

## • WHAT TO BRING CHECKLIST

- Insect repellent containing DEET (diethylmethyloamde), in 30%–35% strength for adults and 6%–10% for children. (e.g. Off® (7% DEET), Deep Woods OFF® (25% DEET) or Cutter® (30% DEET))
- Protect yourself from insects by remaining in well-screened areas, using repellents (applied sparingly at 4-hour intervals)
- Sun Screen: Sunscreen should be used at all times, even on cloudy days. It should be reapplied throughout the day. Sunscreens with SPF of 15 or higher are recommended.

\* Combination sunscreens and insect repellents (such as *Skintastic*®) are recommended

- Hat and sunglasses
- Long-sleeved shirt and long pants to wear whenever possible while outside, to prevent illnesses carried by insects (e.g., malaria, dengue, filariasis, leishmaniasis, and onchocerciasis).
- Purchase a bed net impregnated with the insecticide permethrin. (Bed nets can be purchased in camping or military supply stores.), unless you are staying in air-conditioned or well-screened housing,
- Stay in permethrin-impregnated mosquito nets, and wear long-sleeved shirts and long pants from dusk through dawn.
- Prescription medications: make sure you have enough to last during your trip, as well as a copy of the prescription(s).



- Medication for fever control (acetaminophen (Tylenol®) and/or ibuprofen (Motrin®))
- If you have allergies to food or insects, bring an EpiPen or EpiPen Jr.
- Make sure you carry identification (including a list of known medication allergies) for yourself and your child(ren).

### Basic Medical Kit:

- Thermometer
- Antibacterial ointment (e.g. Bacitracin® or Bactroban®) for cuts and abrasions
- Scissors
- Tape
- Bandages of assorted sizes, including adhesive bandages : (i.e. Band-Aids®)

- Elastic wraps: for wrapping wrist, ankle, knee, or elbow injuries
- Triangular bandage: for wrapping injuries and making an arm sling
- Disposable, instant-activating ice packs: for icing injuries
- Water purifying pills or liquid (Tincture of iodine or Halazone tablets), or mechanical filtration devices, such as Katadyne® water purifier.
- Tweezers: to remove small splinters and ticks
- Safety pins: to fasten splints and bandages

## COMPARATIVE EFFICACY OF INSECT REPELLENTS AGAINST MOSQUITO BITES

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**ABSTRACT**

**Background** The worldwide threat of arthropod-transmitted diseases, with their associated morbidity and mortality, underscores the need for effective insect repellents. Multiple chemical, botanical, and "alternative" repellent products are marketed to consumers. We sought to determine which products available in the United States provide reliable and prolonged complete protection from mosquito bites.

**Methods** We conducted studies involving 15 volunteers to test the relative efficacy of seven botanical insect repellents; four products containing *N,N*-diethyl-*m*-toluamide, now called *N,N*-diethyl-3-methylbenzamide (DEET); a repellent containing IR3535 (ethyl butylacetylaminopropionate); three repellent-impregnated wristbands; and a moisturizer that is commonly claimed to have repellent effects. These products were tested in a controlled laboratory environment in which the species of the mosquitoes, their age, their degree of hunger, the humidity, the temperature, and the light-dark cycle were all kept constant.

**Results** DEET-based products provided complete protection for the longest duration. Higher concentrations of DEET provided longer-lasting protection. A formulation containing 23.8 percent DEET had a mean complete-protection time of 301.5 minutes. A soybean-oil-based repellent protected against mosquito bites for an average of 94.6 minutes. The IR3535-based repellent protected for an average of 22.9 minutes. All other botanical repellents we tested provided protection for a mean duration of less than 20 minutes. Repellent-impregnated wristbands offered no protection.

**Conclusions** Currently available non-DEET repellents do not provide protection for durations similar to those of DEET-based repellents and cannot be relied on to provide prolonged protection in environments where mosquito-borne diseases are a substantial threat. (N Engl J Med 2002;347:13-8.)

