

Medical Tourism & International Data Sharing

Nelson Arboleda, MD, MPH

Country Director

US Centers for Disease Control and Prevention (CDC)

US Department of Health and Human Services

US Embassy

Dominican Republic



Travelers Health

- According to UNWTO, > 1 B of international tourists in 2013, an increase from 5% from 2012 to 57% from 2003.
- In 2013, U.S. residents gave more than 61M trips spending at least 1 night out of the country
- There is no correct way to express the importance of protecting the health of travelers as well as safeguarding the health of the communities they return from.



Health of the Traveler

- International travel can be caused by many reasons: tourism, business, studying abroad, investigation, visiting friends and family, ecotourism, adventures, medical tourism, missionary work, and responding to emergencies and international disasters.
- Travelers are as unique as their itineraries, varying in age and health conditions.
- Some risks travelers may come across are dynamic and may vary: many destinations have increased security, while others have seen a surge in new diseases and even resurge in past diseases.



Health of the Traveler

- The risk of becoming ill or injured during an international trip depends on many factors such as the region of the world visited, age and the state of health of the traveler, the duration of the trip, and the diversity of the planned activities.
- CDC provides international information on travelers' health to address the range of health risks one might face.



<http://wwwnc.cdc.gov/travel/yellowbook/2016/introduction/introduction-to-travel-health-the-yellow-book>



Health of the Traveler

- the objective is to help travelers (& clinicians) better understand the necessary measurements to prevent diseases and injuries while on international travel.
- The online **CDC Travelers' Health** website (www.cdc.gov/travel) is the principal source to communicate CDC's recommendations about the health of travelers.

PROTECT YOURSELF from MOSQUITO BITES
Mosquitoes spread Zika virus.



Mosquitoes that spread Zika are aggressive daytime biters. They can also bite at night.

Use insect repellent.
Look for the following active ingredients:
• DEET • PICARIDIN • IR3535
• OIL of LEMON EUCALYPTUS
• PARA-MENTHANE-DIOL

Wear long-sleeved shirts and long pants or use insect repellent. For extra protection, treat clothing with permethrin.

**U.S. Department of Health and Human Services
Centers for Disease Control and Prevention**

For more information:
www.cdc.gov/zika • www.cdc.gov/travel

CS262036-C

CDC Travelers' Health Website Guide



The diagram illustrates the website's structure with a central 'HOME' icon (a house) connected to four main sections:

- Traveler Information Center** (green circle): Includes 'Special Groups Info', 'General Information for Travelers', and 'Find a Clinic'.
- Travel Health Notices** (orange circle): Features a warning triangle icon.
- Clinician Information Center** (brown circle): Includes 'CE Courses & Training', 'In-Clinic Quick Links (Travel Consultation Heat)', 'Clinical Updates', and 'Travel Medicine References (Books, Journals, Articles & Websites)'.
- Destination Pages** (blue circle): Includes 'Vaccine & Medicine Recommendations', 'Healthy Travel Packing List', 'Travel Health Notices (Destination Specific)', 'Health & Safety Recommendations', and 'Returning Travelers'.

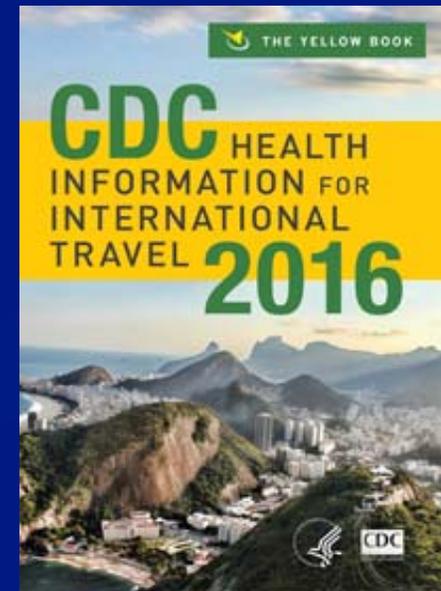
Icons of a traveler with a suitcase and a clinician in a white coat are positioned at the bottom left and right respectively. The CDC logo is in the bottom left corner.

