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The vaccines division of sanofi-aventis Group



Before you **see the world**
make sure you see your doctor

**Travel
Health Tips**

TravelWise[®]
Immunize here. Be safe there.

Brought to you as a public health
service by your travel clinic and
Sanofi Pasteur Inc.





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Why **Worry?**

Nothing is more appealing than a vacation in a warm climate during the depths of winter. Yet how often do we hear friends complain that their dream vacations were ruined by unexpected health problems, such as “Montezuma’s revenge,” a bad sunburn, or more serious illnesses? For most travelers staying in resort areas, simple preparations and precautions can eliminate the risk of a vacation ruined by illness.

If you’re traveling outside North America or Western Europe, more time and consideration are needed to protect your health. Each year, hundreds of thousands of people travel to countries where diseases such as malaria, typhoid, and dengue fever still pose serious threats to the unprotected traveler. In these areas, whether you’re seeking sun and sand, traveling for business, or embarking on the adventure of a lifetime, you need to take extra precautions to safeguard your health.

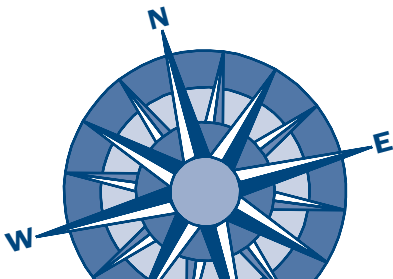
An ounce of prevention

The **Travel Health Tips** booklet is a quick reference guide to start you on your way to healthy travel. Your local travel clinic is the best source of detailed advice on travel safety, immunization, and disease prevention. Talk to a travel health-care professional as soon as you start planning your trip.

Make your trip a healthy one with knowledge, common sense, and an ounce of prevention.

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The first steps to healthy travel

If you're planning to stay in a resort area or large urban center and you're in good health, you'll probably have a safe and healthy trip if you take some minor precautions. However, if you're planning to do some backpacking or visit remote areas and "live like the natives," you may require a full set of immunizations and detailed medical advice before you leave. Immunizations can take up to 8 weeks, so start your preparations early.

Am I a high-risk traveler?

Your risk of contracting a disease or illness while traveling depends on several factors:

Factor	Lower Risk	Higher Risk
geographical destination	developed countries	developing countries
length of stay	short-term	long-term
location within country	urban	rural
type of accommodation	luxury	economy
purpose of travel	business	leisure
traveler's age	younger	very young or old (>65 years)
behavioral profile	cautious	risk-taking

Discuss your plans with your health-care professional.

Where do I begin?

11 steps to health-wise travel

The following list will assist you as you begin to prepare for international travel. Use the space provided to check off each item once you've completed it.

✓ Checklist

- 1. Learn about your destination—type of accommodations, food and water preparation, type of geographical areas you'll visit, medical service available.
- 2. Visit a travel clinic.
- 3. Get appropriate immunizations for your destination. Obtain an International Certificate of Vaccination or Yellow Card and keep it with your passport.
- 4. Have a dental check-up and complete medical examination (especially if traveling for 3 months or more).
- 5. Arrange for an adequate supply of your prescription medication.
- 6. Obtain a medical alert bracelet for medical conditions, such as diabetes or drug allergies.
- 7. Purchase an extra pair of eyeglasses or contact lenses and sunglasses.
- 8. Obtain a directory of English-speaking physicians (IAMAT, see page 47).
- 9. Collect items for a first aid travel kit (see page 44), especially if traveling long-term or off the usual tourist routes.
- 10. Check your health insurance coverage for international coverage.
- 11. Buy additional health/accident travel insurance. Ensure you're covered for any current health conditions (ie, heart, pregnancy, etc).

Who can assist **me?**

Health situations around the world change rapidly. General practitioners may have difficulty staying up-to-date on the most recent health and immunization recommendations for every country. Your family physician may recommend that you visit a travel clinic for assistance.



What is a travel clinic?

Travel clinics are staffed by health-care professionals with expertise in travel medicine. Services include pre- and post-travel counseling, immunization, and malaria prevention advice.

When should I visit a travel clinic?

You may require up to 8 weeks to complete a full set of vaccinations for your trip. Consult your local travel clinic as soon as you start planning your trip. Be prepared to provide detailed information about your itinerary, current health status, and vaccination history.

Do I need an immunization certificate for international travel?

If you are traveling to (or transiting through) Africa or South America, you may require a certificate of vaccination against yellow fever. Your vaccination can be administered only in a clinic that has been approved by your state to administer yellow fever vaccine. Most travel clinics provide yellow fever vaccine but, if not, you may be referred to another clinic that is approved to provide this vaccine.

Where is the travel clinic in my area?

Most major metropolitan areas in the United States have travel clinics. Consult your family physician for assistance. A partial listing of travel clinics across the United States can be obtained from sanofi pasteur by visiting the travel section of our Web site at **www.vaccineplace.com**

HEALTH TIP

Some diseases such as malaria may not become apparent until after you return from your trip, and you may require a post-travel checkup. Visit your doctor or travel clinic immediately if you develop any signs of illness, especially within the first 2 months after you return.

Facts about immunization

When planning a trip, the last thing you want to think about is illness. But as the old adage goes: the best defense is a good offense. That holds true for international travelers. Immunization is designed to protect you from serious diseases, many of which can be life-threatening.

When should I be immunized?

Some immunization schedules can take up to 8 weeks to complete. It's important to visit your health-care professional as soon as you know your destination and itinerary.