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**I**NSECT-TRANSMITTED disease remains a major source of illness and death worldwide. Mosquitoes alone transmit disease to more than 700 million persons annually.<sup>1</sup> Malaria kills 3 million persons each year, including 1 child every 30 seconds.<sup>2,3</sup> Although insect-borne diseases currently represent a greater health problem in tropical and subtropical climates, no part of the world is immune to their risks. In the United States, arboviruses transmitted by mosquitoes continue to cause sporadic out-

breaks of eastern equine encephalitis, western equine encephalitis, St. Louis encephalitis, and La Crosse encephalitis.<sup>4,5</sup> In the fall of 1999, West Nile virus, transmitted by mosquitoes, was detected for the first time in the Western Hemisphere. In the New York City area, 62 persons infected with West Nile virus were hospitalized, and 7 persons died.<sup>6-8</sup> The Centers for Disease Control and Prevention estimates that more than 2000 persons were infected with West Nile virus in the year 2000.<sup>9</sup> The virus has now been detected in 27 states, and it is anticipated that it will continue to spread unabated across the United States during the next few years.<sup>9,10</sup>

Protection from arthropod bites is best achieved by avoiding infested habitats, wearing protective clothing, and using insect repellent.<sup>11,12</sup> In many circumstances, applying repellent to the skin may be the only feasible way to protect against insect bites. Given that a single bite from an infected arthropod can result in transmission of disease, it is important to know which repellent products can be relied on to provide predictable and prolonged protection from insect bites. Commercially available insect repellents can be divided into two categories — synthetic chemicals and plant-derived essential oils. The best-known chemical insect repellent is *N,N*-diethyl-*m*-toluamide, now called *N,N*-diethyl-3-methylbenzamide (DEET). Many consumers, reluctant to apply DEET to their skin, deliberately seek out other repellent products. We compared the efficacy of readily available alternatives to DEET-based repellents in a controlled laboratory environment.

**METHODS****Product Selection**

In January 2001, we purchased a total of 16 products for testing, choosing repellents with national, rather than local, distribution (Table 1). Seven widely available botanical repellents were included in the study. Multiple concentrations and formulations of DEET are readily available. We chose and tested three DEET-based repellents (ranging from 4.75 to 23.8 percent DEET) that we believe represented the range of commonly purchased repellents in the United States. We also tested a controlled-release 20 percent DEET formulation to determine whether it had a longer duration of action. The only synthetic repellent containing IR3535 (ethyl butylacetylaminopropionate) that is available in the United States and three

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## Permethrin

Permethrin is a man-made insecticide, structurally similar to a naturally-occurring chemical called pyrethrum. Pyrethrum was initially derived from the crushed dried flowers of the daisy *Chrysanthemum*, whose insecticidal properties have been recognized since the 18th century. The permethrin which is currently sold to consumers is a synthesized product that was developed in the 1970's.

Permethrin works as a contact insecticide, damaging the nervous system of insects which come in contact with it, leading to either their death or "knockdown". Permethrin is effective against multiple species of crawling and flying insects, including mosquitoes, ticks, fleas, bedbugs, chiggers, and flies. Ticks crawling across permethrin-treated pant legs or socks are likely to drop off before they are able to attach and feed. Studies have shown that permethrin-treated bednets can dramatically reduce the risk of getting malaria, through their ability to kill mosquitoes that fly into the treated netting. When used with an insect repellent, it can decrease your risk of being bitten by an insect, thereby decreasing your risk of insect borne illnesses.

Permethrin should be applied to clothing, or to other fabrics (tent walls, mosquito nets, etc.). It is not intended for direct application to the skin. When treating a garment with permethrin spray, spray the cloth outdoors and allow it to dry before wearing.

Permethrin comes in various preparations. Some preparations will last 4-6 weeks through several washings. Permethrin may be purchased at retail camping outlets (such as *REI* or *Eastern Mountain Sports*) or over the internet (such as

*Everglades*:

[https://www.travmed.com/scripts/catalog.epl?product\\_id=321&category\\_id=44&moveit=3](https://www.travmed.com/scripts/catalog.epl?product_id=321&category_id=44&moveit=3)

or *SAWYER® Permethrin Clothing Treatment*

<http://www.permethrin-repellent.com/products.htm>

The combination of permethrin insecticide and DEET containing insect repellent are excellent in decreasing your risk of insect bites and therefore insect borne illness.

