

YELLOW FEVER

WHAT IS YELLOW FEVER

Yellow fever is a potentially fatal viral infection spread by several species of mosquitoes that inhabit either jungle, savannah or urban areas. The name 'yellow fever' derives from a complication of the disease where the skin turns yellow - this is also known as jaundice.

The mosquitoes that transmit yellow fever in urban areas are also the vectors for dengue fever, chikungunya and even Zika virus. If travelling in a yellow fever endemic area, it is necessary to avoid mosquito bites by covering up, using an effective insect repellent and minimising outdoor activities during the day (dusk and dawn are peak times).

WHAT ARE THE SYMPTOMS?

It can take several days before symptoms appear, usually within 3 to 6 days of the bite of an infected mosquito. The initial symptoms include sudden onset of fever, chills, severe headache, back pain, nausea, vomiting, fatigue and an overall feeling of weakness. While some people will get better after this stage, about 15% of those infected will enter the 'toxic' stage which can lead to death in up to 20 -50% of those who develop the severe illness. Symptoms in this stage include high fever, visible bleeding, jaundice and kidney and liver failure; death results from multi-organ failure.

WHERE IS IT FOUND?

There are currently 42 countries in tropical and subtropical areas of Africa and Central/South America where yellow fever has been declared a risk. Proof of vaccination by means of an International Certificate of Vaccination or Prophylaxis (ICVP) may be required or even mandatory under the International Health Regulations, if you are travelling to or from one of these countries, and other nations may require proof in order for travellers to cross their borders.

Australia's list of yellow fever risk areas is found on the Department of Health general [factsheet](#), and the requirements for vaccination, which are set by individual countries, are listed on the WHO's International Travel and Health website. Proof of vaccination for travel may be required if you are travelling to or from one of these countries, with many other countries also requiring vaccination for entry. Travellers should seek the advice of a yellow fever-licensed medical practitioner regarding the suitability of vaccination for their itineraries and any relevant medical circumstances.

RISK TO TRAVELLERS

For travellers, the risk of contracting yellow fever infection is highest when travelling to areas experiencing an outbreak, however travel to any endemic zone presents risks which can vary depending on a number of factors including: destination, vaccination status, season of travel, levels of exposure to mosquito bites and whether anti-insect measures are employed, amongst others.

HOW IS YELLOW FEVER TRANSMITTED?

There are 3 transmission cycles for yellow fever:

1. Jungle cycle involves transmission of the virus between non-human primates (i.e. monkeys) and mosquito species which in turn transmit the virus to humans living, visiting or working in these areas.
2. In Africa there is an intermediate cycle (savannah) which involves the transmission of the virus from mosquitoes to humans living or working in jungle border areas. Here the virus can be transmitted from monkeys to humans or from humans to humans via mosquitoes.

3. The urban cycle involves the transmission of the virus between humans through bites from feeding urban-dwelling mosquitoes. The virus is introduced into this setting by individuals who were infected in the jungle or savannah.

HOW IS YELLOW FEVER TREATED?

There is no specific cure for yellow fever; infected people are hospitalised for treatment of their symptoms and close observation.

WHAT IS YELLOW FEVER VACCINATION?

Type: Injection

- Live attenuated yellow fever vaccine

The yellow fever vaccine, which has been in use for more than 80 years, cannot be administered in some cases due to a number of contraindications or precautions – as the following lists are not exhaustive, seek advice for your particular situation from a yellow fever licensed doctor.

- Contraindications include infants under 6 months of age, anaphylaxis to eggs or any vaccine components, immunocompromised condition and history of thymus gland disorders.
- Precautions include adults aged 60 years and over, infants aged from 6 to 8 months, pregnancy and breastfeeding, non-immunosuppressed people with HIV, and some people of Western Polynesian heritage (including Tongan, Samoan and Niuean) who have a rare inherited condition (IFNAR1 deficiency).

SCHEDULE

A single dose of yellow fever vaccine is recommended for anyone aged 9 months and over who is travelling to an area with a risk of yellow fever virus transmission. A certificate of vaccination (ICVP) is issued after administration of the vaccine; it becomes valid 10 days later. In most cases, protection from the vaccine is considered life-long, however there may be some situations when a booster could be advisable: People who were pregnant or had HIV when first vaccinated, or those who are travelling to a high risk or epidemic area and had their yellow fever vaccine more than 10 years previously.

LEVEL OF PROTECTION

In a healthy adult, two weeks after vaccination the level of protective antibodies is estimated to be around 90%, however these levels are reached by virtually all recipients after four weeks.

POSSIBLE SIDE EFFECTS

Generally mild, starting within days of vaccination and lasting 5-10 days: low-grade fever, headache, pain at injection site, pain, unusual weakness, myalgia, rash; and in children, also crying, irritability, drowsiness, vomiting or appetite loss.

Severe side effects:

Immediate allergic reactions with rash, itching and hives; swelling of face, tongue or other parts of the body; difficulty swallowing or breathing.

Delayed reactions (usually within a month of vaccination) affecting the nervous system: Fever, headache, confusion, stiff neck, fits, loss of movement or feeling. This is known as Yellow Fever Vaccine–Associated Neurologic Disease (YEL-AND).

Reactions affecting vital organs (generally within 10 days of vaccination) which resemble yellow fever infection and are sometimes fatal. It can present with tiredness, fever, headache and muscle pain which can progress to multiple organ dysfunction or failure. Known as Yellow Fever Vaccine–Associated Viscerotropic Disease (YEL-AVD).

HOW CAN I STAY PROTECTED WHILE TRAVELLING?

