bacterial infection which can affect the skin, lungs and gastro-intestinal tract. It is generally transmitted via infected livestock. Ensure that all meat is well cooked and from a safe source.

Health authorities have reported over 24,000 cases (1 death) of hand, foot and mouth disease nationally, Jan-Jun 17. Over 79,000 cases (2 deaths) were reported in 2016. Hand, Foot and Mouth Disease (HFMD) is a viral infection which usually affects young children and causes fever, mouth ulcers and blisters on hands and feet. It is transmitted by person to person contact. The majority of cases are mild but serious complications are occasionally reported.

An Australian tourist has died from Japanese encephalitis after contracting the disease on a 13 day holiday to Phuket, Jun 17.

A report from the Health Protection Agency shows that Thailand is in the top 5 countries for UK travellers to develop travellers diarrhoea, take care to avoid contaminated food and water and be prepared to manage the symptoms.

We have reports that convincing counterfeit antimalarial drugs are available to buy at pharmacies in South East Asia. Some 'fakes' are extremely convincing but don't contain any active drug. Seek required medication from a recognised clinic if possible.

## Ghana

The WHO has reported 888 cases (61 deaths) of meningitis, Jan-Sep 18. 827 cases (78 deaths) were reported, Jan-Jul 17.

Medical facilities are poor outside towns. For serious medical treatment, medical evacuation will be necessary. Make sure you have adequate travel health insurance and accessible funds to cover the cost of any medical treatment abroad and repatriation. There are reports of isolated cases of cholera and meningitis in Ghana; cases may rise during the wet season. You should follow the advice of the National Health Network and Centre. .

Health officials have reported 1 death from Lassa fever, Mar 18. Lassa fever is a viral infection which occurs in West Africa. It is primarily transmitted by contact with infected rodent excreta but can also occur following direct contact with the blood or secretions of infected individuals. It is especially dangerous if contracted during pregnancy. The risk is low but it would be wise to avoid rodent infested areas.

According to UNICEF 4% of the female population undergo female genital mutilation (FGM/cutting). Be aware this is illegal in the UK and a form of child abuse.

## Poland

In general, medical facilities in Poland are comparable to those in the UK. Private medical facilities are comparatively inexpensive and of a good standard. Polish doctors and nurses are well qualified but English is not always widely spoken and you may face communication difficulties. If you're visiting Poland you should get a free European Health Insurance Card (EHIC) before leaving the UK. The EHIC isn't a substitute for medical and travel insurance, but it entitles you to state provided medical treatment that may become necessary during your trip. Any treatment provided is on the same terms as Polish nationals. If you don't have your EHIC with you or you've lost it, you can call the Department of Health Overseas Healthcare Team (+44 191 218 1999) to get a Provisional Replacement Certificate. The EHIC won't cover medical repatriation, ongoing medical treatment or non-urgent treatment, so you should make sure you have adequate travel insurance and accessible funds to cover the cost of any medical treatment and repatriation. If you need emergency medical assistance during your trip, dial 112 and ask for an ambulance. If you are referred to a medical facility for treatment you should contact your insurance/medical assistance company immediately.

Over 700 cases of rubella have been reported nationally, Jun 16-May 17. Rubella is generally a mild viral infection causing a rash on the face, trunk and limbs that usually lasts 3 days. Infection during the first 10 weeks of pregnancy can be especially dangerous causing congenital harm to the baby. 2 doses of the MMR vaccine are required for protection.

## Madagascar

The Ministry of Health has declared an outbreak of measles, with more than 16,400 cases (39 deaths) reported across all 22 regions, Oct-Dec 18. Antananarivo-Renivohitra district is most affected. Vaccination campaigns have started. Measles is a viral infection which causes a red blotchy rash and occasionally more serious disease. 2 doses of the MMR vaccine are recommended to provide protection against the disease. The travel consultation provides a good opportunity to ensure that all travellers are in-date with their primary vaccinations.