<http://www.nnc.cdc.gov/travel/yellowbook/2016/introduction/introduction-to-travel-health-the-yellow-book>



“The Yellow Book”

- The information provided by CDC for international travelers has been a reliable source since 1967 – through the well-known book, “The Yellow Book”
- Originally, it was a pamphlet published to meet the requirements of the WHO and RSI, it has now evolved to a book that provides detailed information on traveler’s diseases, as well as the requirements to enter foreign countries.
para entrar a otros países (i.e. Yellow Fever shot).
- The “Yellow Book” is written by clinicians primarily, nurses and pharmacists. Also by other people tied to the travel industry - relevant information can be found in this book.
- The updated version can be found on the CDC Homepage (www.cdc.gov/yellowbook).



Travelers' Health

- Home
- Destinations
- Travel Notices
- Zika Travel Information +
- Travel to the Olympics +
- Find a Clinic +
- Disease Directory
- Resources +
- Yellow Book +
- Partners +
- Mobile Apps
- RSS Feeds

[CDC](#) > [Home](#)

Destinations



For Travelers



Where are you going?

-- Select One -- 

What kind of traveler are you?

(optional)

- Traveling with Children
- Chronic Disease
- Cruise Ship
- Extended Stay/Study Abroad
- Immune-Compromised Travelers
- Pregnant Women
- Mission/Disaster Relief
- Visiting Friends or Family

Go

For Clinicians



Traveler destination

-- Select One -- 

Special travel needs

(optional)

- Traveling with Children
- Chronic Disease
- Cruise Ship
- Extended Stay/Study Abroad
- Immune-Compromised Travelers
- Pregnant Women
- Mission/Disaster Relief
- Visiting Friends or Family

Go

[Complete List of Destinations](#)

Travelers' Health

- Home
- Destinations (245) -
- Dominican Republic +
Traveler View
- Dominican Republic -
Clinician View
- Healthy Travel Packing List
- Travel Notices
- Zika Travel Information +
- Travel to the Olympics +
- Find a Clinic +
- Disease Directory
- Resources +
- Yellow Book +
- Partners +
- Mobile Apps
- RSS Feeds

[CDC](#) > [Home](#) > [Destinations \(245\)](#)

Health Information for Travelers to Dominican Republic
Clinician View



Note: Zika outbreaks have been reported in the Dominican Republic. Because of the risk of birth defects in babies born to women who were infected with Zika while pregnant, women who are pregnant should not travel to the Dominican Republic. For more information, see [Zika Virus in the Dominican Republic](#).



On This Page

- [Vaccines and Medicines](#)
- [Non-Vaccine-Preventable Diseases](#)
- [Patient Counseling](#)
- [Healthy Travel Packing List](#)
- [Travel Health Notices](#)
- [Advising Returning Travelers](#)

Traveler View

See another destination

Traveler destination

Special travel needs
(optional)

Vaccines and Medicines [Hide](#)

Prepare travelers to the Dominican Republic with recommendations for vaccines and medications.

	Recommendations	Transmission	Guidance
Routine vaccines	Recommended for all travelers	varied	Immunization schedules
Hepatitis A	Recommended for most travelers, including those with "standard" itineraries and accommodations	Fecal-oral route (contaminated food and water)	Hepatitis A (Yellow Book)



- Mobile Apps
- RSS Feeds

See another destination

Where are you going?

Dominican Republic ▼

What kind of traveler are you?

(optional)

- Traveling with Children
- Chronic Disease
- Cruise Ship
- Extended Stay/Study Abroad
- Immune-Compromised Travelers
- Pregnant Women
- Mission/Disaster Relief
- Visiting Friends or Family

Go

Vaccines and Medicines

Hide

Check the vaccines and medicines list and visit your doctor (ideally, 4-6 weeks) before your trip to get vaccines or medicines you may need.

Find Out Why

Protect Yourself

All travelers

You should be up to date on routine vaccinations while traveling to any destination. Some vaccines may also be required for travel.

Routine vaccines	Make sure you are up-to-date on routine vaccines before every trip. These vaccines include measles-mumps-rubella (MMR) vaccine, diphtheria-tetanus-pertussis vaccine, varicella (chickenpox) vaccine, polio vaccine, and your yearly flu shot.	
----------------------------------	--	---

Most travelers

Get travel vaccines and medicines because there is a risk of these diseases in the country you are visiting.