What immunizations do I need?

There are three types of immunizations: routine, required, and recommended. Recommended vaccinations are of particular importance to the international traveler—especially if you're traveling for an extended period of time.

Routine: All adults should update these routine immunizations every 10 years:

- Tetanus and diphtheria

Required: Proof of immunization is required to enter some countries:

- Yellow fever
- Meningococcal during Hajj
- Cholera

Recommended: Depending on your itinerary, planned activities, and current health status, your health-care professional may recommend one or more of these immunizations:

- Polio
- Influenza
- Hepatitis B
- Japanese encephalitis
- Pneumococcal
- Hepatitis A
- Typhoid
- Meningococcal
- Rabies

Understand how disease spreads

Appropriate immunization will help protect you from many serious diseases. You can further safeguard your health by understanding how diseases are transmitted, and taking personal precautions to reduce your risks.



How are diseases transmitted?

Protecting yourself against illness is an everyday affair. Why else do you wash your hands before you eat? When you travel, you must simply heighten your awareness of potential risks.

Diseases are transmitted in a variety of ways

Food and water

Contaminated food and water are two of the most common ways travelers develop illness. While “Montezuma’s revenge” may sideline you for a few days, other more serious illnesses can mean the end of your trip or worse. Typhoid fever, hepatitis A, and travelers’ diarrhea are all transmitted by contaminated food and water.

Insects

In most developing countries the mosquito can be a threat to your health. Malaria, dengue fever, Japanese encephalitis, and yellow fever are all transmitted by infected mosquitoes.

Contaminated soil

We give little thought to our feet. Unfortunately, they may be the entry route for harmful parasites and other illnesses. Contaminated soil can enter cuts and sores in the skin, causing tetanus. There are also parasites capable of entering unbroken skin.

Person to person

Along with the common cold, many diseases—such as measles, mumps, rubella, diphtheria, meningococcal disease, tuberculosis, pneumococcal pneumonia, influenza, hepatitis B, and AIDS—can be transmitted person to person.

What can I do?

The information in this booklet will give you some basic information on safeguarding your health, especially while traveling. For detailed, personal advice, discuss your travel plans with your health-care professional.



Acclimatize—get used to it



Sun

During a typical cold winter, it is tempting to overdo your time in the sun while on vacation. Most sun and heat illnesses are the result of doing too much, too soon. A bad sunburn is not only painful but dangerous and can lead to skin cancer in later years. Enjoy the sun by taking a few simple precautions.

What can I do?

- Avoid direct sunlight between 10 AM and 4 PM
- Use frequent applications of a sunscreen with a sun protection factor (SPF) of 15 or greater. A higher SPF factor is recommended for children over 6 months of age.
- Apply sunscreen 20 minutes before going out and after swimming or excessive sweating
- Wear sunglasses, a hat, and other protective clothing when possible
- Check with your doctor regarding the potential adverse interactions of sun with the medications you may be taking

HEALTH TIP

Your skin can burn even when you're not directly in the sun or when it's overcast. Get in the habit of applying sunscreen and dressing appropriately even when you're not at the beach.

Heat

If you're traveling from a cold to a warm climate, your body will need time to adjust to the temperature difference. Most adults should have little trouble adapting to the heat, but need to modify their lifestyle. The most serious threat to your body is dehydration. While you should forsake your daily 5 km run, especially during midday, you can still exercise if you use common sense and take some precautions. Obese, unfit, or elderly persons are at greater risk of developing a heat illness, especially through overexertion.

What can I do?

- Drink plenty of fluids
- Avoid alcohol and beverages containing caffeine
- Ask your doctor about adding salt or minerals to your diet
- Take it slow and don't overdo exercise



HEALTH TIP

Whether you plan to be physically active or not, you should wear loose-fitting, light-colored clothing made of natural fabrics, such as cotton or linen. These fabrics breathe better and will help your body remain cool.

High altitudes

Altitude sickness, which can have serious consequences and can be fatal, can be caused by rapid ascent to altitudes over 9000 ft. Discuss altitude sickness and its prevention with your travel health-care professional.

What can I do?

- Make your ascent gradually. If mountain climbing or hiking, take a 1- or 2-day break at an appropriate altitude during ascent.
- Drink extra fluids
- Don't overexert yourself
- Avoid sedatives, codeine, and alcohol



HEALTH TIP

Under specific conditions, there are medications that are effective in preventing altitude sickness. Talk to your health-care professional at your travel clinic.

Jet lag

Jet lag is a common complaint of travelers who cross more than three time zones. Because our body runs on an internal biological clock, time is needed to adjust to a new time zone. Symptoms of jet lag include fatigue, insomnia, decreased appetite, and headache.

What can I do?

- If possible, try to break up your trip with 1 day of rest for every six time zones crossed
- Avoid caffeine, heavy meals, and excessive alcohol while traveling
- Schedule important commitments for 24 hours after arrival

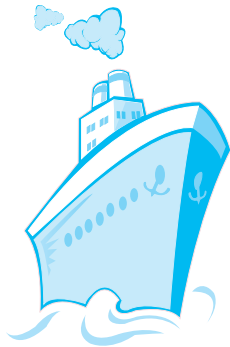


HEALTH TIP

You can minimize the effects of jet lag by altering your sleep habits 1 week prior to departure. Another way to prepare for the difference in time zones is to control the type of sunlight you're exposed to during the first few days after arrival. Your travel health-care professional can advise you on the best method for you.