97 suspected cases (9 deaths) of plague have been reported from 8 regions, Aug-Oct 18. A large outbreak of 2,676 cases (238 deaths) was reported, Aug 17-Apr 18. Bubonic plague is endemic in Madagascar but the majority of cases in the 2017 outbreak were pneumonic. The WHO states that Madagascar is the country most severely affected by plague worldwide, reporting around 400 cases annually, with the peak season between September and April. Bubonic plague is spread from animals, usually through flea bites or by handling infected animals. The pneumonic form of the disease is spread by close contact with an infected person or swallowing infected materials. The risk for most travellers remains low as outbreaks mainly occur in areas of poor housing and sanitation. Travellers who start with flu-like symptoms should seek immediate medical attention. Prompt antibiotic treatment is required to prevent serious illness or death.

A yellow fever certificate is required from travellers aged 9 months or over having transited more than 12 hours through an airport of a country with a risk of yellow fever (see map: [www.masta-travel-health.com/yf-maps/](http://www.masta-travel-health.com/yf-maps/)).

Although there are public and private hospitals in Antananarivo, they can only handle routine operations. Complex surgery requires evacuation either to Mauritius, South Africa or La Reunion. Make sure you have adequate travel health insurance and accessible funds to cover the cost of any medical treatment abroad and repatriation. If you need emergency medical assistance during your trip, dial 17 (117 from mobile phone) or +261 20 22 357 53 and ask for an ambulance. You should contact your insurance/medical assistance company promptly if you are referred to a medical facility for treatment.

8 children have died from a food-borne illness after eating sea turtles, Jan 18. 8 deaths were reported following consumption of contaminated sardinella fish in Antsiranana Province (N), Dec 17. Turtle meat is considered a delicacy in some countries.

Previous study has shown that 30% of artemisinin-based drugs used for treating malaria sold in Madagascar failed quality tests. Many contained impurities or insufficient active ingredients. Counterfeit drugs are widespread in many parts of Africa, travellers should take all recommended drugs with them. Seek any further required medication from a recognised clinic if possible.

## Brazil

More than 241,000 cases (142 deaths) of dengue fever have been reported, Jan-Dec 18.

More than 82,000 cases of chikungunya virus have been reported, Jan-Nov 18.

More than 7,500 cases of Zika virus have been reported, with Rio de Janeiro state reporting over 2,200 cases, Jan-Nov 18.

Health authorities have reported 14 confirmed cases of South American trypanosomiasis in Tocantins State (C), Dec 18. The cases are thought to be linked to the consumption of contaminated juice. 18 cases (1 death) were recorded in Pará, Aug 18.

1,376 confirmed cases of yellow fever (483 deaths) have been reported from Minas Gerais, São Paulo, Rio de Janeiro, Espírito Santo, Mato Grosso and Federal District, Jul 17-May 18. Several cases have been reported in unvaccinated travellers to Brazil, Dec 17-May 18. 779 confirmed cases (262 deaths) were reported, Dec 16-Jun 17. Based on historical cases a seasonal transmission pattern is seen in Brazil with most cases occurring between Dec-May.

Health authorities have reported nearly 10,000 cases of measles including 13 deaths, Jan-Nov 18. The majority of the cases have been recorded in the northern states of Amazonas and Roraima. Measles is a viral infection which causes a red blotchy rash and occasionally more serious disease. 2 doses of the MMR vaccine are recommended to provide protection against the disease. The travel consultation provides a good opportunity to ensure that all travellers are in-date with their primary vaccinations.

An increase in leishmaniasis cases has been reported from Alagoas State (NW), with 63 cases recorded, Jan-Jun 18. 48 cases were reported in the same state during 2017.

Foreign nationals are entitled to emergency medical treatment in Brazilian public hospitals. Public hospitals in Brazil, especially in major cities, tend to be crowded. Private hospitals will not accept you unless you can present evidence of sufficient funds or insurance. Make sure you have adequate travel health insurance and accessible funds to cover the cost of any medical treatment abroad and repatriation. If you need emergency medical assistance during your trip, dial 192 and ask for an ambulance. You should contact your insurance/medical assistance company promptly if you are referred to a medical facility for treatment.

12 human cases of rabies have been reported in Para (NE), May 18. Those affected have been hospitalised in Belem and Breves and a team has been dispatched to investigate the outbreak. Previous outbreaks have been associated with bites from vampire bats such as cases from Bahia (E) in Mar 17 and Ceara (Ne) in Nov 16.

