

Health Information for Travelers to Panama  
January 4-17, 2009

Immunizations for the following diseases are recommended prior to your travel to Panama.

**MEASLES, MUMPS & RUBELLA:** Measles and rubella are viral illnesses that begin with fever and rash. Mumps involves infection of the salivary glands. All are spread by coughing, sneezing or other respiratory or oral contact. **If born after 1956 you need two doses of measles vaccine for adequate protection.**

**TETANUS:** Bacterial disease resulting in muscle rigidity (lockjaw). Spread through open wounds, especially in deep puncture wounds, in contact with soil, street dust, human or animal feces. **Adults need a Tetanus booster every 10 years.**

**HEPATITIS A:** A disease with abrupt onset of fever, malaise, anorexia, nausea and abdominal discomfort followed within a few days by jaundice (yellowing of the skin and eyes). It is spread person-to-person by the fecal-oral route through ingestion of contaminated food or water. **Immunization should be given 2 weeks prior to travel.**

**HEPATITIS B:** A disease of the liver spread through contact with an infected person's blood or body fluids. **You are at increased risk of exposure to Hepatitis B, if you are exposed to blood, have sexual contact with an infected person, choose to have a piercing or tattoo, or need medical treatment.**

**TYPHOID FEVER:** A system-wide disease with sudden fever, headache, malaise, anorexia, spleen enlargement, rash. Spread by food (especially shellfish, raw fruits, vegetables and milk) or water contaminated by feces or urine of a typhoid patient. **Immunization should be given at least 2 weeks prior to travel to this area.**

**YELLOW FEVER:** Yellow Fever is a viral disease transmitted to humans by a mosquito bite. The mosquitoes are most active during the evening hours. Symptoms range from fever, chills, headache, and vomiting to jaundice, internal bleeding, and kidney failure. Death occurs in about 5% of those infected. **There is no specific drug to treat an infection of yellow fever therefore prevention of infection is important.**

**The following immunizations are important in protecting you from the above-mentioned diseases.**

<u>TYPE OF IMMUNIZATION</u>	<u>RECOMMENDED FOR</u>	<u>HOW MANY SHOTS</u>	<u>COST AT UWGB</u>
MMR (measles, mumps, rubella)	All persons over 1 year of age	2 shots since 1st birthday if born after 1956	FREE
Tetanus (Td)	All persons	1 booster every 10 years	FREE
Havrix (for Hepatitis A)	All unvaccinated persons	1 shot with booster dose in 6 to 12 months Should be given at least 2 weeks prior to travel.	\$27/each
Typhoid Fever	All unvaccinated persons.	1 shot with booster every 2 years. Should be given at least 2 weeks prior to travel.	\$47.00
Yellow Fever	For travelers to Darien, Kumayala (San Blas) and Panama provinces, excluding the Canal Zone, Panama City and San Blas Islands.	If > 9 months of age, 1 shot with booster dose every 10 years. <b>Yellow fever vaccine must be given at least 10 days before departure.</b>	*

\*Must be given by Certified Yellow Fever Center; refer to the list of local Certified Yellow Fever Centers..

**over**

CERTIFIED YELLOW FEVER CENTERS: Please call the clinic of choice to schedule an appointment.

**Yellow fever vaccine must be given at least 10 days before departure.**

**Bellin Health Family  
Ashwaubenon**  
1630 Commanche Ave  
Green Bay, WI 54313  
Phone: 920 430-4700

**Aurora BayCare**  
(Dr. Loomans)  
2845 Greenbrier Rd.  
Green Bay, WI 54311  
920 288-8100

**Prevea Clinic East**  
(Lynn Green N.P.)  
3021 Voyager Dr.  
Green Bay, WI 54311  
920 431-1801

**Ascend Health, S.C.**  
1061 West Mason  
Green Bay, WI 54303  
Phone: 920-884-1989

PRECAUTIONS:

- Pregnant women must contact their physician regarding immunizations. It is also recommended that you do not become pregnant for 3 months after receiving an MMR or typhoid immunization.
- If you have any chronic health problems or have had a reaction to a previous immunization consult with your personal physician regarding the advisability of these immunizations.