Hepatitis A	CDC recommends this vaccine because you can get hepatitis A through contaminated food or water in the Dominican Republic, regardless of where you are eating or staying.	
Typhoid	You can get typhoid through contaminated food or water in the Dominican Republic. CDC recommends this vaccine for most travelers, especially if you are staying with friends or relatives, visiting smaller cities or rural areas, or if you are an adventurous eater.	

Some travelers

Ask your doctor what vaccines and medicines you need based on where you are going, how long you are staying, what you will be doing, and if you are traveling from a country other than the US.

Hepatitis B	You can get hepatitis B through sexual contact, contaminated needles, and blood products, so CDC recommends this vaccine if you might have sex with a new partner, get a tattoo or piercing, or have any medical procedures.	
Malaria	When traveling in the Dominican Republic, you should avoid mosquito bites to prevent malaria. You may need to take prescription medicine before, during, and after your trip to prevent malaria, depending on your travel plans, such as where you are going, when you are traveling, and if you are spending a lot of time outdoors or sleeping outside. Talk to your doctor about how you can prevent malaria while traveling. For more information on malaria in the Dominican Republic, see malaria in the Dominican Republic .	
Rabies	Rabies can be found in dogs, bats, and other mammals in the Dominican Republic, so CDC recommends this vaccine for the following groups: <ul style="list-style-type: none"> • Travelers involved in outdoor and other activities (such as camping, hiking, biking, adventure travel, and caving) that put them at risk for animal bites. • People who will be working with or around animals (such as veterinarians, wildlife professionals, and researchers). • People who are taking long trips or moving to the Dominican Republic • Children, because they tend to play with animals, might not report bites, and are more likely to have animal bites on their head and neck. 	



Healthy Travel Packing List Hide

Use the [Healthy Travel Packing List for Dominican Republic](#) for a list of health-related items to consider packing for your trip. Talk to your doctor about which items are most important for you.

Why does CDC recommend packing these health-related items?

It's best to be prepared to prevent and treat common illnesses and injuries. Some supplies and medicines may be difficult to find at your destination, may have different names, or may have different ingredients than what you normally use.

[^ Top](#)

Travel Health Notices Hide

Be aware of current health issues in the Dominican Republic. Learn how to protect yourself.

Alert Level 2, Practice Enhanced Precautions

[Zika Virus in the Dominican Republic](#)

August 05, 2016

Local transmission of Zika virus infection (Zika) has been reported. Local transmission means that mosquitoes in the area have been infected with Zika virus, spreading it to people.

Watch Level 1, Practice Usual Precautions

[Chikungunya in the Caribbean](#)

May 14, 2015

In December 2013, the World Health Organization (WHO) reported cases of chikungunya in Saint Martin. Additional cases were reported in other islands in the Caribbean. This is the first time that local transmission of chikungunya has been reported in the Americas. CDC recommends that travelers to the Caribbean protect themselves from mosquito bites.

[^ Top](#)

After Your Trip Hide

If you are not feeling well after your trip, you may need to see a doctor. If you need help finding a travel medicine specialist, see [Find a Clinic](#). Be sure to tell your doctor about your travel, including where you went and what you did on your trip. Also tell your doctor if you were bitten or scratched by an animal while traveling.

If your doctor prescribed antimalarial medicine for your trip, keep taking the rest of your pills after you return home. If you stop taking your medicine too soon, you could still get sick.



For every **100,000 travelers** visiting a developing country for **one month**, an average of

 **50,000** will experience some health problem while abroad

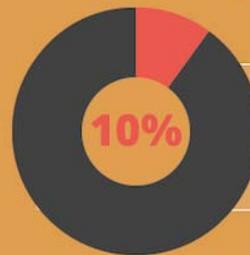
 **8,000** will need to be seen by a physician

 **5,000** will be confined to a bed

 **300** will be admitted to a hospital

 **50** will require air evacuation

 **1** will die on the trip



Despite these facts, **only 10 percent** of international business travelers receive **pre-travel health care**.



