CDC Travelers’ Health, 2018

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May 22, 2018
Objectives

1. Develop or increase awareness of current travel health concerns
2. Learn steps travelers can take before and during travel to stay healthy and safe
3. Learn about resources CDC offers to help travelers and their clinicians
CDC Travelers’ Health Mission

To help reduce illness and injury in US residents traveling internationally or living abroad
Travelers’ Health Activities

- Studying and monitoring illness and injury among travelers
- Monitoring disease outbreaks and other health threats around the world that may affect travelers
- Providing travel health advice, including vaccine recommendations and requirements for international travelers and their healthcare providers
- Delivering health communication and education to a variety of audiences
- Developing and distributing event-specific advice regarding the risks of travel during an emergency
Speed of Global Travel in Relation to World Population Growth

From: Murphy and Nathanson Sems. Virol. 5, 87, 1994
Airline Routes, 2012

59,036 routes between 3,209 airports on 531 airlines

Source: http://openflights.org/data.html
On the rise: US Resident Travel to International Destinations

Source: National Travel and Tourism Office, U.S. Department of Commerce
Reasons for International Travel

Most common reasons
• Leisure (55%)
• Visiting friends and relatives (27%)

Other reasons
• Business
• Education
• Humanitarian aid
• Religion/pilgrimage
• Health care

US Department of Commerce, International Trade Administration, 2016
Current and Emerging Topics
Travel Health in the News
Measles

- Highly contagious
- Most US measles cases result from international travel
- Ongoing measles outbreaks in popular tourist destinations like England, France, Greece, Italy, the Philippines, and Indonesia as well as the DRC, Romania, Serbia, and Ukraine
- Travelers should be vaccinated before their trip, including infants 6 months and older
Malaria

- Symptoms usually appear in 7-30 days but can take up to a year to develop
- Malaria occurs in Africa, Central and South America, parts of the Caribbean, Asia, Eastern Europe, and the South Pacific
- Now there are outbreaks in areas that do not usually report malaria: South Africa, Brazil, and Cyprus
- Every year about 1,700 cases of malaria and 5 deaths occur among international travelers from the United States
- Travelers can protect themselves from malaria by taking prescription medicine and preventing mosquito bites
Distribution of Malaria
Dengue

- Symptoms usually begin 4 – 7 days after the mosquito bite and typically last 3 – 10 days
- Many people with dengue have mild illness, but there is a form of dengue that can cause severe symptoms that include intense stomach pain, repeated vomiting, bleeding from the nose or gums, and death
- Occurs in parts of the Caribbean, Central and South America, Western Pacific Islands, Australia, Southeast Asia, and Africa
- Currently there is no vaccine or medicine to prevent or treat dengue
- Travelers can protect themselves by preventing mosquito bites
Distribution of Dengue
Yellow Fever

- About 15% of people who get yellow fever develop serious illness that can lead to bleeding, shock, organ failure, and sometimes death
- Travelers to certain parts of South America and Africa are at risk for yellow fever
- Travelers can protect themselves from yellow fever by getting yellow fever vaccine and preventing mosquito bites
Yellow Fever in Brazil

- Ongoing outbreak
- Cases in unvaccinated travelers to Brazil
- Expanded list of areas in which yellow fever vaccination is recommended.
- In addition to areas where vaccine was already recommended, vaccine now also recommended in:
  - All of Espírito Santo, Parana, Santa Catarina, and Rio Grande do Sul States
  - All of São Paulo and Rio de Janeiro States, including the cities of São Paulo and Rio de Janeiro and all coastal islands
  - A number of cities in Bahia State
Yellow Fever Vaccine Shortage

- Production issues for US-licensed YF-Vax
  - YF Vax ran out of stock in July 2017
  - Authorization from FDA to use alternate vaccine (Stamaril)
- Number of clinics providing vaccine has gone from ~4,000 to ~250
- Travelers should plan ahead to get the vaccine and be prepared to drive some distance from home

Travelers can use CDC’s interactive Stamaril map to find the nearest clinic
Zika: Still a Risk

- Areas with a risk of Zika include countries in Africa, Asia, the Caribbean, Central America, North America, South America, and the Pacific Islands
- Virus spread mostly by the bite of an infected Aedes species mosquito
- Can be spread through sex and through blood transfusions
- Can be passed from a pregnant woman to her fetus
- No vaccine or medicine to prevent or treat Zika
Zika Prevention: Pregnancy

- Pregnant women should **NOT** travel to an area with a risk of Zika
- If the partner of a pregnant woman travels to an area with a risk of Zika, the couple should use condoms or not have sex for the rest of the pregnancy
Zika Prevention

- Prevent transmission through mosquito bites
  - Use EPA-registered insect repellent with an active ingredient such as DEET or picaridin
  - Wear long-sleeved shirts and long pants
  - Sleep in places with air conditioning and window and door screens to keep mosquitoes outside, or use a bed net
  - Use insect repellent for 3 weeks after returning from a trip to keep local mosquitoes from getting Zika