## To stay healthy, do...

- Wash hands often with soap and water and use alcohol based hand sanitizers (such as Purel® Hand Sanitizer)
- Drink only bottled or boiled water, or carbonated (bubbly) drinks in cans or bottles. Avoid tap water, fountain drinks, and ice cubes. If this is not possible, make water safer by BOTH filtering through an “absolute 1-micron or less” filter AND adding iodine tablets to the filtered water. “Absolute 1-micron filters” are found in camping/outdoor supply stores.
- Eat only thoroughly cooked food or fruits and vegetables you have peeled yourself. Remember: **boil it, cook it, peel it, or forget it.**
- Take your malaria prevention medication before, during, and after travel, as directed
- To prevent fungal and parasitic infections, keep feet clean and dry, and do not go barefoot.
- Always use latex condoms to reduce the risk of HIV and other sexually transmitted diseases.
- If you are going to be staying in a specific country for more than 2 weeks, contact the US Embassy and let them know your address. The Embassy can be a good resource to find medical personal for routine care or emergencies.
- If you are going to be staying with family/friends, have them contact their doctor and let them know that you are visiting, just in case you/your child becomes ill.

## To avoid getting sick...

- Don't eat food purchased from street vendors.
  - “If you can't cook it, peel it or boil it, **Don't eat it**”
- Don't drink beverages with ice.
- Don't eat dairy products unless you know they have been pasteurized.
- Don't share needles with anyone.
- Don't handle animals (especially monkeys, dogs, and cats), to avoid bites and serious diseases (including rabies and plague).
- Don't swim in fresh water. Salt water is usually safer
- Always watch children closely around any water
- Avoid driving at night whenever possible

## Water

In areas with poor sanitation, only the following beverages may be safe to drink: boiled water, hot beverages (such as coffee or tea) made with boiled water, canned or bottled carbonated beverages, beer, and wine.

Ice may be made from unsafe water and should be avoided.

It is safer to drink from a can or bottle of beverage than to drink from a container that was not known to be clean and dry. However, water on the surface of a beverage can or bottle may also be contaminated. Therefore, the area of a can or bottle that will touch the mouth should be wiped clean and dry. In areas where water is contaminated, travelers should not brush their teeth with tap water.

### **Treatment of Water**

Boiling is the most reliable method to make water safe to drink. Bring water to a vigorous boil (the water should boil for 20 minutes) and then allow it to cool; do not add ice. At high altitudes, allow water to boil vigorously for a few minutes or use chemical disinfectants. Adding a pinch of salt or pouring water from one container to another will improve the taste.

Chemical disinfection can be achieved with either iodine or chlorine, with iodine providing greater disinfection in a wider set of circumstances. For disinfection with iodine, use either tincture of iodine or tetraglycine hydroperiodide tablets, such as Globaline®\* and Potable-Aqua®\*. These disinfectants can be found in sporting goods stores and pharmacies. Read and follow the manufacturer's instructions. If the water is cloudy, then strain it through a clean cloth and double the number of disinfectant tablets added. If the water is very cold, either warm it or allow increased time for disinfectant to work.

As a last resort, water that is uncomfortably hot to touch may be safe for drinking and brushing teeth after it is allowed to cool. However, many disease-causing organisms can survive the usual temperature reached by the hot water in overseas hotels.

### **Food**

Food should be selected with care. Any raw food could be contaminated, particularly in areas of poor sanitation. Foods of particular concern include salads, uncooked vegetables and fruit, unpasteurized milk and milk products, raw meat, and shellfish. If you peel fruit yourself, it is generally safe. Food that has been cooked and is still hot is generally safe.

Infants younger than 6 months should either be breast-fed or be given powdered commercial formula prepared with boiled water.

Some fish are not guaranteed to be safe even when cooked because of the presence of toxins in their flesh. Tropical reef fish, red snapper, amber jack, grouper, and sea bass can occasionally be toxic at unpredictable times if they are caught on tropical reefs rather than in open ocean. The barracuda and puffer fish are often toxic, and should generally not be eaten. Highest risk areas include the islands of the West Indies, and the tropical Pacific and Indian Oceans.

### **Travelers' Diarrhea**

The typical symptoms of travelers' diarrhea (TD) are diarrhea, nausea, bloating, urgency, and malaise. TD usually lasts from 3 to 7 days. It is rarely life threatening. Areas of high risk include the developing countries of Africa (Central, East, North, Southern, and West), the Middle East, and Central America. The risk of infection varies by type of

eating establishment the traveler visits—from low risk in private homes to high risk for food from street vendors.

TD is slightly more common in young adults than in older people, with no difference between males and females. TD is usually acquired through ingestion of fecal contaminated food and water.