Motion sickness

One in 20 travelers will experience motion sickness whether traveling by airplane, boat, or automobile. Motion sickness may be avoided by choosing your seat carefully. There are also several effective medications available.



What can I do?

- In a car, the best place to be is in the driver's seat; second best is a front window seat
- On a bus, sit near the front by a window, preferably one that opens
- On a plane, the seats over the wings or wheels are the most stable
- On a boat, try to get a midship cabin close to the waterline

HEALTH TIP

There are several prescription and over-the-counter medications available to relieve the symptoms of motion sickness. Most should be taken at least half an hour before departure. Talk to your health-care professional about the appropriate medication and dosage, especially for children.

The lowdown on insects

Travel to tropical climates entails contact with a variety of insects capable of transmitting infectious diseases. The most well-known culprit is the mosquito, which may transmit yellow fever, malaria, Japanese encephalitis, and dengue fever, as well as other diseases. If you're traveling to Central or South America, Southeast Asia, or Africa, you'll need proper vaccination and/or medication before leaving and special precautions while traveling.

What can I do?

- Limit outdoor activity between dusk and dawn to reduce the risk of malaria and Japanese encephalitis. (Dengue fever, however, is transmitted by day-biting mosquitoes, primarily in urban areas.)
- Wear a good insect repellent containing **DEET**
- Reapply insect repellent after swimming or excessive sweating
- Wear protective clothing, such as long sleeves and pants whenever practical
- Sleep in air-conditioned, well-screened areas
- Use bed nets permeated with a **permethrin** insecticide
- Use coils and insect sprays containing **pyrethrum** to kill insects in living or sleeping quarters

HEALTH TIP

You can still develop malaria after you leave the endemic area. To be most effective, the prescribed medication must be continued for 4 weeks after leaving malaria areas.

Don't bare your soles

While it may be tempting to bare all—or at least your toes—in a hot climate, it puts you at greater risk for injury, insect bites, and infection by a variety of parasites capable of entering through unbroken skin. Some of these parasites can be contracted by walking on sand or soil where infected dogs or cats have defecated. And you may be thankful for a bit of shoe leather if you surprise a neighborly snake or scorpion while you're walking.

What can I do?

- Always wear protective footwear—slip on a pair of sandals or flip-flops, even on the beach
- Update tetanus immunization every 10 years
- Avoid direct contact with contaminated sand or soil
- Don't walk in long grass, especially at night, to avoid bites from snakes and scorpions



Keep in mind, some medical care available outside North America and Europe often is not up to the same sanitary standards we take for granted. An injury requiring blood transfusion or injections may put you at greater risk for hepatitis B, AIDS, or other blood-borne diseases.

HEALTH TIP

To protect yourself from fleas and ticks, wear closed footwear and tuck your pants into your socks. You can soak clothing in an insecticide, such as **permethrin**, for extra protection.

Don't swim in fresh water

Slow-moving fresh water lakes, rivers, and streams in many developing countries should be enjoyed for their beauty—but from a safe distance. It's common for these waters to be infested with parasitic larvae released from snails. These parasites are capable of penetrating the unbroken skin of humans causing serious illness in some cases.

What can I do?

- Don't swim, wade, or walk in slow moving fresh water lakes, rivers, or streams where these parasites are known to occur
- If fresh water contact is unavoidable, towel dry quickly to prevent the parasite from penetrating the skin



HEALTH TIP

Not all water is unsafe. Consult your travel health-care professional about swimming conditions in the area you intend to visit, and pay attention to signs depicting local water conditions.

Be kind to your stomach



Ensure your water is purified

No matter what you call it—Montezuma's revenge, Delhi belly, or the Trotskies—diarrhea is a potential hazard for most travelers to warm climates. Up to 50% of travelers contract diarrhea during their trip. The most common causes of travelers' diarrhea are contaminated food and water.

Besides diarrhea, several other illnesses are transmitted through contaminated water sources, such as typhoid fever, hepatitis A, polio, and cholera. Even first-class hotels cannot guarantee that water is pure.

What can I do?

- Consume only canned or commercially bottled carbonated drinks
- Avoid ice cubes that are not made from purified water
- Filtration alone is not recommended
- Brushing teeth should also be done with purified water. If it's not available, use hot tap water.

What is the best way to purify my water?

There are several ways to purify water. Consult with your travel health-care professional for the most appropriate precaution for your travel destination.

HEALTH TIP

While portable water purifiers greatly improve the taste of water and assist in the purification process, they should not be used alone. It's essential to boil your water first as recommended by your travel health-care provider.

Consume well-cooked food

Poor sanitation, unhygienic food handling, and the heat and humidity of tropical climates all contribute to the growth of bacteria that contaminate food. While you'll want to experience local cuisine, it's wise to ensure food has been properly prepared and cooked to avoid illnesses, such as diarrhea, hepatitis A, or infestation by parasites.

What can I do?

- Ensure all food is well cooked—especially meat and seafood
- Serve food hot. Bacteria grow quickly as food cools.
- Don't eat leftovers, food from street vendors, or unpasteurized dairy products
- Never eat raw shellfish
- Avoid cold cuts, salads, watermelon, and puddings
- Don't eat canned food if the tin appears "blown" or "swollen"

Can I eat raw fruits and vegetables?

Fresh fruits and vegetables may often be contaminated from the soil in which they grow.

