

YELLOW FEVER VACCINE

WHAT YOU NEED TO KNOW

1 What is yellow fever?

Yellow fever is a serious disease caused by the yellow fever virus. It is spread through the bite of an infected mosquito and **cannot** be spread directly from person to person. It is found in certain parts of Africa and South America.

Yellow fever can cause:

- fever and flu-like illness
- jaundice (yellow skin or eyes)
- liver, kidney, respiratory and other organ system failure
- vomiting blood
- death

People with yellow fever disease usually have to be hospitalized.

2 How can I prevent yellow fever?

Yellow Fever Vaccine

Yellow fever vaccine can prevent yellow fever.

Yellow fever vaccine is given only at approved vaccination centers.

After receiving the vaccine, you should receive an **International Certificate of Vaccination** (yellow card) that has been validated by the vaccination center. This Certificate becomes valid 10 days after vaccination and lasts for 10 years. You will need this card as proof of vaccination to enter certain countries. Consult your health department or visit CDC's travel information website at <http://www.cdc.gov/travel> to learn the travel requirements for different countries or to find the nearest approved vaccination center.

Please make sure you discuss your travel itinerary with your doctor or nurse before you receive your yellow fever vaccination.

Other Preventive Measures

As with any disease transmitted by mosquitoes, precautions and insect repellent are also recommended to prevent exposure to yellow fever virus. These precautions include remaining in well-screened areas, wearing clothes that

cover most of the body, and using effective insect repellent (i.e., containing up to 50% N,N-diethylmetatoluamide [DEET]) on skin and clothing.

3 Who should get yellow fever vaccine?

- Persons 9 months of age or older traveling to or living in a country that requires yellow fever vaccination for certain travelers. **Check with your health-care provider.**
- Persons 9 months of age or older traveling to a country that does **not** require yellow fever vaccination but is located in an area where the risk of yellow fever is known to exist. **Check with your health-care provider.**

Information about known or probable infected areas is available from the World Health Organization (<http://www.who.int>), the Pan American Health Organization (<http://www.paho.org>), and CDC (<http://www.cdc.gov/travel>).

If you continue to live or travel in yellow fever-endemic areas, you should receive a booster dose of yellow fever vaccine after 10 years.

Yellow fever vaccine may be given at the same time as most other vaccines.

4 Who should NOT get yellow fever vaccine?

- Persons who have ever had a life-threatening allergic reaction to eggs, chicken, gelatin or to a previous yellow fever vaccine.
- Infants younger than 9 months of age. For infants 6 to 8 months of age who cannot avoid travel to a yellow fever area, discuss vaccination with their doctor. Under no circumstances should infants younger than 6 months of age be vaccinated.
- Pregnant women and nursing mothers should avoid or postpone travel to a yellow fever area. If travel cannot be avoided, discuss vaccination with your doctor.

- Check with your doctor before getting yellow fever vaccine if:
 - You have a history of allergy to eggs, chicken, or gelatin
 - You have HIV/AIDS or another disease that affects the immune system
 - You have been under treatment for 2 weeks or longer with drugs that affect the immune system, such as steroids
 - You have any kind of cancer
 - You are taking cancer treatment with X-rays or drugs
 - Your thymus gland has been removed, or if you have a history of problems with your thymus, such as myasthenia gravis, DiGeorge syndrome, or thymoma.

If you are 65 or older, discuss with your physician the risks and benefits of vaccination in the context of your risk for exposure to yellow fever virus based on your destination.

If you cannot get the vaccine because of a medical reason and proof of yellow fever vaccination is required for your travel, your doctor can give you a waiver letter. When planning to use a waiver letter, you should also obtain specific advice from the embassy of the country or countries you plan to visit.

If you cannot get the vaccine, discuss with your doctor other ways to prevent yellow fever.

5 What are the risks from yellow fever vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of a vaccine causing serious harm, or death, is extremely small.

Reactions are less likely to occur after a booster dose of yellow fever vaccine than after the first dose.

Mild problems:

- soreness, redness, or swelling where the shot was given
- fever
- aches

If these problems occur, they usually begin soon after the shot and last for 5-10 days. In studies, they occurred in as many as 25% of vaccine recipients.

Severe problems (estimates based on passive reporting):

- Life-threatening allergic reaction (approximately 1 reported per 131,000 doses).
- Severe nervous system reactions (approximately 1 reported per 150,000-250,000 doses).

- Life-threatening severe illness with major organ system failure (approximately 1 reported per 200,000-300,000 doses, or 1 reported per 40,000-50,000 doses in people 60 years of age and older). More than half of the people who suffer these side effects die.

6 What if there is a moderate or severe reaction?

What should I look for?

- Look for any unusual condition, such as a high fever, behavior changes, or flu-like symptoms that occur 1-30 days after vaccination. Signs of an allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heartbeat, or dizziness within a few minutes to a few hours after the shot.

What should I do?

- **Call** a doctor, or get the person to a doctor right away.
- **Tell** your doctor what happened, the date and time it happened, and when the vaccination was given.
- **Ask** the clinic where you received the vaccine to save any left over vaccine and the vaccine vial, and record the lot number.
- **Ask** your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form. Or you can file this report through the VAERS website at www.vaers.org, or by calling 1-800-822-7967. *VAERS does not provide medical advice.*

7 How can I learn more?

- Ask your doctor or nurse. They can show you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
 - Visit the CDC Travelers' Health website at www.cdc.gov/travel/diseases/yellowfever.htm, or other CDC websites at www.cdc.gov/ncidod/dvbid/yellowfever/, or <http://www.cdc.gov/mmwr/preview/mmwrhtml/00031094.htm>.



U.S. Department of Health & Human Services
Centers for Disease Control and Prevention
National Immunization Program