The best way to prevent TD is by paying meticulous attention to choice of food and beverage. CDC does not recommend use of antibiotics to prevent TD because they can cause additional problems.

For treatment, oral fluids should be administered to sufferers of diarrhea. Fruit juices, soft drinks (preferably without caffeine), and salted crackers are advised. For severe dehydration, the use of an oral rehydration solution (ORS) is advised.

Avoid dairy products and all beverages that contain water of questionable quality.

It is important for the traveler to consult a physician about treatment of diarrhea in children and infants. The greatest risk for children, and especially for infants, is dehydration. Prevention of dehydration through administration of soups, thin porridges, and other safe beverages is advised. Infants with diarrhea who exhibit signs of mild dehydration, such as thirst and restlessness, should be given an oral rehydration solution (ORS) to drink. This is a packet of salt and carbohydrates that should be prepared following the package instructions and using boiled or treated water. It is widely available abroad, however it can also be made by mixing 4oz of water with 4oz of Gatoraide®, Poweraide® or other sports drink and adding ¼ tsp of table salt.

If bloody diarrhea, dehydration, fever in excess of 102° F, or persistent vomiting occurs, seek immediate medical help.

Most episodes of TD resolve in a few days. As with all diseases it is best to consult a physician rather than attempt self-medication, especially for pregnant women and children. Travelers should seek medical help if diarrhea is severe, bloody, or does not resolve within a few days or if it is accompanied by fever and chills or if the traveler is unable to keep fluids intake up and becomes dehydrated.

## **Head injury (Awaken at night)**

### **Medication**

Use Acetaminophen (Tylenol®) every 4-6 hours for pain or

Use Ibuprofen (Advil®) every 6-8 hours for pain

### **Background**

Head injuries are common, and in most cases are not serious. It is not unusual for a child or young adult to be sleepy, vomit in the first hours following the injury, or have a mild headache. Sleeping after a head injury is not dangerous, but make sure that the patient can be awakened ever 1-2 hours initially. Upon waking, there should be normal behavior, ability to recognize people and objects, and clearly speech.

### **Treatment**

Treatment is symptomatic.

Encourage rest or quiet activity for the first 24-72 hours following the injury

Awaken the injured person every 1-2 hours initially, then every 4 hours through the night to ensure normal mental activity.

Give acetaminophen or ibuprofen as needed for headaches

### **When to seek care urgently**

- If vomiting occurs more than 5 times or begins/continues 6-8 hours after the injury
- If there is difficulty waking
- If there is a change in the mental status
- If there is difficulty seeing
- If there is difficulty walking or there is clumsiness/incoordination
- If there is a seizure or convulsion
- If there is new or worsening neck pain

### **Return to athletics**

If there was no loss of consciousness and the patient was mentally normal within 15 minutes of the injury regular activity can be resumed at any time.

If there was there was no loss of consciousness but the patient required more than 15 minutes to return to a normal mental level, then sports may be resumed **1 week after all symptoms** have resolved.

If there was loss of consciousness, then sports may be resumed **2 weeks after all symptoms** have resolved.

If there has been a previous head injury with change in mental status, do not resume contact sports until authorized by your physician after a complete evaluation.



## **Muscle strain/Contusion**

### **Medication**

Use Acetaminophen (Tylenol®) every 4-6 hours for pain or

Use Ibuprofen (Advil®) every 6-8 hours for pain

### **Background**

A *strain* is a soft tissue injury of the muscles or tendons from stretching or pulling. The amount of bleeding and swelling determines the severity of the symptoms and the time to complete recovery.

A *contusion* is an injury of the skin and underlying muscles caused by direct impact. It is a soft tissue injuries, where the amount of bleeding and swelling determines the severity of symptoms and the time to complete recovery.

### **Treatment**

To help with healing; remember the word "RICE":

- **R**est the injured body part;
- **A**pply **I**ce – 20 minutes on and 20 minutes off as tolerated for the next 48 hours. This will help reduce the swelling;
- **C**ompression – an elastic bandage or "ace" wrap may help
- Remove or loosen the bandage prior to sleep;
  - You may apply a pressure bandage (ace wrap) for the first 2-3 days or until the swelling is gone.
- **E**levation – Keep the injured body part elevated above the level of the heart, as much as possible. You can raise the arm or leg on pillows while sitting or lying down. This will also reduce the swelling;
- Acetaminophen or ibuprofen can be taken for pain

### **Seek care urgently:**

- If the pain is getting worse;
  - If there is numbness or tingling in the injured body part that is not relieved by loosening the ace bandage;
- If there is coolness or color change that is not relieved by loosening the ace bandage.