- Eat only fruits and vegetables that you properly wash and peel yourself
- Cook or bake fruit and vegetables that can't be peeled or washed

HEALTH TIP

Don't forget to wash your own hands carefully before eating or preparing food.

How to prevent/treat

travelers' diarrhea

For most cases of travelers' diarrhea, you don't need to see a doctor. However, high-risk travelers may need a daily antibiotic to prevent diarrhea. Individuals who may be considered high-risk are:

- Those with underlying medical problems (eg, diabetes, inflammatory bowel disease, AIDS, cancer, etc.)
- Travelers who routinely get diarrhea when they travel
- Some athletes
- Individuals traveling for business

If you're traveling for a period of less than 3 weeks, talk to your health-care professional about medications that may help prevent diarrhea.

What can I do if I get diarrhea?

- Drink plenty of fluids to prevent dehydration
- Drink clear broth or eat salted crackers to compensate for loss of salt
- Avoid milk products
- If you have bloody stools, seek medical attention
- Ask your doctor to provide a stand-by treatment or oral rehydration method

Getting around safely

Motor vehicle accidents are the leading cause of accidental deaths of travelers to developing countries. A significant portion of these deaths can be attributed to accidents involving motorcycles.

Often “rules of the road” are not enforced or are nonexistent. Travelers involved in car accidents are at risk of contracting more serious illnesses through blood transfusions and injections that may carry deadly viruses (AIDS, hepatitis B).

What can I do?

- Avoid overcrowded public vehicles
- Avoid traveling by road after dark (especially in rural areas)
- Avoid riding on motorcycles; but if a motorcycle is your only option, wear a helmet
- Wear a seat belt



HEALTH TIP

Remember the rules of the road yourself, and drive defensively.

After your trip

You should make a post-travel appointment to see your travel health-care professional if:

- You have spent 3 months or more in rural areas of the developing world
- You were told that you had or were suspected to have malaria
- You were treated or hospitalized for any medical illness
- You continue to have any unusual ongoing symptoms
- Your activities (especially among travelers who are health-care workers, veterinarians, spelunkers, archaeologists, etc.) while overseas exposed you to increased health risks



Information for travelers on

selected diseases

On the following pages, information is provided on selected diseases to increase your awareness and hopefully minimize the risks to your health while away from home.

There are risks associated with all vaccines. As with any vaccine, vaccination may not protect 100% of individuals. Please consult your physician for full Prescribing Information.

AFRICA

INDIA

ARUBA

MAROC

AIDS

Acquired immunodeficiency syndrome (AIDS) is caused by infection with the human immunodeficiency virus (HIV). HIV destroys cells in the body's immune system, crippling the defensive power of the body. AIDS and other sexually transmitted diseases are more common in developing countries, and the international traveler should be very cautious about sexual contact.

Eighty percent of all people infected with HIV have acquired the infection through sexual contact. However, due to economic conditions in some developing countries, there is also a significant risk of contracting HIV infection through blood transfusions and injections with improperly sterilized, contaminated needles.

What can I do?

- Avoid sexual contact, particularly with those in high-risk groups (intravenous drug users, prostitutes, others with multiple sexual partners)
- Use latex condoms correctly for every sexual contact
- Bring your own supply of needles and syringes, and if you need regular blood treatment (eg, persons with hemophilia), bring your own supply of blood products if possible and/or practical
- Never use needles and syringes used by other people
- Never use another person's razor, shaver, or toothbrush
- Don't get tattoos or have any part of your body pierced
- If you need a blood transfusion, try to ensure donor blood has been tested for HIV or other blood-borne diseases
- In nonemergency situations, request to be flown home if blood cannot be adequately screened before transfusion

HEALTH TIP

Most casual social contacts, not involving bodily secretions, do not appear to hold risk of HIV infection. Shaking hands and cuddling are safe, as are sharing food and air.

Cholera

Cholera is a disease characterized by severe diarrhea leading to rapid dehydration which, if untreated, may lead to death within 24 hours. Cholera is transmitted through contaminated food or water. Cholera may be present in Asia, the Middle East, Africa, parts of Europe, and South and Central America, including Mexico.

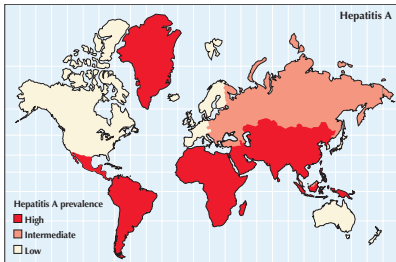
What can I do?

- If you will have ongoing, close contact with the local population in areas with a high incidence of cholera (eg, health-care workers or workers in refugee camps), you may benefit from complete immunization against cholera in order to reduce symptoms if you develop this disease
- Cholera vaccine is no longer required nor recommended for the vast majority of travelers by the Centers for Disease Control and Prevention (CDC)
- Vaccination consists of 2 injections at least 1 week apart

HEALTH TIP

Carefully ensure that you eat and drink only well-cooked food and bottled beverages, including drinking water. Before departure, review “Be kind to your stomach” (pages 20–21) for personal precautions against illnesses transmitted through contaminated food and water.

Hepatitis A



Hepatitis A is very common in developing countries where sanitation is poor. Travelers can be infected from person-to-person contact or through food and water that have been contaminated with animal or human feces. In adults, hepatitis A usually results in liver disease, characterized by jaundice—a yellowing of the skin—that can last a month or more. Other symptoms may include fatigue, nausea, stomach pains, and general weakness; however, children may show no symptoms at all. The disease can be severe and possibly fatal.

