Yellow fever



Yellow fever is an infection in humans caused by the yellow fever virus. Yellow fever occurs in tropical areas of Africa and Central and South America. Infections have increased in recent years as humans are in greater contact with infected mosquitoes through:

- > deforestation
- > urbanisation
- > population movements
- > climate change.

Yellow fever does not naturally occur in Australia but the mosquitoes capable of transmitting the virus are present in North Queensland so there is the potential for local transmission from returned travellers who are infected. Strict quarantine measures are in place at Australia's border to ensure that this does not occur.

The 'yellow' in the name refers to the skin colour that occurs when the infection involves the liver.



Yellow fever is a notifiable condition¹

How yellow fever is spread

In rainforest areas of Africa and Central and South America yellow fever is transmitted between mainly non-human primates and several species of mosquitoes of the genus *Haemagogus*. Occasional human infection occurs in people who are working or living in these areas.

Large numbers of cases (epidemics) can also occur in urban areas when a human with yellow fever infects the local *Aedes* mosquitoes (mainly *Aedes aegypti*) resulting in transmission from human-to-human via infected mosquitoes.

Signs and symptoms

A first phase of symptoms is characterised by flu-like symptoms including:

- > fever
- > muscle pain
- > headaches
- > shivers
- > nausea and vomiting
- > loss of appetite.



Image Courtesy - Department of Health and Human Services, Centers for Disease Control and Prevention (CDC-USA) CDC Dr. Thomas F. Sellers / Emory University.

Most people improve after 3 to 4 days but 15% of people then enter into a second more toxic phase with liver and kidney failure. Of these severe cases around 50% are fatal.

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Symptoms in the second phase may include:

- > return of high fevers
- > bleeding problems
- > headache
- > abdominal and back pain
- > nausea and vomiting
- > drowsiness (excessive sleepiness) and weakness
- > yellow skin or eyes (jaundice)
- > itching.

Diagnosis

Yellow fever can be diagnosed with a blood test, although this is not routinely performed in Australia.

Incubation period

(time between becoming infected and developing symptoms)

From 3 to 6 days.

Infectious period

(time during which an infected person can infect others)

Yellow fever cannot be spread from person-toperson.

Treatment

There is no specific treatment for yellow fever. Supportive care to treat dehydration and symptomatic relief of pain may be required.

Prevention

- > Exclusion of people with yellow fever from childcare, preschool, school or work is not necessary but people should avoid being bitten by mosquitoes while they are unwell.
- Vaccination is the single most important measure for preventing yellow fever.
 Vaccination is recommended for all travellers to countries where yellow fever transmission occurs.
- > Immunisation against yellow fever must be provided by an approved yellow fever vaccination clinic
- > A number of countries have specific mandatory vaccination requirements for travellers entering that country. Many countries, including Australia, require travellers coming from yellow fever infected countries to show proof of immunisation upon entry. This should be kept in mind when planning a travel itinerary.
- > Personal protection and the environmental management of mosquitoes are very important in preventing infection in regions where the virus is present.

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Useful links

Fight the bite

www.sahealth.sa.gov.au/fighthebite

> Avoiding mosquito bites

SA Health website <u>www.sahealth.sa.gov.au</u>

- > Approved yellow fever vaccination clinics
- > Barmah Forest virus infection
- > Chikungunya virus infection
- > Dengue fever
- > Japanese encephalitis
- > Kunjin/ West Nile virus infection
- > Malaria
- > Murray Valley encephalitis
- > Protecting yourself and your health whilst travelling overseas
- > Ross River virus infection
- > When you have a notifiable condition

Department of Health www.health.gov.au/ <u>yellowfever</u>

Centres for Disease Control and Prevention wwwnc.cdc.gov/travel/yellowbook/2016/ infectious-diseases-related-to-travel/yellow-<u>fever</u>

1 In South Australia the law requires doctors and laboratories to report some infections or diseases to SA Health. These infections or diseases are commonly referred to as 'notifiable conditions'.

You've Got What? 5th Edition

Communicable Disease Control Branch

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The SA Health Disclaimer for this resource is located at www.sahealth.sa.gov.au/youvegotwhat









