

Yellow Fever Vaccine

Information for Travellers

What is yellow fever?

Yellow fever is a serious illness caused by the yellow fever virus. It is one of the viral haemorrhagic fevers. Yellow fever is passed on to humans by the bite of an infected mosquito. It is not contagious; one person cannot catch yellow fever directly from another person.

Yellow fever can vary from a flu-like illness that gets better on its own over several days to a severe illness with organ failure and death.

Symptoms of yellow fever may include:

- Fever, muscle aches and pains, and headache
- Nausea and vomiting
- Jaundice (turning yellow)
- Liver, kidney and lung failure
- Bleeding

There is no specific medicine to treat yellow fever. Most people with the disease will need to be admitted to hospital and treated in intensive care. Many people who get yellow fever will die from the disease.

Where does yellow fever occur?

Yellow fever occurs in tropical parts of South America and Africa (see maps on next page). Although most cases occur in the countryside, it can also occur in cities, particularly in parts of West Africa. The World Health Organization estimates that 200,000 cases occur each year.

How can I prevent yellow fever?

There are two ways to prevent yellow fever. The first is to prevent the bites of the mosquitoes that transmit the disease during your trip. The second is to have the yellow fever vaccine before you travel. All travellers to yellow fever areas should do both things.

Mosquito bites:

The mosquitoes that transmit yellow fever tend to bite during the daytime, particularly in the hours after dawn and before dusk. Ways of preventing bites are:

- Cover-up as much as possible with loose-fitting, lightweight clothing.
- Apply insect repellents, ideally containing DEET, to exposed areas of skin.

- Apply an insecticide such as permethrin to clothing to kill mosquitoes when they come into contact with it. Permethrin should not be used directly on the skin.

More detailed information about avoiding bites can be found on the NaTHNaC website:

http://www.nathnac.org/travel/misc/travellers_mos.htm

Yellow fever vaccine:

The vaccine against yellow fever has been used for more than 50 years. It works very well and lasts for a long period of time. Most people do not have any problems with the vaccine. Vaccination can only be given in approved yellow fever vaccination centres (YFVCs). Your local GP may be a YFVC, but if not, you can find a YFVC in England and Wales by searching on the NaTHNaC website:

<http://www.nathnac.org/yellowfevercentres.aspx?comingfrom=travel>

Yellow fever vaccine must be given 10 days or more before your trip to be effective and to be officially accepted by the country to which you are travelling. Travellers who are leaving sooner than the 10 day interval should discuss with their YFVC the advisability of still getting the vaccine. You must carry your Certificate of Vaccination with you during travel. It is a record of your vaccination and may be requested by immigration officials during your trip.

The YFVC where you received vaccine will give you this certificate. For international travel, the yellow fever certificate lasts for 10 years.

Who should get yellow fever vaccine?

In general, there are two situations where travellers should be immunised against yellow fever:

- Travel to countries that require immunisation as a condition for entry
- Travel to countries where there is a risk of getting yellow fever

Your YFVC will be able to advise you whether or not you need the vaccine. You should still get advice from a YFVC even if you have received information about yellow fever vaccine from your travel agent.

Who should not get yellow fever vaccine?

- Anyone with a severe allergy to eggs, or to a previous dose of yellow fever vaccine.
- Children younger than 9 months old. Rarely, children 6 to 8 months old may be vaccinated.

- People whose immune system is compromised because of a disease or treatment for a disease. Examples of this are: current or recent treatment (within 6 months) with chemotherapy or radiation for cancer, taking high doses of steroids or other drugs that affect the immune system, and having a recent organ or bone marrow transplant.
- People whose immune system is suppressed because of HIV infection. Rarely, people who are HIV positive, but are fit and well, are receiving highly active anti-retroviral therapy and have a high CD4 count may be given the vaccine.
- People with a disorder of their thymus gland such as myasthenia gravis, thymoma, or a history of thymus removal or radiation.
- Women who are pregnant. Under unusual circumstances, pregnant women may be vaccinated if they are travelling to a destination at high risk for yellow fever. Pregnant women must carefully consider if a trip to a yellow fever country is wise, as there are diseases in addition to yellow fever, such as malaria, that will be a threat to their health.