- Prevent sexual transmission
  - Use condoms every time you have sex while traveling and after you return home
Traveler’s Diarrhea

- Most common travel-related illness
- Prevention
  - Safe food and water choices
  - Handwashing
  - Taking bismuth subsalicylate
- Treatment
  - Fluid replacement
  - Taking bismuth subsalicylate and loperamide
  - Taking antibiotics (often just one dose)
Other Risks for Travelers

- Accidental injury
- Environmental hazards
- Altitude
- Animal bites, stings, and envenomation
- Psychiatric problems
- Skin and soft tissue infections
- Crime and assault
Preventive Actions
Pre-Travel Medical Visit

- CDC recommends most travelers see a provider 4-6 weeks before their trip
- Traveler’s risk is assessed based on
  - Traveler health history
  - Travel itinerary
- Only a provider can give
  - Vaccines
  - Prescription medications
  - Counseling and advice
Risk Assessment: Health History

- Age-specific issues
- Underlying illness, immunosuppression
- Systems review
- Medical history
- Medication use
- Vaccination history
- Allergies
- Contraindications to vaccines and medications
Risk Assessment: Travel Itinerary

- **Full itinerary**
  - Dates, duration, stopovers
  - Seasonal considerations

- **Styles of travel**
  - Rural vs. urban
  - Budget vs. luxury

- **Accommodation**
  - Hotel vs. camping

- **Activities**
  - Business vs. tourism
  - Adventure, safari
  - Missionary/humanitarian/NGO
Immunizations for Adult Travelers

- **Routine immunizations**
  - Pre-travel medical visits are opportunities to make sure adults are up to date on their routine immunizations

- **Required immunizations for travel**
  - Yellow fever (certain countries)
  - Meningococcal vaccine (all travelers) and polio (travelers from certain countries) for travel to Saudi Arabia for the Hajj
Recommended Immunizations for Travel

- Cholera
- Hepatitis A
- Hepatitis B
- Japanese encephalitis
- Meningococcal
- Polio
- Rabies
- Typhoid
- Yellow fever

Recommended vaccines vary by destination, health history, and planned activities.
Travel Medications

- Malaria
  - Prophylaxis and self-treatment
  - Chloroquine, atovaquone/proguanil (Malarone), doxycycline, mefloquine (Lariam), and primaquine
- Diarrhea
  - Bismuth subsalicylate and loperamide
  - Fluoroquinolones and azithromycin
- Altitude
  - Acetazolamide
- Motion sickness
  - Scopolamine and dimenhydrinate (Dramamine)
Food and Water Precautions

- Drinks that are bottled and sealed
- Selection of foods
  - well-cooked and hot
  - fruits you can peel
- Avoidance of
  - salads, raw vegetables
  - unpasteurized dairy products
  - food from street vendors
  - ice
- Handwashing
Insect and Mosquito Precautions

- **Outdoor measures**
  - EPA-registered insect repellent
  - Clothing that covers exposed skin
  - Treating clothing with permethrin
  - Pyrethroid coils to repel insects in the area

- **Indoor measures**
  - Staying in rooms with air conditioning or window screens
  - Permethrin-impregnated bed nets
Animal Precautions

- **Risks**
  - Animal bites and scratches
  - Envenomations
    - Snakes, scorpions, spiders
    - Marine animals
- **Precautions**
  - Avoid all animals, even pets
  - If you are bitten, scratched, or stung, seek medical care right away
Safety Precautions

- Wear a helmet
- Wear seat belts
- Drink responsibly
- Stay alert in crowds
- Follow local laws and customs
- Understand local crime risks
Leading Causes of Injury Death for US Citizens in Foreign Countries, 2011-2013

2 Excludes deaths of US citizens fighting wars in Afghanistan or Iraq, and deaths that were not reported to the nearest US Embassy or Consulate.
Planning for Emergencies

- Prepare for travel emergencies before leaving home
  - Find the contact information of the US embassy or consulate nearest your destination
  - Research how to access health care services where you are going
- Leave a copy of your passport, credit cards, and itinerary with a trusted friend or relative
  - Arrange to check in regularly
- Register in the Smart Traveler Enrollment Program (https://step.state.gov)
  - Allows the US Department of State to find you in case of an emergency
Preparing for Illness and Injury

Pack a health kit

- Pack important items to prevent and treat common injuries and illnesses
- Include prescription medicines, with enough for your trip plus extra in case of travel delays
- Don’t assume over-the-counter items will be easily available

Know when to get medical help

- Diarrhea AND a high fever (above 102° F)
- Bloody diarrhea
- Fever or flu-like illness in a malaria risk area
- Animal bite or scratch
- Car accident or other serious injury
- Sexual assault
Travel Insurance

- Find out if your health insurance covers you abroad
- Consider supplemental travel health insurance and medical evacuation insurance
- Be prepared to pay out of pocket at the time of treatment

There are 3 types of insurance you should consider for your trip: trip cancellation insurance, travel health insurance, and medical evacuation insurance. These will cover different situations and may give you financial peace of mind, as well as allowing for safe and healthy travel.