## **Burn Care (1<sup>st</sup> Degree and 2<sup>nd</sup> Degree)**

### **Medication**

Use Acetaminophen (Tylenol®) every 4-6 hours for pain  
or

Use Ibuprofen (Advil®) every 6-8 hours for pain

### **Background**

A 1<sup>st</sup> degree burn is one in which the top layer of skin has been damaged. The skin is red, warm and tender. This type of injury usually is seen as a sunburn.

A 2<sup>nd</sup> degree burn is one in which the skin has been damaged, exposing the nerves. It is very painful. Blisters develop and may drain fluid. Swelling may also develop.

### **Treatment**

A 1<sup>st</sup> degree burn often requires no specific therapy. Moisturizers may be used on the skin and acetaminophen or ibuprofen may be given as need for pain. Keep the dressing clean and dry. If blisters develop, **do not** break them. The fluid inside the blister will reabsorb and the unbroken skin will help prevent infection.

A 2<sup>nd</sup> degree requires careful management. The wound is first cleansed. Sometimes tissue is removed if it has been significantly damaged. In most cases blisters are left intact because the intact skin helps prevent infection. Antibacterial ointment is applied in larger burns to help prevent infection.

Acetaminophen or ibuprofen may be given as need for pain.

Drink plenty of fluids.

Return to your doctor or the ED for dressing change in 24 hours

### **When to seek care urgently**

If fever develops over 101F (38.5C);

If the pain worsens;

If pus begins to drain from the area;

If a foul odor develops;

If a red streak develops going away from the burn;

If large (wider than 1 inch) or multiple blisters develop

# MALARIA

## Background

Malaria is found throughout the tropical areas of the world and is acquired from the bite of the female *Anopheles* mosquito. The risk of malaria infection is highest for travelers to sub-Saharan Africa, Papua New Guinea, the Solomon Islands, and Vanuatu; the risk is intermediate in Haiti, and the Indian subcontinent and is low in most of Southeast Asia and Latin America.

## Symptoms

The classic symptoms include high fever with chills, rigor, sweats, and headache, which may be re-occurring (paroxysmal). As the infection becomes synchronized, the fever and "paroxysms" generally occur in a cyclic pattern. Depending on the infecting species, fever appears every other or every third day.

Other symptoms may include nausea, vomiting, diarrhea, cough, arthralgia (joint pain), and abdominal and back pain.

