

SUMMER 2010

# Healthy Travels

## Protect Yourself from Viruses While Traveling

Advances in technology have made travel to different countries more accessible for everyone. Both young and old can now travel from their country of origin to foreign and exotic lands within 24 hours and experience cultures different from their own. Adventures in air and sea are limitless. However, just as easily as travelers can traverse different countries, diseases can now spread quickly across continents. Travelers are exposed to large numbers of people in different settings (i.e., airports, airplanes, and cruise ships) facilitating the transmission of diseases to different areas of the world.

This newsletter will focus on common viruses travelers may encounter including those that are respiratory, gastrointestinal, blood-borne, and sexually-transmitted. It will provide you with guidance on how to protect yourself from acquiring these viruses while traveling. Given the recent global health concern caused by the 2009 H1N1 virus, also known as “swine flu”, a section is dedicated to address your travel concerns about this virus.

Viruses are microscopic organisms that require

human or animal hosts to survive and to multiply. Many of these viruses are resilient and can survive extreme fluctuations in temperature and humidity once outside the human body. They can even survive on objects, such as tables and chairs, for many hours. Once infected, an individual can transmit the virus to another person through direct or indirect contact with infected bodily secretions or fluids. Most of these illnesses resolve without complications; however, some may result in long-term medical conditions or even death. It is important to understand that there are ways to protect yourself from getting sick and specific actions that you can do to prevent spreading the viral infection to someone else.



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## H1N1 and Travel

The H1N1 virus, also known as “swine flu”, is a new virus causing infections in humans worldwide. It is transmitted from person-to-person resulting in mild to severe illnesses. This virus is made up of two genes from influenza viruses found in pigs in Europe and Asia along with avian (bird) genes and human genes. This combining of parts from different flu viruses is a natural process that occurs when one animal is exposed to multiple influenza viruses at one time. Most illnesses caused by H1N1 resolve without complications. However, many individuals require hospitalization, occasionally leading to death after being infected with this virus. Medical conditions that may increase the risk for more severe disease with H1N1 include: diabetes, asthma, heart disease, and kidney disease. Young children may develop serious complications from H1N1 infection as well. According to the U.S. Centers for Disease Control and Prevention (CDC), elderly people (>65 years) are least likely to be infected with H1N1, but are more likely to have severe reaction if they do acquire an infection.

Just like seasonal influenza, infection with the H1N1 virus manifests as any combination of the following symptoms: fever, cough, sore throat, runny nose, body aches, headaches, chills, fatigue, vomiting, and diarrhea. Person-to-person transmission occurs through contact with infected bodily secretions generated by coughing and sneezing, or by touching objects containing the virus and then touching the eyes, nose, and mouth.

What actions can you take to protect yourself from H1N1? Immunization against seasonal influenza and H1N1 virus are important preventive measures to protect you from these viruses. Because influenza viruses circulate year-round in the tropics, immunization against influenza should be up-to-date for anyone traveling outside of the U.S. In addition, wash your hands frequently with soap and water for 15 to 20 seconds. If soap and water are not available, use alcohol-based hand sanitizer and rub your hands together until dry. Water is not needed if using these alcohol-based products. Cover your



mouth and nose with your arm or tissue when coughing or sneezing. Immediately discard the used tissue in the trash. Avoid touching your eyes, nose, and mouth. Most importantly, the CDC recommends that individuals with influenza-like illness not board an aircraft until at least 24 hours after fever has resolved without the use of fever-reducing medications, such as Tylenol. For more information on H1N1 virus, go to <http://www.cdc.gov/h1n1flu/qa.htm>.

## Respiratory Viruses and Air Travel

Sitting next to someone who sneezes, snuffles, or coughs from takeoff until landing can make traveling in coach class on a long flight even worse than it already is. Fortunately, the risk of becoming ill with a respiratory virus is probably quite low, and you can take action to reduce your risk.

The closed environment of an airplane cabin may seem to be a good means for spreading respiratory viruses. However, air in an aircraft is exchanged more frequently than in a typical office building, and special filters remove viruses attached to respiratory droplets in the air. So if you become ill with a respiratory virus, it is probably from direct contact with someone who is infected (think twice about that friendly handshake!), or by airborne transmission before the air is filtered and exchanged.

Experts primarily warn air travelers about common cold viruses. In addition, the transmission of more severe illnesses such as Severe Acute Respiratory Syndrome (SARS) may occur from an infected passenger to others seated nearby. If the airplane’s ventilation system is down, then the cabin becomes a favorable environment for virus transmission. In a famous outbreak 30

years ago, a passenger with influenza infected nearly 75% of the other 53 people on board while the plane sat on the ground for 3 hours with the ventilation system not functioning.

