

# YELLOW FEVER FREQUENTLY ASKED QUESTIONS (FAQ)

## What is Yellow Fever?

Yellow fever is a disease caused by the yellow fever virus which is spread to humans through the bite of an infected *Aedes* or *Haemogogus* mosquito. The yellow fever virus belongs to the Flavivirus family, which includes other viruses such as Dengue virus and Zika virus.

The "yellow" in the name refers to the jaundice (yellowing of skin and eyes) that affects some patients who are infected with the virus. Yellow fever is found in endemic countries of Africa<sup>1</sup> and Latin America<sup>2</sup>.

## Can I Spread Yellow Fever to Others?

No, yellow fever is not transmitted by direct spread/contact from one person to another. It is transmitted by infected mosquito bites.

## What is the incubation period?

The incubation period from when a person gets bitten by an infected mosquito to onset of symptoms is approximately 3 to 6 days. An infected person may pass on the virus to a mosquito if bitten shortly before onset of fever and up to 5 days after onset of fever.

## Symptoms of Yellow Fever

Common symptoms:

- Fever
- Muscle pain
- Backache
- Headache
- Loss of appetite
- Nausea or vomiting

These symptoms may be relatively non-specific and difficult to differentiate from other acute viral infections. Most individuals improve after 3 to 4 days.

## Risks of Yellow Fever - Does yellow fever cause severe illness?

A small group of individuals may develop more severe symptoms after initial symptoms have improved. Half of the individuals who have severe features die within 10 to 14 days, while the rest recover. Severe symptoms include:

- High fever returns with jaundice (yellowing of skin and eyes)
- Dark urine and abdominal pain with vomiting
- Bleeding from the gut, eyes and nose
- Multi-organ failure involving the liver, kidney and the nervous system may occur

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## **Diagnosis of Yellow Fever**

Doctors and nurses will do clinical assessments of yellow fever for someone with:

- Recent history of travel to countries with yellow fever transmission within last 6 days
   AND
- No prior yellow fever vaccination AND
- Present with clinical symptoms compatible with yellow fever virus infection such as acute onset of fever, abnormal liver function and renal function tests, presence of albumin in the urine, low blood pressure and bleeding manifestations

Yellow fever can be diagnosed by testing urine and blood samples

#### **Treatment of Yellow Fever**

There is no specific antiviral therapy to treat yellow fever. Treatment is mostly supportive. Patients with yellow fever should be hospitalized for close observation.

Avoid aspirin and other nonsteroidal anti-inflammatory drugs (such as Brufen® (ibuprofen) or Synflex® (naproxen)) as they may increase the risk of bleeding.

#### **Prevention of Yellow Fever**

#### What Can I Do to Reduce the Chances of Yellow Fever Infection?

Yellow fever is preventable by vaccination. A single dose of yellow fever vaccine provides lifelong immunity if given at least 10 days prior to possible exposure.

The vaccine is a live vaccine. Administration should be avoided in persons who are severely immunocompromised, pregnant, and used with caution at the extremes of age (infants <6 months and individuals >60 years old). Persons with severe egg protein allergy should not receive the vaccine.

Other prevention measures include reducing the risks of being bitten by mosquitoes.

- Use insect repellents containing 20 30% DEET
- Wear long-sleeved clothes and long pants when outdoors/Avoid unnecessary outdoor exposure

## What Should I Do If I Am Traveling to an Endemic Country?

All travellers to yellow fever endemic regions are required to carry a yellow fever vaccination certificate.

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If you are a returning traveler from an endemic country and suspect you may have yellow fever:

Please seek medical attention immediately if you have symptoms that are compatible with yellow fever. You should inform your doctor of your travel history to be tested for the infection appropriately.

## **Useful Information and Updates on Yellow Fever**

Immigration and Checkpoints Authority of Singapore Ministry of Health (MOH) Centers for Disease Control & Prevention (CDC) World Health Organisation (WHO) www.ica.gov.sg www.moh.gov.sg www.cdc.gov/yellowfever www.who.int

<sup>1</sup>Africa: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Mali, Mauritania, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Sudan, Togo, Uganda

<sup>2</sup>America: Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru, Suriname, Trinidad, Venezuela

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