## Diagnosis

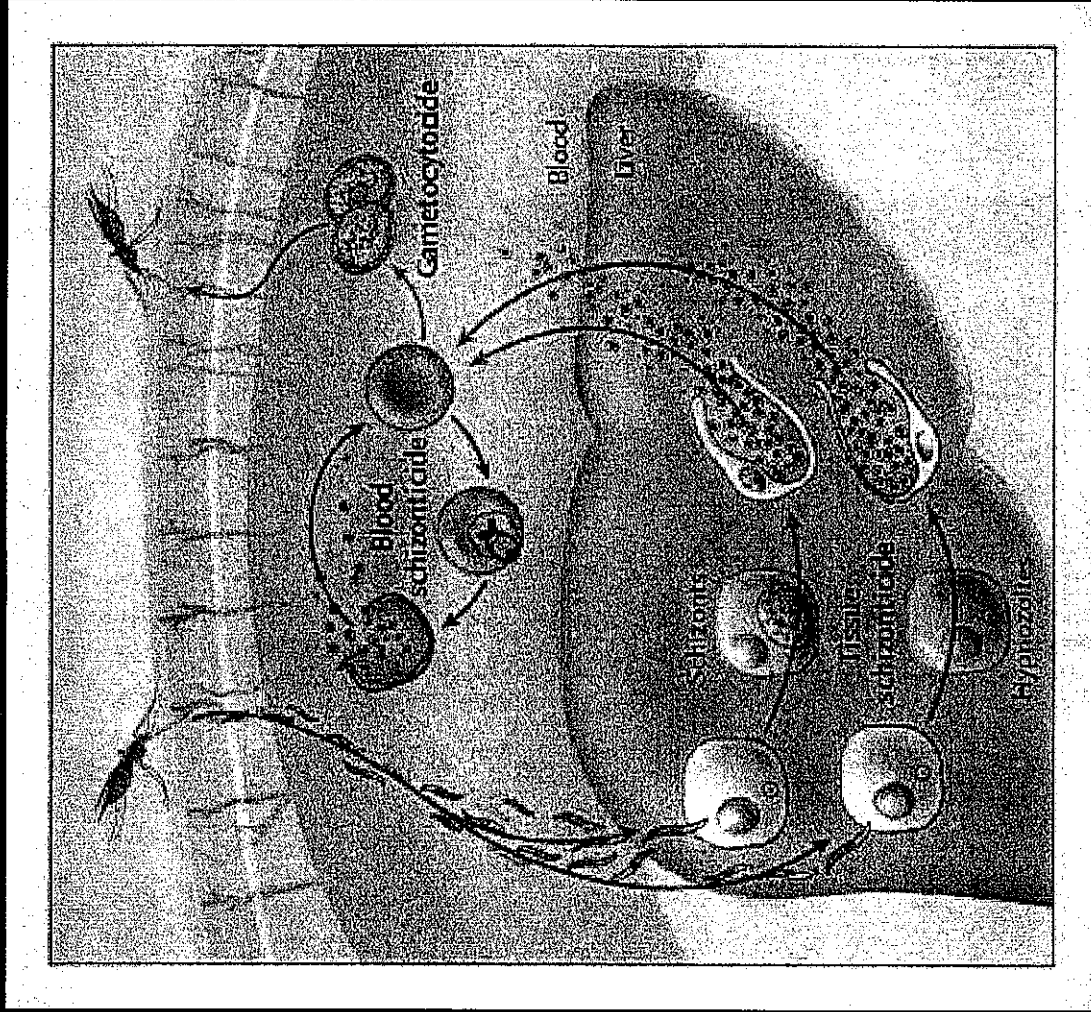
Definitive diagnosis relies on identification of the parasite on stained blood films. Initial blood smears may be negative and repeat tests may be required if the symptoms are suspicious for the infection.

## Treatment

The best treatment is prevention of the disease initially. This is done by taking medication prior to your trip as well as during and upon your return.

If the disease is contracted, the choice of malaria medication is based on the specific type of parasite, the possible drug resistance, and the severity of the disease.

# Antimalarial Drug Activity in the Life Cycle of Plasmodia



Baird, J. K. N Engl J Med 2005;352:1565-1577



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# Are you taking **Malaria** Medication?

ATOVAQUONE/CHLOROGUANIDE  
HYDROCHLORIDE (Malarone®)?

If you were given a prescription for malaria medication, follow these instructions:

- The medication is taken **Daily**
- It should be taken beginning 2 days prior to your trip
- It should be taken every day of your trip (while in a Malaria endemic area)
- It should be taken daily for 1 week after leaving a Malaria endemic area

# Are you taking **Malaria** Medication?

Mefloquine (Lariam®) or Chlorquine (Aralen®)?

If you were given a prescription for malaria medication, follow these instructions:

- The medication is taken **once** per week
- It should be taken on the **same day** of the week (for example, every Monday)
- It should be taken beginning 1 week prior to your trip
- It should be taken every week you are on your trip
- It should be taken once a week for 4 weeks when you come home.

# TYPHOID FEVER

## Background

The bacteria *Salmonella typhi* as well as several other *Salmonella* species cause a protracted bacterial illness referred to as enteric or typhoid fever.

The bacteria is spread from human to human by contamination of food or water.

## Symptoms

The onset of illness typically is gradual, with manifestations such as fever, constitutional symptoms (e.g. headache, malaise, loss of appetite, and lethargy), abdominal pain, rash (rose spots) and change in mental status. Constipation may be an early feature. Diarrhea occurs more commonly in children than in adults.

## Diagnosis

Isolation of the *Salmonella* organism from cultures of the stool, blood, and urine is diagnostic.

## Control Measures

Important measures include proper sanitation methods for food preparation (if you can't boil, cook it or peel it, **Don't eat it**).

Water should be boiled for 20 minutes or bottled water should be used for drinking, brushing teeth, cooking or mixing infant formula

## Treatment

Antibiotics are used for the treatment of typhoid fever. The choice of the medication, route of administration, and duration of therapy are based on susceptibility of the organism, site of infection, host (patient), and response.