In theory, many respiratory viruses could present a risk for people traveling by air. During the 2003 SARS outbreak, investigators identified influenza, parainfluenza, adenovirus, metapneumovirus and other viruses among travelers with severe respiratory illnesses arriving by air to Germany from SARS-affected countries. Although in many cases the illnesses were no more severe than seasonal influenza, air travel can accelerate the spread of a respiratory virus such as H1N1 influenza.

Most respiratory infections in travelers are caused by viruses. If you become ill with a respiratory virus after flying, it is likely to be a cold or other relatively mild infection. Influenza causes sudden onset of high fever, cough, muscle aches, and headache. If these symptoms increase in severity, you are pregnant, or have an underlying medical condition (such as asthma, heart, and lung disease), seek medical attention immediately. Like seasonal flu, H1N1 flu may cause a worsening of underlying chronic medical conditions.

## A Party in your Belly: An Overview of Viral Gastrointestinal Illness for Travelers

Sizzling kabobs, fresh mangoes, or a steaming bowl of noodles - one of the most exciting things about traveling is the opportunity to try new foods. Eating can be one of the great joys of traveling, but is definitely not without risks. There are varieties of illnesses that can be caused by consuming contaminated food or drinks. These illnesses are generally caused by bacteria, viruses and parasites. This section will focus on the two most common travel related gastrointestinal conditions caused by viruses: Hepatitis A and traveler's diarrhea.

Hepatitis A is a contagious liver disease that people catch from consuming food or water that has been contaminated with the feces of someone else who has been infected with the Hepatitis A virus (HAV). Some of the most commonly contaminated foods are lettuce, fresh fruits and vegetables. Travelers are at especially high risk for Hepatitis A. The most common risk factor for infection with HAV in the U.S. population is international travel. HAV causes inflammation of the liver that can last anywhere from several weeks to several months. Common symptoms of this infection include jaundice (yellow skin), nausea, weakness and generally feeling ill. While most people infected with HAV recover, about 20% of people infected must be hospitalized, and death occurs in 0.1%-1% of patients with the disease.

Hepatitis A can be prevented in two ways. The first is to assure that the food and water that one consumes is safe. The second is by receiving the Hepatitis A vaccine. Immunization against HAV requires receiving two doses of the vaccine. The second dose of vaccine should be given 6-18 months after

the first dose is received. If someone is traveling and doesn't have time to receive two doses, they should receive at least one dose of vaccine, as there is strong scientific evidence that a single dose provides fairly good protection against the virus. Upon returning, one should receive the second dose of the vaccine; this will provide near total protection against the virus.

Traveler's diarrhea is generally less severe than Hepatitis A, but it is much more common. In fact, it is the most common illness suffered when travelers from the U.S. visit less developed countries. There are many names for traveler's diarrhea: Montezuma's Revenge, the Delhi Belly, turista, the Turkish Two-Step, the Tijuana Cha-Cha. Although some irony is definitely intended in most of these appellations, the explosively watery stools and excruciating cramps of traveler's diarrhea are no joke. It is a very common ailment that can ruin several days of a much-anticipated vacation or trip.

Like Hepatitis A, traveler's diarrhea is generally caused by consuming food or water that has been contaminated with the feces of an infected person. Traveler's diarrhea can also be prevented by assuring that the food and drinks that one consumes are safe. For additional information on how to protect against traveler's diarrhea, see the General Preventive Strategies section in this newsletter.

It is important to note that acute diarrhea during travel is more frequently caused by bacteria than viruses. This is the

reason that your travel doctor may discuss the use of antibiotic medications for self treatment of diarrhea during travel. However, acute diarrhea due to gastrointestinal viruses is common both in the U.S. and in foreign travel destinations. The well-publicized Norwalk virus is the most common cause of gastrointestinal illness outbreaks on cruise ships.

What should a traveler do when they start having loose stools? The most important thing before, during and after a bout of diarrhea is to stay hydrated. Travelers should make sure that they are drinking enough fluids, and that the fluids they drink are safe. Your doctor may prescribe antibiotics for self-treatment if you develop diarrhea. Your doctor may also recommend that you use an anti-motility medication (i.e., Lomotil or Imodium) that slows down the activity of the gastrointestinal system. However, anti-motility agents should never be used if blood is present in your stool. Travelers should discuss use of these medications with a travel doctor prior to leaving for their trip.

Both Hepatitis A and traveler's diarrhea are serious conditions, but both are also preventable. Travelers should be aware of these conditions, and should do all that they can to prevent them, including immunization for Hepatitis A, consuming safe foods and beverages, and setting up a self-treatment plan for traveler's diarrhea with a doctor prior to travel. Once informed and prepared, one can travel with confidence and truly enjoy the exciting experiences of traveling; so go enjoy that steaming bowl of borscht or that banana you just picked from the plant. Bon voyage and bon appétit- safe travels and bon good eating!