Health officials have reported 4 deaths from Rocky Mountain spotted fever in Minas Gerais State (SE), Dec 17. A death has been reported from Sao Paulo State (SE), Aug 17. Rocky Mountain spotted fever is a serious rickettsial disease spread by infected ticks and reported in the Americas. It causes fever, headaches, rash, muscle pain and may be fatal if not treated with antibiotics promptly. Take steps to avoid tick bites.

Health authorities have reported a death from hantavirus in Rio Grande do Sul, Dec 17. Hantavirus is a viral disease which is primarily transmitted by contact with infected rodent excreta. The infection usually affects the lung and kidneys. The risk is low but it would be wise to avoid rodent infested areas.

Health authorities have reported 42 suspected cases of diphtheria across 13 states, Jan-Dec 17.

230 cases of mumps have been reported in Manaus (N), Apr-Aug 17. Mumps is a viral disease which causes painful swelling of the salivary glands. 2 doses of the MMR vaccine are recommended but protection against the disease sometimes wanes over time.

## India

Media sources have reported at least 22 cases (4 deaths) of Kyasanur Forest disease from Shivamogga District, Karnataka (SW), Dec 18-Jan 19. Cases have been reported from the same region previously as well as Maharashtra (W), Goa (SW) and Kerala (S), Jan-Apr 18. 400-500 cases are recorded each year, mainly in south-western states. Kyasanur Forest Disease is a viral disease transmitted by tick bites or direct contact with infected animals such as monkeys. It can cause fever and encephalitis. Take steps to avoid tick bites. A local vaccine is sometimes used in affected areas.

2 suspected cases of Crimean-Congo haemorrhagic fever have been reported from Gujarat state (W), Mar-Jun 18. CCHF has been an ongoing problem in Gujarat state since 2011. It is thought to be widespread in some other states. Crimean-Congo haemorrhagic fever is a viral disease which is fatal in 20-35% of cases. It is usually transmitted by infected tick bites or direct contact with the blood of infected individuals. Take steps to avoid tick bites by covering exposed skin and using an effective repellent.

4 deaths of leptospirosis have been reported from Mumbai during this monsoon season, Jul 18. Media sources have reported more than 400 suspected cases (26 deaths) across Pathanamthitta, Thiruvananthapuram and Kozhikode districts in Kerala (SW), Jan-Jul 18. Leptospirosis is transmitted by contact with the urine of infected animals usually in water. Outbreaks often occur after natural disasters and flooding. About 10% of those infected progress onto a severe form known as Weil's disease which can involve multiple organs. Avoid swimming or wading in potentially contaminated fresh water. It is treated with antibiotics.

Media sources have reported more than 300 cases (4 deaths) of cholera from Hoshiapur district, Punjab, Jul 18. Media sources have reported cases of cholera from Vadodara, Gujarat (W) and Mumbai, Jul 18. 54 cases (4 deaths) were reported from Karnataka State (SW), Feb 18.

More than 30,000 suspected cases of chikungunya have been reported, Jan-Sep 18.

488 cases (94 deaths) of Japanese encephalitis have been reported from Assam (NE), Jan-Oct 18. Cases are also being reported from Madhya Pradesh, Oct 18. 2 cases were confirmed in Himachal Pradesh (N), a region where the virus has never been reported, Jun 18. Between Jan-Jun 18, 23 states recorded cases, including Kerala (S), Karnataka (SW) and Bihar (NE), with most occurring in the north east of the country.

More than 40,800 cases of dengue fever have been reported nationally, Jan-Sep 18. Over 11,000 cases have been recorded in Punjab (N), Jan-Nov 18. Cases have also been recorded from Kerala (S), Odisha (E) Andhra Pradesh (E), Maharashtra (W), Himachal Pradesh (N), Goa (SW), Karnataka (SW), Telangana (S) and Rajasthan (N) as well as the cities of New Delhi and Mumbai.

More than 280 cases of Zika virus have been reported from 3 states: Rajasthan (NW), Madhya Pradesh (C) and Gujarat State during 2018.