What can I do?

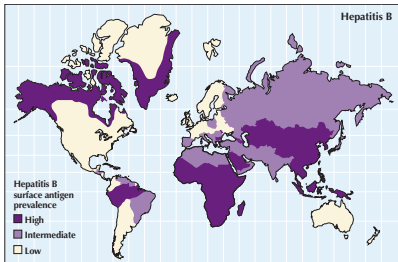
- Follow strict food and water precautions while traveling
- Review the section “Be kind to your stomach” (pages 20–21)
- If traveling to an area where hepatitis A is common, your travel health-care professional should ensure that you receive the hepatitis A vaccine

Maps are for illustrative purposes only. For current information please consult your travel medical specialist 6 to 8 weeks before planned departure.

HEALTH TIP

If your preparation time before travel is less than 1 month, an accelerated schedule for hepatitis A vaccination may be provided. “Passive” immunization with IG, or gamma globulin, may be an alternative. However, IG only provides more limited protection for about 6 months. You’ll need repeat doses every 4 to 6 months if traveling for a longer period. Also, IG must be administered under sterile conditions—which, in many developing countries, may be difficult to find.

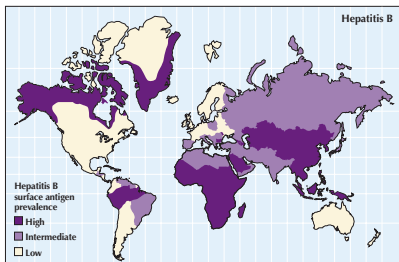
Hepatitis B



Hepatitis B is one of several viruses that may cause hepatitis (liver disease), and may result in a particularly severe form of hepatitis that leads to liver cancer or death. It is widespread in many developing countries, especially in Africa, southeast Asia, the Middle East (except Israel), south and western Pacific Islands, the interior Amazon Basin, and certain parts of the Caribbean.

Hepatitis B is spread in the same way as AIDS

- Intimate or sexual contact with an infected person
- Accidental exposure to traces of blood or blood-contaminated fluids (ie, surgical, medical, or dental procedures)
- Medical injection or drug abuse with inadequately sterilized syringes/needles, tattooing, body piercing, acupuncture, or cuts with razors and similar objects contaminated by blood



What can I do?

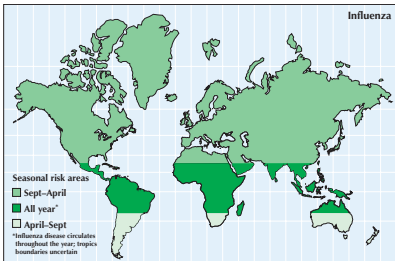
- Travelers who will have daily physical contact with the local population in areas of the world where hepatitis B is prevalent should receive vaccination. Travelers who may be exposed to blood (eg, health-care workers), seek medical or dental treatment in local facilities, or have sexual contact with local residents should also receive vaccination.
- Avoid intimate or sexual contacts
- Use latex condoms correctly for every sexual contact
- Bring your own supply of needles and syringes, and if you need regular blood treatment (eg, persons with hemophilia), bring your own supply of blood products if possible and/or practical
- Never use needles and syringes used by other people
- Never use another person's razor, shaver, or toothbrush
- Don't get tattoos or have any part of your body pierced

HEALTH TIP

If you find yourself in a nonemergency situation requiring blood transfusion, request to be flown home if blood cannot be adequately screened first.

Influenza

Influenza virus is the cause of the “flu,” an illness characterized by fever, diffuse muscle aches, headache, fatigue, and cough. Everyone is at risk of catching influenza.



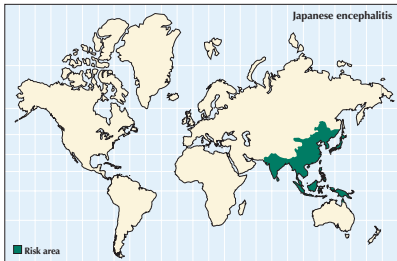
What can I do?

- Vaccination prior to departure is recommended for all travelers leaving the United States during the US influenza season or who will be traveling during the influenza season at their destination (see map). If you are traveling to a high-risk area, have the vaccination about 2 weeks before you go.
- If you are 50 years of age or older, or if you have a chronic medical condition (such as: heart, kidney, or lung disease; asthma; cancer; diabetes; or anemia), you're at increased risk of serious complications. Influenza vaccine is recommended for you each fall on an annual basis, whether traveling abroad or not.
- Vaccination is the single most effective means of preventing or minimizing the impact of influenza. Even if you're young and healthy, consider vaccination each year, especially if you're planning international travel.

HEALTH TIP

Influenza virus can survive on unwashed hands for 5 minutes; on clothing and tissues for 8 to 10 hours; and on hard surfaces (eg, table tops, telephones) for up to 2 days. So remember to wash your hands frequently during influenza season at home and during travel.

Japanese encephalitis



Japanese encephalitis is a viral illness that infects the brain, leading to brain damage and sometimes death. The illness begins with fever,

chills, headache, nausea, and vomiting. Central nervous system infections develop, consisting of stiff neck, delirium, paralysis, possible tremors, and convulsions. It is transmitted by mosquitoes in various areas of Asia (from India east to Korea, Japan, and Indonesia). Be certain to discuss the risks of this disease with your travel health-care professional.

What can I do?