A health threat anywhere is a health threat everywhere



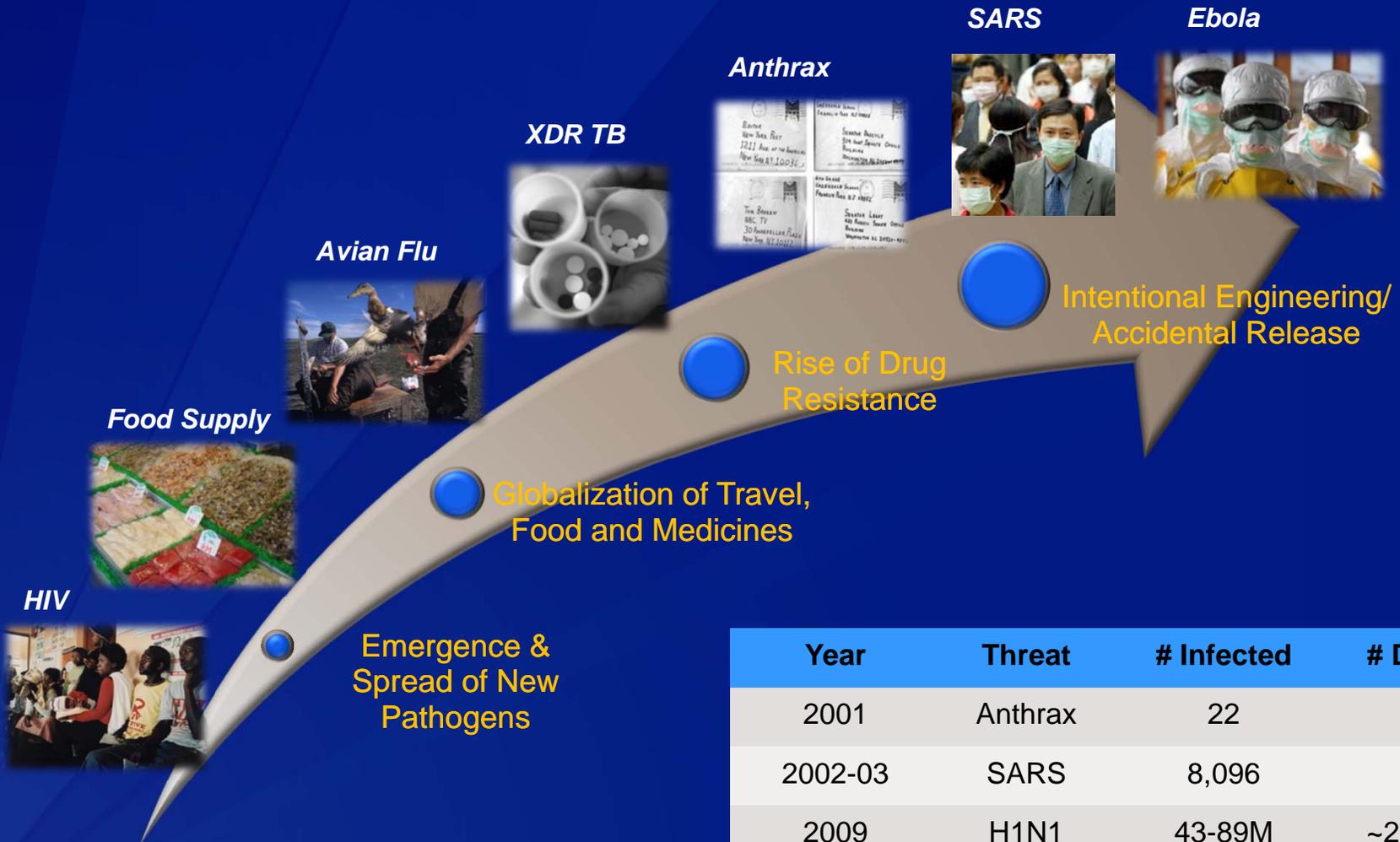
Source: *The Lancet* 380:9857, 1-7 Dec 2012, pp. 1946-55. www.sciencedirect.com/science/article/pii/S0140673612611519

Diseases are only a flight away



Global transmission patterns of measles viruses from the Philippines, 1/1/14 to 3/31/14