Media sources have reported 2 deaths from suspected diphtheria in Jammu and Kashmir (N), Dec 18.

Health officials have reported 40 cases of typhoid fever from a district of Tiruchirappalli (Trichy), Tamil Nadu (SE), Sep-Oct 18.

Media sources have reported 2 deaths from suspected scrub typhus in Ultadanga's Basanti Colony, West Bengal, Nov 18. Over 55 cases (12 deaths) have been reported from Nagpur, Maharashtra State (C), Sep 18. Some of the cases originated in Madhya Pradesh but travelled to Nagpur for treatment. More than 100 cases have been recorded in Mizoram State (NE), July 18. Scrub typhus is an illness

caused by a Rickettsia bacteria that is spread by mites on rodents. Symptoms vary but often include headache, fever and rashes. Travellers should minimize exposure by avoiding rodents and using insect repellents.

7 cases of anthrax have been reported from Karveti Nagaram division, Andhra Pradesh (E), Oct 18. Cases have previously been reported from the same state as well as Odisha and Jharkhand states, Apr-Jul 18. Anthrax is a bacterial infection which can affect the skin, lungs and gastro-intestinal tract. It is generally transmitted via infected livestock. Ensure that all meat is well cooked and from a safe source.

Health officials have reported that the outbreak of Nipah virus infection has been contained, Jun 18. 19 cases (17 deaths) have been recorded in Kozhikode and Malappuram districts of Kerala, May-Jun 18. Nipah Virus is a viral disease which can affect the brain and has usually been associated with close contact with pigs or fruit bats, although the exact mode of transmission is uncertain. Some outbreaks have been associated with eating fruit contaminated with the saliva of infected bats.

Local medical facilities are not comparable to those in the UK, especially in more remote areas. In major cities private medical care is available, but expensive. A list of the most commonly used hospitals can be found on the British High Commission website. For psychiatric illness, specialised treatment may not be available outside major cities. If you need emergency medical assistance during your trip, dial 102 and ask for an ambulance. You should contact your insurance/medical assistance company promptly if you are referred to a medical facility for treatment.

India is one of the countries highlighted by the WHO as having a particular problem with measles. More than 51,000 cases have been reported, Mar 17-Feb 18. Measles is a viral infection which causes a red blotchy rash and occasionally more serious disease. 2 doses of the MMR vaccine are recommended to provide protection against the disease.

A report from the Health Protection Agency shows that India is in the top 5 countries for UK travellers to develop travellers diarrhoea, take care to avoid contaminated food and water and be prepared to manage the symptoms.

Pharmaceutical companies estimate that 1 in 5 drugs sold in major Indian cities is fake. Travellers should be extra careful when buying medicines, always attend a recognised clinic. Take sufficient supplies of medicines with you if possible.

## Things to consider and pack



### Accidents

- First aid kit containing plasters, bandages, antiseptic spray, scissors, tweezers, thermometer.
- Consider needle and syringe kit.
- Consider joining the Blood Care Foundation.

### Insect Bites

- Insect repellent.
- Mosquito net treated with insecticide.
- Plug in insecticide vaporiser.
- Long sleeves and trousers.

### Water Purification

- Augmented depth water purifiers such as the 'Aquapure Traveller' or a basic water filter.

### Sun

- High factor UVA and UVB sun cream.

### Sex

- Condoms may be appropriate.

### Medication

- Painkillers.
- Travel sickness medication if required.
- Antimalarial drugs if appropriate.
- Travellers diarrhoea treatment pack.
- If away from medical attention consider emergency malaria treatment.
- Antifungals/antibiotics may be appropriate for expeditions.
- If you take regular medication: take more than you need and split it between your baggage. Consider taking a copy of your prescription or a generic list of the drugs you take.

### Travel Insurance

- Copy of your policy and emergency contact numbers. Check insurance covers any medical conditions and planned activities.

**Safety and Security:** Check the most up to date security advice from the Foreign and Commonwealth Office.  
[www.fco.gov.uk/en/travel-and-living-abroad/travel-advice-by-country](http://www.fco.gov.uk/en/travel-and-living-abroad/travel-advice-by-country)