Yellow fever is vaccine-preventable. If you are planning to travel to one of the yellow fever declared countries above, it is crucial to get vaccinated for your safety and to ensure you have no issues with entry into other countries. It is also important that while you are on your trip, you [avoid mosquitoes](#) – use [insect repellent](#), avoid perfume or cologne and wear light coloured, full-coverage clothing where possible.

DO I REALLY NEED A VACCINATION?

Yellow fever is one of a few **mandatory** vaccinations and may be a requirement if you are travelling to or from a country with a declared presence of yellow fever. **Australia's entry requirement for travellers arriving** from a yellow fever endemic country are: a yellow fever vaccination certificate is required for travellers aged 1 year or over arriving from countries with risk of yellow fever transmission (with the exception of Galápagos Islands in Ecuador) and for travellers having transited for more than 12 hours through an airport of a country with risk of yellow fever transmission (with the same exception as mentioned above).

WHO CAN PROVIDE ME WITH A YELLOW FEVER VACCINATION?

Travelvax is a leading provider of travel health advice and medical services for those travelling overseas. We provide a one-stop travel health consultation to make your preparations as smooth as possible.

Our staff are passionate, enthusiastic and experienced in providing travel health services and will adapt your travel health plan to your personal needs and itinerary.

If you require vaccination against yellow fever, call our travel health advisory line on **1300 360 164** for more information.

References:

- Australian Immunisation Handbook (online); Vaccine preventable diseases, Yellow fever: <https://immunisationhandbook.health.gov.au/vaccine-preventable-diseases/yellow-fever>
- Australian Department of Health Yellow fever – general fact sheet <https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-communic-factsheets-yellow.htm>
- International Health Regulations (2005) 3rd edition: <https://www.who.int/ihr/publications/9789241580496/en/>
- WHO Yellow fever vaccination requirements and recommendations: <https://www.who.int/who-documents-detail/vaccination-requirements-and-recommendations-for-international-travelers-and-malaria-situation-per-country-2019-edition>

FAQS

HOW FAR IN ADVANCE DO YOU NEED A YELLOW FEVER VACCINE?

Yellow fever vaccinations should be taken at least 10 days prior to travelling to a yellow fever risk area.

WHO SHOULD NOT GET A YELLOW FEVER VACCINE?

Those who should not get a yellow fever vaccine include children under 9 months of age, individuals who have had serious allergic reactions to the vaccine in the past or any component of the vaccine i.e. to eggs or chicken proteins, and for immunocompromised individuals. Your yellow fever-licensed medical practitioner will inform you whether or not you should get a yellow fever vaccine based on your age, destination, existing health conditions, risk of infection, country requirements and more.

HOW MUCH IS YELLOW FEVER VACCINE IN AUSTRALIA?

The cost of the yellow fever vaccine at Travelvax clinics is competitive and may be partly reimbursed through your health fund, if you have Extras cover. There will also be a cost for the consultation with the doctor.

~~DOES YELLOW FEVER OCCUR IN AUSTRALIA?~~

Yellow Fever isn't found in Australia however a common mosquito species (called *Aedes aegypti*) that can transmit the virus is found in regions within northern Queensland.

~~WHO CAN HAVE A YELLOW FEVER VACCINATION?~~

Yellow fever vaccinations may be required or recommended if you are older than 9 months of age and travelling (or staying) in any country with areas of risk for yellow fever. Proof of vaccination may also be required when arriving in another country or countries after travelling through a yellow fever risk area. Check with your yellow fever-licensed medical practitioner for the requirements and recommendations that apply to you and your itinerary.

~~CAN I BE EXEMPT FROM A YELLOW FEVER VACCINATION?~~

You may be exempt from a yellow fever vaccination if you have one of the contraindications to its administration - i.e. the vaccine may cause harm to the person or the risks outweigh the benefits of vaccination. The exemption - which may not be accepted in all countries and under all circumstances - can be used in place of a Yellow Fever Certificate, provided that the medical exemption letter includes:

- the travellers' details such as correct name and date of birth as it appears on their passport, as well as
- a dated and signed medical exemption letter on letterhead stationery from an approved Yellow Fever Vaccination Centre

OR

- a completed Medical Contraindications to Vaccination section of the International Certificate of Vaccination or Prophylaxis (ICVP) completed by a medical practitioner at an approved Yellow Fever Vaccination Centre.

~~WILL I BE ALLOWED TO ENTER AUSTRALIA IF I DO NOT HAVE A YELLOW FEVER VACCINATION CERTIFICATE?~~

Yes. If you have travelled to a Yellow Fever Risk area overseas and want to return to Australia without a Yellow Fever Vaccination Certificate you will still be permitted to enter. However, upon your arrival in Australia you will be spoken to by border authorities who will stress the seriousness of yellow fever infection, provide you with a Yellow Fever Action Card that lists symptoms of concern and ask you to seek medical help should any symptoms develop.

~~WHERE CAN I GET A YELLOW FEVER VACCINATION AND VACCINATION CERTIFICATE?~~

You can get a Yellow Fever Vaccination at any of Travelvax's clinic locations - all of which are approved Yellow Fever Vaccination clinics in Australia.

~~WHICH COUNTRIES REQUIRE A YELLOW FEVER CERTIFICATE?~~

Countries that are high risk for Yellow fever include: African countries such as Nigeria, Uganda, Togo and Ghana, as well as some destinations in Central/South America including Brazil, Argentina (Misiones and Corrientes provinces) and Peru. Forty-two countries are currently on Australia's list of yellow fever risk countries and areas.

For professional advice on whether you need a Yellow Fever Certificate for your next travel destination, contact your nearest Travelvax clinic today or call the information line on 1300 360 164.

**More information on Yellow Fever is available during your pre-travel consultation with Travelvax.
Call 1300 360 164 for the location of the clinic nearest to you.**