## Oral Typhoid Vaccine

- Take 1 Pill every other day for 4 doses
- Take on an empty stomach (1 hour before a meal or 2 hours after a meal)
- Take around the same time each dose
- Keep in the refrigerator between doses
- You must complete the course of medication at least 10 days before your trip



# YELLOW FEVER

## Background

Yellow fever is caused by a virus. The virus is transmitted by mosquitoes, ticks or sandflies. The virus is found in tropical areas of South America and Africa

## Symptoms

Yellow fever develops through 3 phases. The first includes a nonspecific febrile (fever) illness with associated headache, malaise, weakness, nausea, and vomiting. This phase is followed by a brief "remission" or loss of symptoms. After this short remission, "hemorrhagic fever" develops. This is manifest by gastrointestinal bleeding (blood in the stool and in the vomit), jaundice, hemorrhage. If the symptoms continue without support, cardiovascular instability, kidney failure and heart problems may result.

## Diagnosis

Definitive diagnosis is made by testing for the virus in the spinal fluid, sputum, or in the blood.

## Control Measures

The best way to avoid infection is through prevention measures. Precautions to avoid mosquito bites include repellents containing DEET (diethylmethylnolamide), in 30%–35% strength for adults and 6%–10% for children; protective clothing, aerosol insecticides, and staying in screened or air-conditioned locations.

## Treatment

There are no specific medications to treat the infection once it has been contracted. Yellow Fever vaccination is recommended to all persons traveling to areas where there is a concern for Yellow Fever Virus. If the virus has been contracted, supportive treatment by trained physicians is required.

# RABIES

## Background

Rabies is a virus found in the saliva of infected animals. It is spread to other animals or human by bites, scratches caused by teeth or claws; or contact between an infected animal's saliva and open wounds on the victim. Rabies infection has been very rare in the United States however rabies is found in many areas throughout the world. The rabies virus affects the brain; infection is characterized by fever, appearance of symptoms such as restlessness, anxiety, and difficulty swallowing. It is almost always fatal. The time between contact with the infected saliva to when symptoms appear is usually between 1 and 6 months. Immunization against rabies, if required based on contact, is essentially 100% effective in preventing this infection if started prior to the appearance of symptoms.

Wildlife, including raccoons, skunks, foxes, coyotes, bats and other species, are the most important potential source of infection for humans. Rabies in small rodents (squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats and mice) and lagomorphs (rabbits and hares) is rare, but rabies may occur in woodchucks or other large rodents in areas where raccoon rabies is common.

Worldwide, most rabies cases in humans result from dog bites in areas where canine rabies is endemic. Most dogs, cats, and ferrets become ill within 4 or 5 days of viral shedding.

## Caring for the wound

Keep the wound clean and dry.

Do not remove any bandage that was placed on in the Emergency Department for 48 hours, unless it gets wet.

If the wound bleeds, press firmly over the bandages for several minutes. If the bleeding does not stop after 15 minutes of constant pressure, call your doctor or return to the Emergency Department.

*After 48 hours*

Remove the original bandage gently, it may stick a little.

Clean the wound gently with soap and water or a mixture of ½ hydrogen peroxide and ½ water to remove any crusted blood.

Showering or sponge bathing is fine, but avoid a tub bath.

Pat the wound gently, **do not rub it**.

Keep the wound covered with a clean bandage until the stitches are removed.

## Rabies immunization

If there has been a possible exposure to the rabies virus, **THEN IMMUNIZATION IS REQUIRED**. Successful rabies immunization requires a series of shots. On the first day, Rabies Immune Globulin and Rabies Vaccine (two different treatments) will be given.

Rabies Immune Globulin must be given initially because it provides the body with antibodies that produce an immediate response to prevent the infection. The immune globulin is given in two parts; most of it is injected directly into the wound and the remaining amount is injected in the leg. Side effects of Rabies Immune Globulin are

rare; occasionally some tenderness where the shot was given or a low-grade fever may occur.

Rabies Vaccine allows the body to develop it's own antibodies to the virus. It is injected in the arm and provides a longer lasting immunity (resistance) towards the infection. Side effects of the Rabies Vaccine are few; the most common is tenderness, itching, redness, and swelling at the injection site. Mild symptoms may also occur such as headache, nausea, stomachache, muscle aches, and dizziness.

#### Schedule follow up

To complete the series of immunization, a total of five injections of Rabies Vaccine will be needed.