## General Preventive Strategies: Protect Yourself from Getting Sick

Whether for business or pleasure, to visit tourist destinations or friends and relatives, traveling has become a major part of American culture. However, in order to make the most of your trip, there are many steps that you can take to prepare yourself. The CDC recommends that travelers be “Proactive, Prepared and Protective” in order to maximize their travel adventures.

In order to be proactive, travelers should learn about their destinations. This can involve learning about the health risks associated with these countries, evaluating safety and security concerns, and understanding the local laws and customs. Travelers should also think about their own health status and evaluate whether they may be too sick to travel or have special health needs that need to be addressed prior to traveling. These issues and concerns can be managed by seeing a travel doctor before your trip. A travel medicine provider can go over your itinerary and recommend any needed vaccinations and provide health and safety-related tips prior to travel. This appointment should be made at least 4-6 weeks before your travel date.

The second step in a safe and healthy travel is to be

prepared. Plan ahead for illness or injuries that may occur during the trip. Often, travelers are responsible for any medical expenses incurred during a trip, check with your current insurance if you already have this coverage. Consider purchasing travel specific insurance if not provided by your current insurance. You should also prepare for your trip by packing appropriately for your destination. This not only involves clothing but also a travel health kit which may include your prescription medications, over the counter medications, insect repellents, band-aids, and any other health related personal items.

Finally, it is important to protect yourself from illness during and after your trip. The most overlooked advice is to pay attention to your health during your trip. Often, travelers have saved money or vacation days for a dream destination and will ignore their basic health requirements in order to maximize their experience. Some additional tips include:

- a) use sunscreen and insect repellent;
- b) wear a seatbelt when riding in a motor vehicle;
- c) try not to take risks with your health or safety, and
- d) most importantly, respect your host country and its people by following local laws and customs.

Following these simple steps will make for an enjoyable and safe trip. For more information, visit <http://wwwnc.cdc.gov/travel/>

### Preventive Measures against Gastrointestinal Illnesses while Traveling

Poor sanitation and absence of safe restaurant practices places travelers at risk for traveler’s diarrhea. Here are some preventive measures for you to follow to prevent getting sick while abroad:

#### Do’s:

- » Always wash your hands with soap and warm water for 15-20 seconds (minimum) after using the toilet or before eating
- » Drink only water that is sealed and bottled, chemically treated, filtered or boiled
- » Eat food from known caterer to foreign traveler
- » Eat well-cooked food served steaming hot
- » Eat fruits, nuts or vegetables with thick skin that you remove yourself
- » Eat breads, tortillas, crackers, biscuits and other baked goods
- » Eat canned food

#### Don’ts:

- » Eat food from street vendors with suspicious preparatory habits
- » Eat leafy, uncooked vegetables or salads
- » Eat undercooked or raw meat, chicken, seafood, or fish
- » Eat unpasteurized milk, juice, cheese, or cold sauces (mayonnaise)
- » Eat buffet foods unless they are fresh and have been kept steaming hot
- » Eat creamy desserts, custards, or sauces



## Blood borne and Sexually Transmitted Viruses

Involvement in a motor vehicle accident, either as a passenger or a pedestrian, may occur while traveling abroad. Motor vehicle accidents are the number one factor contributing to hospitalization of U.S. travelers in developing countries. Such trauma may result in injury requiring blood transfusion. In the U.S. under the Food and Drug Administration, strict blood screening standards are performed on all donated blood. The donated blood is screened for Hepatitis B (Hep B), Hepatitis C (Hep C), Human Immunodeficiency Virus (HIV), and Human T-Cell Lymphoma Viruses 1&2 (HTLV 1&2). However, other countries may not enforce the same strict screening requirements. If you are involved in an accident or have an illness that requires blood transfusion while abroad, it is important that you understand the potential for infection with one of these

viruses. Among the viruses mentioned, only Hep B has a vaccine to prevent its transmission. The Hep B vaccine consists of three doses and is part of the routine childhood vaccination schedule in the U.S. The Hep B vaccine is recommended for individuals who travel abroad for more than 30 days or plan to participate in activities with high risk for traumatic injuries or exposure to blood products.

Many travelers do not intend to engage in any sexual activities while traveling, while some may travel explicitly for the purpose of sexual tourism. Common viruses that are acquired through sexual activity during travel are the same as those acquired in the U.S. These include HIV, Hep B, Hep C, HTLV 1&2, Human Papilloma Virus (HPV), and herpes viruses. Among these

viruses, only Hepatitis B and HPV have available vaccines to prevent their transmission. Specific types of the HPV can cause cervical cancer in women and genital warts. This vaccine is now a recommended childhood vaccine in the U.S.