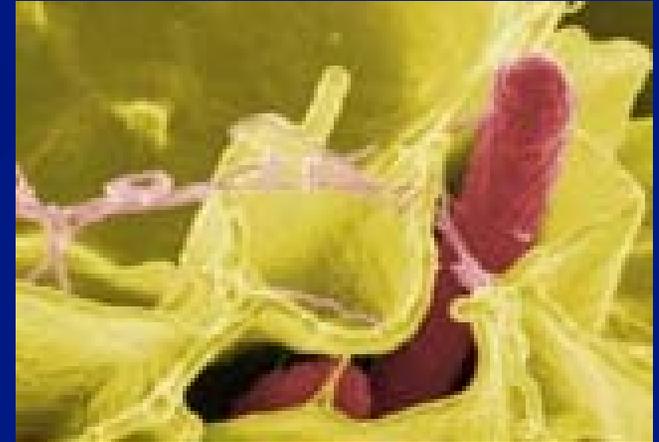
Public Health Threats



Year	Threat	# Infected	# Deaths
2001	Anthrax	22	5
2002-03	SARS	8,096	77
2009	H1N1	43-89M	~284,000
2014-15	Ebola	>28,500	>11,000

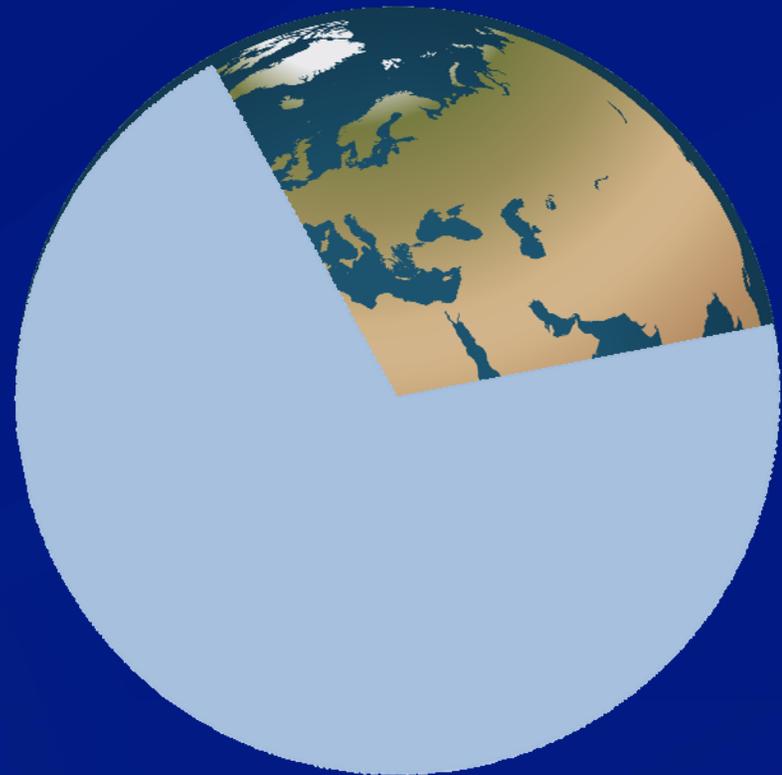
Infectious disease continue to be transmitted via food, water, and medical care

- Food & water
 - Billions of diseases & >4M deaths/year
- Infections associated with medical care (lack of basic hygiene, i.e., washing of hands, sterilization)
 - Affects ~1 in 20 patients in the U.S. (hundreds of millions/year)
 - Everyday we witness more resistant organisms



Less than 1/3 of the world is prepared to respond

- By 2012, fewer than 20% of countries **had met IHR goals**
- By 2014, about 30% of countries were fully prepared to detect and respond to an outbreak



Source: Report to the Director-General of the Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR Implementation, November 2014

Medical Tourism: Represents a Growing Market in the U.S.

- Estimated that thousands of US residents travel for the purpose of receiving medical care
- Currently, there is no nationwide surveillance for medical tourism in the United States by CDC or other groups (Department of State)
- Estimates vary by the tens of thousands because of different sources of data (e.g., some come from private hospitals, others from medical tourism concierge services)



Medical Tourism: Represents a Growing Market in the U.S.