Trip Cancellation Insurance

Trip cancellation insurance covers your financial investment in your trip, such as flights, cruises, or train tickets. Carefully examine the policy to make sure it covers what you need to cover, including cancellation if you or a close family member gets sick. Depending on the policy, trip cancellation insurance might not cover any medical care you receive overseas, so you may need a separate travel health insurance policy.

Travel Health Insurance

If you need to go to a hospital or clinic overseas, you will probably be asked to pay out of pocket for any services, which can be very expensive. Even if you already have national health care, it may not cover people who are not citizens. Before you go, you should consider your insurance options in case you need care while you’re abroad, especially if you have existing health conditions, will be away from home for a long time, or will be engaging in adventure activities such as scuba diving or hang gliding.

If you have health insurance in the United States, find out if it will cover emergencies that happen abroad. Ask if your policy has an exclusions, such as preexisting conditions or adventure activities. If your health insurance coverage is not adequate, consider buying a separate travel health insurance policy. Look for a policy that will make payments to hospitals directly.

Medical Evacuation Insurance

If you are traveling to a remote destination or to a place where care is not likely to be up to US standards, consider buying medical evacuation insurance. This can be purchased separately or as part of your travel health insurance policy. This insurance will pay for emergency transportation from a remote or poor area to a high-quality hospital. Make sure that the policy provides a 24-hour support center.

Finding a Provider

This list is not all inclusive, but these resources provide information about purchasing travel health and medical evacuation insurance:

- Department of State - [www.travel.state.gov](http://www.travel.state.gov)
- International SOS - [www.internationalsos.com](http://www.internationalsos.com)
- InterHealthCare Direct - [www.interhealthcare.com](http://www.interhealthcare.com)
- International Association for Medical Assistance to Travellers - [www.iamat.org](http://www.iamat.org)
- American Association of Retired Persons - [www.aarp.org](http://www.aarp.org)
Getting Care After Travel

- Most post-travel infections present soon after travel, but incubation periods vary from weeks to years, and some are asymptomatic

- Common post-travel symptoms include
  - Fever
  - Skin and soft tissue infections
  - Persistent travelers’ diarrhea
CDC Resources
- Online (free) at www.cdc.gov/yellowbook
- Purchase from Oxford University Press and at major booksellers
  - Print edition
  - E-book
- Available as a mobile app on the App Store and Google Play Store
Travelers’ Health Website
Travel Notices

- **Level 1, Watch**
  - Follow usual precautions

- **Level 2, Alert**
  - Use enhanced precautions

- **Level 3, Warning**
  - Avoid nonessential travel
Destination Pages

- Versions for clinicians and travelers
  - Easy-to-read vaccine and medicine charts
  - Advice on food and water safety, bug bite prevention, and other healthy travel behaviors
- Healthy travel packing list
- Current travel notices
- Tips on when to seek care after travel
Print Materials for Travelers

- In English and Spanish
- Available free of charge
  - [www.cdc.gov/pubs](http://www.cdc.gov/pubs)
- Select “Travel Health” from the "Programs" dropdown menu
Mobile Apps
Outreach Campaigns

Viajo Sin Zika
- Spanish- and English-language Zika campaign focusing on Latinos traveling to Latin America and the Caribbean
- Disseminated through media, social media, advertisements, and partnerships

Think Travel
- Clinician-focused campaign to build awareness of the need to incorporate travel health into patient care
- Coming summer 2018
Stay in Touch
Newsletter and Travel Notice Alerts

Get email updates:
www.cdc.gov/Other/emailupdates/

- Create a user profile
- Add Subscriptions
- Select Travelers’ Health (scroll to bottom)

[Image of a newsletter and travel notice]

June 2016

Welcome to CDC Travelers’ Health Update. We are excited to launch this quarterly newsletter to highlight healthy travel tips. If you plan international travel this summer, our website can help you travel smart and protect yourself. Join us on Twitter and Facebook this week to discuss #SummerTravelTips.

Zika Travel Notices

CDC has Zika travel notices posted for all destinations. If you are traveling to an area with Zika, be sure to follow CDC recommendations to stay healthy and safe. All travelers to areas with Zika should prevent mosquito bites. Zika can also be spread by a man to his sex partners, so travelers should use condoms if they have sex.

Because Zika during pregnancy can cause serious birth defects, pregnant women should not travel to areas with Zika. Couples who are trying to become pregnant should talk to their doctor about their plans and see CDC guidance for how long you should wait to get pregnant after travel to an area with Zika.
National contact center available to answer questions from the public and from healthcare providers

- **Phone calls**
  
  800-CDC-INFO  
  (800-232-4636)  
  TTY 888-232-6348

- **E-mails**
  
  wwwn.cdc.gov/dcs/ContactUs/Form

- Monday – Friday  
  8:00 a.m. – 8:00 p.m. Eastern

- In English and Spanish
Thank you!
Questions?

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.