



WHETHER YOU'RE TRAVELING

to the Amazon rainforest or the deserts of Sub-Saharan Africa, the following tips will help you to avoid contracting yellow fever.

IF you are traveling to certain parts of Africa or to countries in the Amazon rainforest of South America, you may require a yellow fever vaccine. In South America this may include countries not generally associated with the Amazon region, such as Bolivia, Peru and Ecuador. Here's what you should know in advance:

- **Yellow fever is a serious disease**—It is caused by a virus that is transmitted by the bite of infected mosquitoes, and most transmissions occur in rainforests. While

some cases are mild with merely flu-like symptoms, other individuals experience liver problems, bleeding tendencies, and jaundice. There is no specific treatment, only controlling symptoms until the disease runs its course. If you're traveling with children, remember that they are at risk of severe disease.

- **The vaccine is virtually 100-percent effective in preventing disease**—Adverse reactions are extremely rare, but can be severe. Most people at risk to

such reactions can be identified and should not be vaccinated.

- **In yellow fever areas, you may need the vaccine even if there are no current cases**—In many localities local people are vaccinated, and therefore immune. But insects continue to be carriers of the virus, the result of biting infected monkeys.
- **With rare exceptions, the vaccine is safe for infants and children more than nine months of age**—Never vaccinate

infants less than six months, which can lead to an increased incidence of significant neurological side effects. Vaccinate infants between six and nine months only if the risk of the disease is clearly greater than that of side effects. One way of eliminating risk, of course, is avoiding areas where the disease exists.

• **Be familiar with reasons NOT to vaccinate**

—These include egg allergy, immunosuppression, thymus gland issues, and previous cardiopulmonary surgery. The vaccine is produced in chick embryos and may contain egg particles. The vaccine consists of live viruses that have been attenuated, or made harmless, for normal individuals. However, in individuals with problems with their immune systems—AIDS, for example—or thymus-related diseases, the virus may spread uncontrollably. Cardiovascular surgery may necessitate the removal of the thymus because it is adjacent to the heart and lungs.

• **Vaccination is available only at certified yellow fever vaccination centers**

—Lists of such centers are available from the Centers for Disease Control or from your local health department. Upon vaccination you receive a World Health Organization-authorized certificate stating the date of vaccination. This card allows you entry into countries requiring vaccination, and one injection is sufficient. The date of vaccination should be 10 days prior to entry, the time for the vaccine to be effective. The certificate is valid for 10 years, and the vaccine is likely to be protective far longer.

• **Consult a specialist in travel medicine if you visit countries where the disease exists**

—Many yellow fever centers are health departments and not staffed by experts in travel medicine. A list of such specialists can be found on the Web sites of the International Society of Travel Medicine (www.istm.org) or the American Society of Travel Medicine and Hygiene (www.astmh.org).

They can review your health, determine your risk, write letters of exemption if necessary, and are aware of the latest entry requirements in different countries. Requirements change frequently, sometimes for non-medical reasons. Letters of exemption are given when the risk of side effects is greater than the risk of vaccination, a rare event.

• **Check all countries on your itinerary to see if you require vaccination**

—In Brazil, for example, the disease is not present in the large cities, and in Peru and Ecuador, not above certain altitude. Medically, you do not need vaccination. However, once you visit such countries—regardless of where you travel in that country—subsequent countries may require vaccination. This is to prevent you from introducing the disease into their country. If you visit Asia and you have recently been to South America or Africa, you may require proof of vaccination as a condition of entry even though the disease does not exist in Asia.

• **If you or your travel partner is pregnant or breast feeding, avoid vaccination**

—While yellow fever vaccination appears to be safe for such women, safety has not

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been totally established, so travel only if essential. Depending on the destination, not vaccinating may be an acceptable risk, but be sure to carry a physician's letter stating the reason.

• **Insect protection is your first-line defense against yellow fever and other insect-transmitted diseases such as malaria and dengue fever**—You can reduce the risk of being bitten by staying in air-conditioned or well-screened quarters, covering arms and legs with clothing, using insect repellents containing DEET or picaridin on exposed skin, and placing mosquito netting over beds. ☞

U.S. Centers for Disease Control and Prevention
www.cdc.gov/travel

International Society of Travel Medicine
www.istm.org

The American Society of Travel Medicine and Hygiene
www.astmh.org

World Health Organization
www.who.int

U.S. Department of State
travel.state.gov

Kids Travel Doc
www.kidstraveldoc.com

Travel Medicine Consultants
www.thetraveldoctor.com

International Travel Medicine
www.travelmedicine.com

HealthLink/Medical College of Wisconsin
healthlink.mcw.edu/travel-medicine

MedicineNet.com
www.medicinenet.com/travel_medicine