You should discuss with your YFVC any concerns about your health and if you should get the vaccine.

What if I cannot get a yellow fever vaccine?

Travellers who cannot have the vaccine should consider if it is necessary to travel to a yellow fever risk destination. Travellers whose trip is unavoidable may be issued with a **Medical Exemption** letter that will be taken into consideration by immigration authorities.

What are the risks from yellow fever vaccine?

Yellow fever vaccine is well tolerated by most people. If there are reactions they are usually mild and may consist of:

- Soreness at the injection site
- Headaches and muscle aches
- Low-grade fever

These reactions will occur in up to 30% of people, begin shortly after the vaccine is given and may last for several days.

There are also extremely rare reactions following vaccine. These consist of three types:

- Severe allergic reaction usually occurring in people who are allergic to eggs. This happens about once in every 130,000 to 250,000 people who receive the vaccine.
- Severe nervous system reactions such as meningitis or brain inflammation. This happens about once in every 200,000 people who receive the vaccine.

- Severe systemic reaction involving multiple organs such as liver, lung, and kidneys. This happens about once in every 200,000 people who receive the vaccine. This reaction is like a case of yellow fever.

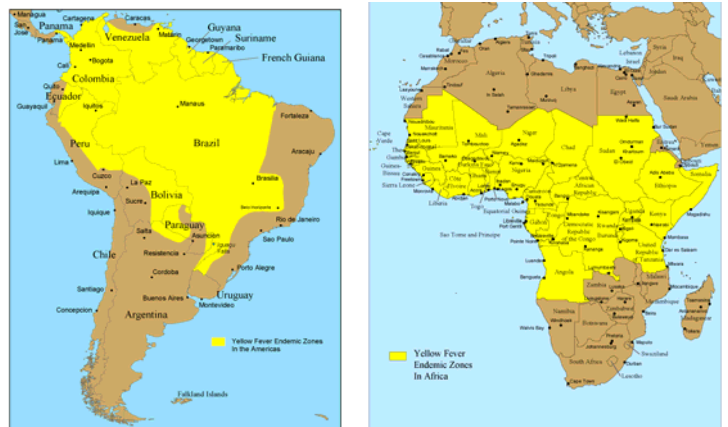
The nervous system and systemic reactions have occurred so far only in people who have received yellow fever vaccine for the first time. There is a higher risk for these two reactions in those who are aged 60 years and older. In people 60 and over the reactions happen about five times for every 200,000 people who receive the vaccine.

What should I do about any potential risks from the vaccine?

Before you receive the vaccine you should thoroughly discuss the indications for the vaccine and be honest about your medical history. Your GP or nurse can then advise whether it is appropriate for you to have the vaccine.

After you get the vaccine you should monitor your health over the next month and report any problems to the YFVC or your GP.

Yellow Fever Areas



Maps courtesy of the U.S. Centers for Disease Control and Prevention

Where can I get more information about yellow fever and yellow fever vaccine?

NaTHNaC, Yellow fever information sheet:
<http://www.nathnac.org/travel/factsheets/YF.htm>

Department of Health, Yellow fever chapter (draft form as of 1 August 2006) in *Immunisation Against Infectious Disease*:
<http://www.dh.gov.uk/assetRoot/04/12/34/54/04123454.pdf>

World Health Organization, International Travel and Health:
<http://www.who.int/ith/en/>

World Health Organization, Yellow fever fact sheet:
<http://www.who.int/mediacentre/factsheets/fs100/en/>

Centers for Disease Control and Prevention (US), Yellow fever chapter from *Health Information for International Travel 2005-2006*:
<http://www2.ncid.cdc.gov/travel/yb/utills/ybGet.asp?section=dis&obj=yellowfever.htm&cssNav=browseoyb>