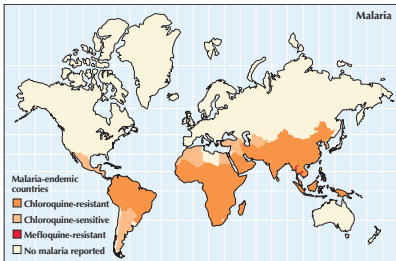
- Everyone over 1 year of age traveling to Asia during the Japanese encephalitis transmission season should consider vaccination if they plan on spending 3 weeks or more in rural areas
- You may need vaccination even when traveling for a shorter period, if your plans include plenty of time outdoors in rural areas
- For persons ≥ 3 years of age, 3 doses at 0, 7, and 28 days are required

HEALTH TIP

Always practice personal precautions against mosquito bites between dusk and dawn. Review “The lowdown on insects” (page 17) in this booklet for specific actions you can take to avoid mosquito bites.

Malaria

Malaria is a parasitic disease transmitted by infected female mosquitoes. Malaria may occur as soon as 1 week after you enter the tropics, and may progress rapidly to cause seizures, coma, breathing and kidney problems, and death. The initial symptoms of malaria look much like the common flu—fever, chills, headache, and generalized aches and pains. You'll need a blood test to determine if you have malaria.



What can I do?

- Rigorously follow your instructions for taking any prescribed medications for the prevention of malaria before, during, and after travel
- Always practice personal precautions against mosquito bites between dusk and dawn
- If you suspect you may have malaria, see a qualified physician immediately

HEALTH TIP

The global situation with respect to malaria is constantly changing because of drug resistance. At this time, there are no antimalarial drugs that offer 100% protection. That's why personal mosquito protection measures are so important. Before leaving, read "The lowdown on insects" (page 17) and strictly follow personal precautions against mosquito bites, as well as taking your medication.

Measles, mumps, and rubella

Measles causes an illness with fever and a rash. It is often accompanied by pneumonia and ear infection, or diarrhea. Measles is prevalent in the developing world, and is transmitted easily from person to person through coughing, sneezing, or direct contact.

Mumps causes fever and swelling of the glands in the mouth and throat area and, in men, may affect the testicles.

Rubella (German measles) is a disease of concern for pregnant women, whether traveling or not. However, the potential for exposure is greater in developing countries. The disease can cause severe damage to the unborn child.

What can I do?

- Measles, mumps, and rubella (MMR) vaccine is customarily given during childhood. The first dose should be given at 12–15 months of age and a newly recommended second dose at 4–6 years of age. MMR may be given before 4–6 years of age, if 4 weeks or more have passed since the first dose and both doses are given at 12 months of age or older. If your travel plans will interrupt the normal immunization schedule for your children, discuss their needs with your physician.
- Anyone born in 1957 or later who has never had measles or mumps should be immunized prior to international travel
- All female adolescents and women of childbearing age who have never had rubella or been immunized should seriously consider vaccination

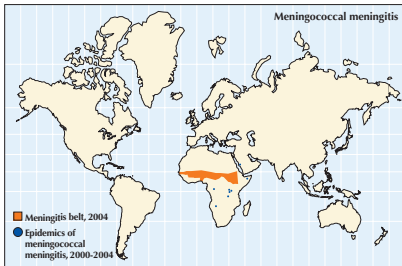
Vaccination against measles, mumps, and rubella consists of one injection for adults and one injection plus a booster dose for children. In special circumstances, you can receive separate vaccines for specific diseases.

HEALTH TIP

When possible, avoid contact with infected individuals. Maintain a strict hygiene regimen, such as washing your hands before eating.

Meningococcal disease

Meningococcal disease is a significant cause of illness and death worldwide. The meningococcal bacteria can cause meningitis (infection of the brain and spinal cord) and a variety of other diseases. The bacteria are usually spread from person to person via coughing, sneezing, or direct contact.



Meningococcal disease can strike with frightening quickness. The early symptoms—fever, headache, and general malaise—are indistinguishable from many less serious illnesses. However, the disease can be fatal to an otherwise healthy person within 48 hours, if left untreated.

What can I do?

- Vaccination with meningococcal vaccine is recommended for travelers to countries in the meningitis belt of Africa or to the Hajj
- A certificate of vaccination against meningococcal disease issued not more than 3 years and not less than 10 days before arrival in Saudi Arabia may be required for people traveling to Mecca, Saudi Arabia, for the annual Hajj. The CDC recommends that people who plan to travel to Saudi Arabia during this period verify these requirements with the embassy.

HEALTH TIP

If possible, avoid crowded places where you can't avoid direct contact with infected persons.

Pneumococcal bacteria are the cause of one type of pneumonia and may cause “blood poisoning.” The bacteria are transmitted from person to person by coughing—much like influenza or tuberculosis.

What can I do?

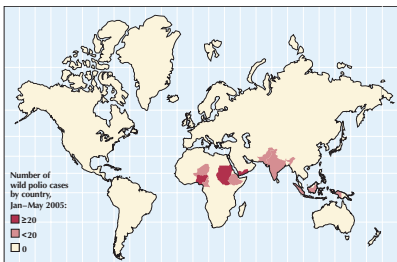
- Vaccination is recommended for people who have sickle cell anemia, are missing a spleen, have chronic diseases of the lungs, kidneys, or liver, diabetes, or those over 65 years of age
- Vaccination consists of a single injection for adults. Consult with your travel health-care professional regarding pneumococcal vaccination or revaccination.

HEALTH TIP

If you're at risk, avoid infected persons and crowded areas whenever possible.