Prevention is the key to avoid any sexually transmitted infection (STI). Abstinence is the only 100% means of protection from STIs. Condoms are commonly available and used around the world to help protect from exposure to body fluids during sexual activities. However, condoms only reduce the risk of acquiring STI and do not eliminate it altogether. You may want to consider obtaining U.S. produced condoms prior to travel as the quality and availability of latex condoms overseas can be unpredictable.

## Travel Immunizations

When preparing for international travel, ensure that routine immunizations such as diphtheria, tetanus, measles, mumps, rubella, polio, chickenpox and influenza are up to date. Most of these immunizations are completed in childhood. These diseases are not thought to have a great impact in U.S. but can be serious health concerns overseas. Additional vaccines may be required or recommended depending on the individuals' destination and planned activities.

Many countries require proof of yellow fever immunization before a traveler is allowed entry into the country. This requirement varies from country to country so check your country of destination for its entrance requirements. The yellow fever vaccine is given only at approved administration clinics, and a single dose provides protection for 10 or more years. Certain individuals (i.e., children under 9 months old; adults over 65 years old; and people with egg or chicken allergies) should be cautious in

receiving this vaccine due to potential side effects. Check with your travel doctor before receiving this vaccine.

Hepatitis A and typhoid vaccines are often recommended for travelers with adventurous dietary habits. The Hepatitis A vaccine is generally given in 2 doses 6 months apart. If receiving both doses is not possible due to time constraints, then immunization at least 1 month before travel (or even 2 weeks before travel) offers some protection. The typhoid vaccine is given either in a single shot or 4 oral doses. The oral doses are taken at home every 2 days for a total of 8 days. The injectable typhoid vaccine provides protection for 2 years, and the oral vaccine for up to 5 years. There are differences in the protection provided by both of these vaccines so you should consult your travel doctor to determine which is right for you.

Rabies virus is acquired by exposure to infected animals. Once an infection is established in humans, it is almost

universally fatal. The rabies vaccine is recommended for individuals who plan on handling animals while traveling, or who will travel to rabies-prevalent areas for an extended period. It is given in 3 doses over 3 to 4 weeks. Treatment is still required if you get bitten by an animal while traveling, but the risk of death due to rabies is decreased significantly.

See a travel doctor weeks before your departure to determine which immunizations are appropriate for your country of destination. Your travel doctor will discuss an individualized plan based on your complete itinerary. This plan will include immunization recommendations, safety tips and preventive measures to protect you from getting sick while abroad. Remember to bring your vaccination records and be prepared to discuss any chronic medical conditions or prior reactions to vaccines. By working as a team with the travel clinic staff, you can ensure yourself a safe and enjoyable trip.

## Travel Medicine Clinic at Fort Myer



Are you planning on traveling internationally in the near future? If you are visiting a location in Africa, Asia, or Central/South America, an appointment at the travel medicine clinic can help you prepare for any disease risks you may encounter.

- The Family Health Center of Fort Myer (Rader Army Health Clinic) Travel Medicine Clinic is open on Tuesdays from 0900 to 1600.
- Appointments can be made by calling 703-696-3439.
- Schedule your appointment approximately 4-6 weeks prior to your departure date.
- Bring your medical records with you, including all prior vaccination records.

## Information Sources



Shoreland's Travel Health Online — [www.tripprep.com](http://www.tripprep.com)

Centers for Disease Control & Prevention

- Traveler's Health Website — [www.cdc.gov/travel](http://www.cdc.gov/travel)
- Travel Notice Website — [www.cdc.gov/travel/notices.aspx](http://www.cdc.gov/travel/notices.aspx)

U.S. Department of State

- Travel & Business Website — [www.state.gov/travelandbusiness](http://www.state.gov/travelandbusiness)
- Embassy & Consulate Website — [usembassy.state.gov](http://usembassy.state.gov)

World Health Organization Travel Website — [www.who.int/topics/travel/en](http://www.who.int/topics/travel/en)

International Association for Medical Assistance to Travelers — [www.iamat.org](http://www.iamat.org)

International Society of Travel Medicine — [www.istm.org](http://www.istm.org)

American Society of Tropical Medicine & Hygiene — [www.astmh.org](http://www.astmh.org)

U.S. Army Public Health Command (Provisional) — <http://phc.amedd.army.mil>

*Tip: Check out these websites for more information about staying healthy while traveling abroad.*

## Fast Facts

- The vast majority of travel-related illnesses are preventable.
- You should visit the travel clinic 4-6 weeks before traveling to Africa, Asia, Central America, or South America.
- Vaccines are the safest, most effective means of preventing illness.
- Avoiding insect bites by using DEET-containing repellents is the only method of preventing some insect-borne diseases.
- One of the best ways to reduce the risk of illness while traveling is to wash your hands frequently.

## Healthy Travels

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