

# Diagnosing Febrile Illness in a Returned Traveler

*[Announcer] This program is presented by the Centers for Disease Control and Prevention.*

Travelers to tropical and developing areas are at risk for a host of serious illnesses that can be challenging for primary care providers in the United States to diagnose.

Welcome to CDC Audio Rounds. I'm Dr. Phyllis Kozarsky with the Travelers' Health Branch at the Centers for Disease Control and Prevention. Today, we're talking about diagnosing febrile illness in a traveler returning from a tropical or developing country.

When taking the patient's history, document the location of travel and adherence to appropriate preventive measures. If a febrile patient has visited a malaria-endemic area in recent months, immediately test for malaria, even if the patient reports adherence to chemoprophylaxis. Malaria is a medical emergency and requires prompt attention. Fever in a returned traveler from a malaria-endemic area should be considered malaria until proven otherwise.

Consider activities during travel in the differential diagnosis. Exposure to fresh water is a risk for schistosomiasis in endemic areas. Receipt of medical care or tattoos at the destination puts the patient at risk for bloodborne infections. Details of accommodations during travel can also offer clues. Staying in open-air dwellings, for example, can expose travelers to other mosquito-borne illnesses, such as dengue, chikungunya, or Japanese encephalitis.

Another factor to consider is time since exposure. All infections have a characteristic incubation period, and although the range can be wide, knowing the length of time since exposure can help you exclude some conditions from the differential. Most serious febrile illnesses manifest within 30 days after returning from travel, although some, such as malaria, can incubate for months, a year, or longer.

Clinical findings that accompany the fever are a useful guide for diagnosis. For example, fever with eosinophilia could be caused by schistosomiasis or an invasive parasitic infection. A drug hypersensitivity reaction could also initially manifest as fever with eosinophilia, so it's important to consider noninfectious causes of fever. Any patient who presents with fever accompanied by hemorrhage, neurologic impairment, or acute respiratory distress should receive urgent care because these symptoms can indicate a potentially fatal illness.

Most fevers are caused by common, cosmopolitan infections, such as self-limited diarrheal illnesses, influenza, or other viral syndromes, but because initial symptoms of self-limited and life-threatening infections can be identical, travel-related illnesses should always be considered in a returned traveler with a fever.

I'm Dr. Phyllis Kozarsky with CDC Audio Rounds.

*[Announcer] For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO.*