- Different reasons may influence the decision to seek care:
 - Cost
 - Care may be less expensive for patients who are paying out of pocket
 - Some health insurance companies outsource medical care overseas and cover costs of travel and procedures
- Comfort with a provider from a specific background (i.e. similar cultural background to patient or belief they can give patient a specific 'look')



Medical Tourism: Represents a Growing Market in the U.S.

- ❑ **Desire to combine medical care with personal travel or vacation**
 - Seeking medical procedure not available in US
 - May not be approved by regulatory authorities in US
 - May be experimental procedure



Medical Tourism: Represents a Growing Market in the U.S.

□ Variety of procedures received:

- Orthopedic surgery
- Cosmetic surgery
- Cardiac surgery
- Oncological care
- Dental care
- Fertility treatments
- Experimental treatments



All **surgical procedures** and many medical procedures carry some amount of risk (even domestically).

- Credentialing standards vary by country. Local and international standards for healthcare providers and clinics may differ from those of the US.
- State and local health departments and CDC have detected outbreaks of disease among medical tourists.
- Some outbreaks have been associated with a particular clinic and/or provider.



Special Considerations:

- Cost-
 - Medical tourism may be cheaper for individuals paying out-of-pocket
 - Insurance companies may incentivize travelers
 - Potential for additional costs incurred with complications or adverse events
 - Medical costs
 - Unanticipated travel costs
 - Evacuation costs
 - Loss of time at work, productivity
 - Potential lack of clarity regarding patient care overseas and upon return to country of residence



Special Considerations:

- Challenges with continuity of care to ensure safe, adequate care
 - Overseas providers need current medical records
 - Providers in country of residence need medical records from overseas care to ensure appropriate follow-up
- Medical insurance
 - Some domestic insurance carriers may provide coverage for emergencies that occur while traveling
 - Traditional health insurance may limit coverage
- Supplemental travel health insurance, medical evacuation insurance may provide additional protection



Special Considerations:

- Language barriers
 - Patient may need assistance in a country where their primary language is not spoken
 - Navigating country
 - Interacting with provider(s)
 - Patient records may be in a foreign language
 - Need translated copy for regular provider in country of residence
- Post-travel care
 - Patients may not share travel history
- Patients may lack documentation and/or knowledge of procedures, medication, etc.
 - Difficulties transferring records between facilities
 - Records may not be in English



CDC recommends that people who are considering medical tourism see a healthcare provider **4-6 weeks before they travel to discuss their trip and any planned medical procedures.**



How CDC is Contributing

- **CDC is currently working with state and local health departments to conduct novel surveillance on medical tourism**
 - Collaborating with 12 health departments in US states and territories



Guidance to Providers Preparing Travelers

- **Providers:**
 - Assess health risks for patient based on current health status, planned activities
 - Assess health risks associated with travel destination
 - Assess health risks associated with planned procedures
 - Prepare traveler based on current health status, planned activities, destination risk profile, and planned procedures

How CDC is Contributing

- This data will provide more detailed information about medical tourists, the most sought out procedures, if they experience complications on their return, and if they received attention after their return to the U.S.
- Quickly sharing information with the Ministry of Health
- CDC/DR office opens in 2009
- Part of the strategy in support of the Dominican Republic to characterize and fight diseases such as HIV, TB, Malaria, Zika, Colera, Dengue, etc...



Guidance to Prospective Medical Tourists

- Encourage complete documentation
 - Take medical records from country of residence
 - Patients should request a copy of their complete medical
 - Record from their overseas provider before returning to US
 - Transfer between facilities must meet HIPAA standards
- Transparency is important
 - Ability to provide adequate care is compromised without an accurate medical, travel history

Guidance to Prospective Medical Tourists

- Importance of researching provider and facility
 - What kind of accreditation does a provider have? What kind of accreditation does a facility have?
 - How many times has a provider conducted the specific procedure a patient is seeking?
 - What kind of follow-up care does a patient need? How will they get it?
 - How will a patient get care for any potential complications?



Saving Lives.
Protecting People.™

LEARN MORE ABOUT HOW
CDC WORKS FOR YOU.



Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Phone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov

Web: www.cdc.gov

Nelson Arboleda, MD, MPH

narboleda@cdc.gov



Thank
You!

Center for Global Health