Polio

Tetanus and Diphtheria



As shown in the map, **polio** is a disease that occurs in the developing world outside North and South America, and may result in partial or total paralysis. Polio is transmitted primarily through food or water contaminated with feces.

Tetanus is a rare but severe disease that causes muscle contractions that can lead to breathing problems and even death. It can occur if contaminated soil enters cuts or wounds, such as a burn.

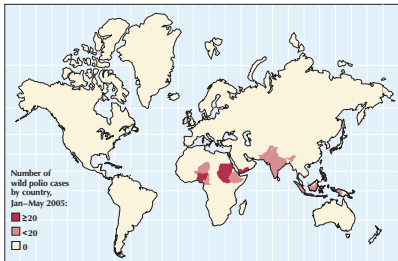
Diphtheria is a disease of the respiratory passages transmitted from person to person, and may cause severe heart disease.

HEALTH TIP

Tetanus cases have followed injuries considered too trivial for a visit to the doctor. The best defense is to keep your immunization up to date.

Polio

Tetanus and Diphtheria



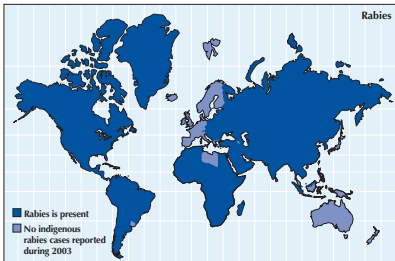
What can I do?

- All Americans should receive their first (primary) immunization series against tetanus, diphtheria, and polio during childhood. If you're traveling with infants and children, you should discuss their immunization needs with your health-care professional, especially if traveling for extended periods of time, which might interrupt your child's normal immunization schedule.
- All Americans should receive a booster against tetanus and diphtheria every 10 years, whether traveling abroad or not. If you have not received the complete primary series, consult your health-care professional about completing it.
- Americans traveling to areas of the world where polio is still prevalent should have received their primary immunization series of polio vaccine and a booster within the last 10 years. If you have not received the primary series, then you should receive at least 2 doses of polio vaccine, 4 to 8 weeks apart, prior to departure, if time allows. A third dose should be administered 6 to 12 months after the second.

Rabies

Rabies is a rare infection of the brain that follows a bite, scratch, or, less commonly, a lick from an infected animal.

It is more common in many developing countries than in the United States. Rabies is fatal if not treated, but can be prevented by prompt immunization after exposure.



What can I do?

- Vaccination is normally given after contact with a suspect animal. However, people who travel or work abroad and may have more frequent animal contact—such as veterinarians, agricultural specialists, and especially hikers—in rabies risk areas, would benefit from a pre-exposure vaccine series before departure.

Anyone potentially exposed to rabies must seek prompt medical attention, even if vaccinated. However, there are two advantages to receiving pre-exposure rabies vaccine:

1. If you are exposed to rabies, you will need to receive only 2 injections of the vaccine (rather than 5), and you won't need to receive rabies immune globulin. Rabies immune globulin is necessary if you have not received pre-exposure rabies vaccine, and it is not always available throughout the world.
2. If there is a delay between the exposure and the subsequent vaccination, you're less likely to develop rabies if you had previously received the vaccine.

HEALTH TIP

Be aware of your surroundings at all times and stay alert. Remember, not all rabid animals behave ferociously—some become docile.

Tuberculosis (TB) bacteria cause infection of the lungs and occasionally other organs. The bacteria are primarily transmitted person to person by coughing or sneezing. TB is much more prevalent in the developing world than in the United States, especially in hot climates.

What can I do?

- ❑ A TB skin test is given before departure for travelers likely to be exposed to many cases of TB over a long time, usually in confined, high-risk areas (such as hospitals, prisons, or homeless shelters). If the test is negative prior to travel abroad and positive upon return from the developing world, then it's an indication that a course of anti-TB drugs should be given.
- ❑ All travelers should avoid high-risk settings where there are no infection control measures in place. Documented places where transmission has occurred include crowded hospitals, prisons, homeless shelters, and other settings where susceptible persons can come in contact with persons with TB.
- ❑ Air travel itself carries a relatively low risk of infection with TB of any kind
- ❑ Travelers who will be working in clinics, hospitals, or other health-care settings where TB patients are likely to be encountered should consult infection control or occupational health experts. They should ask about administrative and environmental procedures for preventing exposure to TB. Once those procedures are implemented, additional measures could include using personal respiratory protective devices.
- ❑ Multidrug-resistant TB (MDR TB) is TB that is resistant to at least two drugs that are considered to be first-line drugs for treating persons with TB. These two drugs are: isoniazid and rifampin.

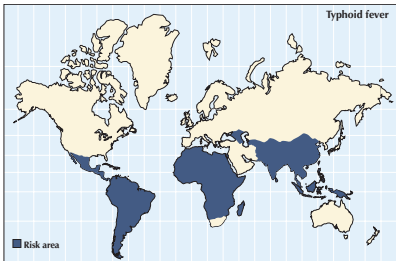
HEALTH TIP

Avoid consuming unpasteurized milk or milk products, which may contain TB bacteria.

Typhoid fever

Typhoid fever is a life-threatening illness. It's usually spread under unsanitary conditions, either person to person, or through contaminated food, drink, or water. Typhoid fever is characterized by a high fever (which gradually increases, often to over 104°F [40°C]), headache, tiredness, loss of appetite, and dizziness. Other symptoms include abdominal pain, nausea, chills, and constipation or diarrhea.