The injections must be performed in the following manner:

#2 (day 3 after the injury or 1<sup>st</sup> injection): \_\_\_\_\_

#3 (day 7 after the injury or 1<sup>st</sup> injection): \_\_\_\_\_

#4 (day 14 after the injury or 1<sup>st</sup> injection): \_\_\_\_\_

#5 (day 28 after the injury or 1<sup>st</sup> injection): \_\_\_\_\_

#### Prevention

- Avoid touching or feeding any wild or stray animal;
- Do not handle a sick or strange acting animal, call the animal control officer in your area to attend to the animal;
- If bitten or scratched by any animal, wash the area with soap and water for 10 minutes;
- If your dog or cat is attacked by a raccoon, do not touch the animal or it's wounds with bare hands; put on rubber gloves or contact the animal control officer for help;
- Don't chase an animal that has attacked a pet or person; call the animal control officer for help;
- Keep garbage cans stored inside, with lids tightly fastened;
- Have your dog or cat properly immunized against rabies.

**U .S. Department of State**  
*Bureau of Consular Affairs*  
*Overseas Citizens Services*



<http://www.state.gov/travel/>

Overseas Citizens Services (OCS) in the U.S. Department of State and our embassies and consulates abroad are charged with providing consular protection and services to United States citizens abroad. The safety of U.S. citizens traveling and residing abroad is the highest priority of the Department of State. Service to the public is OCS's mission.

***Medical Information for Americans Traveling Abroad***

If an American citizen becomes seriously ill or injured abroad, a U. S. consular officer can assist in locating appropriate medical services and informing family or friends. If necessary, a consular officer can also assist in the transfer of funds from the United States. However, payment of hospital and other expenses is the responsibility of the traveler.

Before going abroad, learn what medical services your health insurance will cover overseas. If your health insurance policy provides coverage outside the United States, **REMEMBER** to carry both your insurance policy identity card as proof of such insurance and a claim form. Although many health insurance companies will pay "customary and reasonable" hospital costs abroad, very few will pay for your medical evacuation back to the United States. Medical evacuation can easily cost \$10,000 and up, depending on your location and medical condition.

***THE SOCIAL SECURITY MEDICARE PROGRAM DOES NOT PROVIDE COVERAGE FOR HOSPITAL OR MEDICAL COSTS OUTSIDE THE U.S.A.***

Senior citizens may wish to contact the American Association of Retired Persons for information about foreign medical care coverage with Medicare supplement plans.

To facilitate identification in case of an accident, complete the information page on the inside of your passport providing the name, address and telephone number of someone to be contacted in an emergency.

A traveler going abroad with any preexisting medical problems should carry a letter from the attending physician, describing the medical condition and any prescription medications, including the generic name of prescribed drugs. Any medications being carried overseas should be left in their original containers and be clearly labeled. Travelers should check with the foreign embassy of the country they are visiting to make sure any required medications are not considered to be illegal narcotics.

A listing of addresses and telephone numbers of U.S. embassies and consulates abroad is contained in ***Key Officers of Foreign Service Posts***. This publication may be obtained through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Also available from the Government Printing Office is ***Health Information for International Travel*** by the Centers for Disease Control and Prevention (CDC). This contains a global rundown of disease and immunization advice and other health guidance, including risks in particular countries. The CDC maintains the international travelers hotline at 1-877-FYI-TRIP (1-877-394-8747), an

automated faxback service at 1-888-CDC-FAXX (1-888-232-3299) and a home page on the Internet at <http://www.cdc.gov>.

For information about outbreaks of infectious diseases abroad, consult the World Health Organization's (WHO) web site at <http://www.who.int/en>. The WHO also provides travel health information at <http://www.who.int/ith>.

For detailed information on physicians abroad, the authoritative reference is ***The Official ABMS Directory of Board Certified Medical Specialists*** published for the American Board of Medical Specialists and its certifying member boards. This publication should be available in your local library. U.S. embassies and consulates abroad maintain lists of hospitals and physicians. Major credit card companies also can provide the names of local doctors and hospitals abroad.

Some countries require foreign visitors to have inoculations or medical tests before entering. Before traveling, check the latest entry requirements with the foreign embassy of the country to be visited.

A list of English speaking doctors and health care facilities overseas, may be found at the U.S. State Department Web site <http://travel.state.gov/acs.html#emr>  
This should be referenced prior to travel in the event emergency health care is needed.