This disease is common in many developing countries of the Indian subcontinent, Africa, Asia, the Caribbean, and Central and South America.

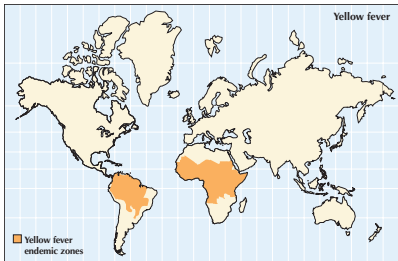


What can I do?

- Vaccination is recommended for all travelers to risk areas
- Travelers to small cities and villages or to rural areas in countries where there are many reported cases of typhoid fever, or nonnative-born Americans returning to their countries of origin, are at even greater risk

HEALTH TIP

Don't depend on immunization alone to keep you healthy. Vaccines don't offer 100% protection for all individuals. If you're traveling to risk areas, rigorously follow safe food and water precautions. Review "Be kind to your stomach" (pages 20–21) for personal precautions for all travelers.



Yellow fever

Yellow fever is a viral illness. The disease is carried by some species of mosquitoes in Central and South America, and sub-Saharan Africa.

A mild attack may have symptoms similar to those of influenza. However, more severe symptoms may include nausea, vomiting, bleeding, abdominal pains, and yellowing of the skin as a result of liver damage.

What can I do?

- Travelers to endemic areas, or those transiting through a disease area and entering another country, may require a certificate of vaccination against yellow fever for legal entry
- Your vaccination will consist of a single injection and can be administered only at a clinic licensed to administer yellow fever vaccine. Your certificate is valid for 10 years, beginning 10 days after you receive your vaccination.

HEALTH TIP

Your best defense is to avoid mosquito bites altogether. Before departure, review “The lowdown on insects” (page 17) to learn how to protect yourself from mosquitoes.

Suggested contents of a **first aid kit** for travelers

*Remember that illness often strikes when you least expect it. It's important that all travelers **be prepared** by taking a medical kit! It is also a good idea to take a small first aid book.*

The contents of your first aid kit will depend upon:

- The countries you plan to visit
- The length of stay
- The time of the year
- Whether you are traveling alone or with family
- Your accommodations
- Whether you will be in rural or urban areas
- Your present state of health
- Access to medical facilities

The items listed on the following pages are suggestions only. Discuss the list with your health-care professional or pharmacist.



First Aid Items

- Absorbent cotton
- Absorbent gauze
- Tape—hypoallergenic, waterproof
- Alcohol swabs
- Antiseptic
- Adhesive bandages
- Burn ointment, dressings
- Cotton swabs
- Disinfectant
- Eyedrops (lubricants)
- Insect sting emergency allergy kit (prescription may be required)
- Oral rehydration solution packets
- Safety pins, multipurpose knife (or scissors and tweezers)
- Tensor bandage, triangular bandage/sling/splint
- Blanket
- Hot/cold packs
- Tongue depressor
- Flashlight
- Latex gloves
- First-aid booklet
- Candles

Medications

- Copy of all personal prescriptions (including generic names) and a note from your doctor for controlled substances and injectable medications
- Antacid
- Antidiarrheals
- Antihistamines
- Antinausea/anti-motion sickness
- Antimalarials
- Cough medicine
- Decongestant
- Laxative
- Skin care (topical antibiotics, antiseptic solution, creams to relieve itching, antifungal cream/powder)
- Throat lozenges

Medications for

- Altitude sickness
- Diarrhea
- Earache
- Ear infection
- Eye infection
- Fever/pain
- Toothache
- Other (as advised by physician)

Additional items also worth considering

- Adequate supply of sunscreen (with SPF ≥ 15), lip balm
- Bottle (one liter, plastic) for preparing purified water or preparing oral rehydration solution
- Contraceptives, including latex condoms
- Dental floss
- Disposable gloves in case you need treatment (ie, dental), or to assist a bleeding victim after an accident
- Disposable syringes and needles (6 x 3 mL and 4 x 5 mL syringes with #22 or #23 gauge needles [#25 gauge for small children], with a physician's accompanying letter)
- Insect repellent (with DEET), insect bite medicine
- Lancets (small, sharp-pointed device), if needed, to prick a finger to check the blood for malaria parasites
- Oral thermometer (rectal thermometer for infants and small children)
- Prepackaged moist towelettes or antiseptic hand gel/soap for cleaning hands when no water is available
- Shampoo for treatment of lice and scabies
- Petroleum jelly
- Water purification methods (read about "drinking water" on page 20 to determine the most appropriate purification method for you to use)

Extra items for women

- Feminine hygiene products
- Medication for menstrual cramps
- Medication for urinary tract and vaginal infections, especially if they are a recurring problem

Extra items for children

- Children's strength medication for fever and pain, nausea, infections, colds, and coughs
- Diaper-rash creams
- Teething gel, if needed
- Vitamins with fluoride, if necessary
- Worm medication

Sources of information for **travelers**

Your nearest travel clinic

Quick reference material

Centers for Disease Control and Prevention

www.cdc.gov

International Association for Medical Assistance
to Travellers (IAMAT)

www.iamat.org

World Health Organization

www.who.int

The Travel Clinic Directory produced by sanofi pasteur provides a listing of travel medicine providers in the United States.

This is available from sanofi pasteur by visiting the travelers' section of our Web site, **www.vaccineplace.com**



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