**You will be traveling during “flu” season.**

Influenza “Flu” is a viral infection of the nose, throat, bronchial tubes and lungs that can make people of any age ill. Typical influenza illness is characterized by abrupt onset of fever, sore throat, nonproductive cough and generalized body aches and soreness. Although most people are ill for only a few days, some people have a more serious illness and may need hospitalization.

A “Flu Vaccine” is available to help protect you from the flu. If you are interested in getting the vaccine, you can contact your family physician or receive it through UW-Green Bay Health Services

*If you are a UWGB student or faculty member call 456-2380 to make an appointment to see a nurse as soon as possible if you wish to be immunized at the UW-GB Counseling & Health Center.*

**All travelers should take the following precaution, no matter the destination:**

- Wash hands often with soap and water.
- Use sunscreen and lip balm with SPF 15 or greater, wear a hat to protect your face, and avoid sun when it’s strongest, usually 10 a.m. to 2 p.m. Choose sunglasses that block at least 99 percent of UVB rays and at least 95 percent of UVA rays.
- Drive defensively, avoid travel at night if possible and always use seat belts. *Motor vehicle crashes are a leading cause of injury among travelers, walk and drive defensively.*
- Food and water precautions:
  - Don’t eat or drink dairy products unless you know they have been pasteurized.
  - Consider choosing bottled beverages as they are likely safest.
  - Never eat undercooked ground beef and poultry, raw eggs, and unpasteurized dairy products. Raw shellfish is particularly dangerous to persons who have liver disease or compromised immune systems.
  - Maintain extra precaution with buffets, salad bars and outside vendors.
  - Avoid all direct contact with poultry, including touching well-appearing, sick or dead chickens and ducks. Avoid places such as poultry farms and bird markets where live poultry are raised or kept. Also avoid handling surfaces contaminated with poultry feces or secretions.
- Protect yourself from insects.
  - Apply repellants containing 30-50% DEET to clothing and skin.
  - Wear long-sleeved shirts, long pants and hats to minimize areas of exposed skin. Tuck in shirts

- and tuck pants into socks and boots for further protection when at increased risk.
- If you are sexually active always use latex condoms to reduce the risk of HIV and other sexually transmitted diseases.
- Don't share needles with anyone.
- If you are in unfamiliar company, be cautious about leaving your drink unattended or accepting an opened beverage from a stranger.
- Avoid contact with all animals including freely roaming cats and dogs. **Rabies is almost always transmitted by the bite of an infected animal. Dogs are the main reservoir of the disease in many countries. While traveling it is wise to avoid contact with ALL animals.**

## **Important information specific to your area of travel:**

### **Food and Water Precautions:**

- Traveler's diarrhea is acquired through ingestion of fecal contaminated food and/or water. Avoid any foods that cannot be cooked or peeled by you.
- Chlorinated water does not necessarily guarantee safety. Chlorine may significantly reduce the microorganism count in water but not destroy all the germs.
- In areas where sanitation and hygiene are poor, you should assume the only safe drinks are canned or bottled carbonated drinks. Even bottled water should be carbonated to ensure that the bottle has not been simply refilled with local water and recapped. Avoid ice cubes. Freezing tends to preserve microorganisms rather than destroy them.
- Remember: water that is unsafe to drink is unsafe for brushing teeth, rinsing contact lens, or washing near your mouth.

### **Risky foods and beverages:**

- raw meat
- raw seafood
- raw fruits and vegetables, unless peeled by the traveler
- un-pasteurized milk products
- street vendor foods/beverages
- ice cubes

### **Generally safe food and beverages:**

- cooked foods that are still hot
- fruit with unbroken skin that is peeled by the traveler
- canned or bottled carbonated beverages
- wine and beer
- hot coffee and tea
- boiled water or water appropriately treated with iodine or chlorine

**A good rule of thumb: *"If you can't cook it, peel it, or boil it, forget it!"***

## **Protection from Cryptosporidiosis:**

### **What is cryptosporidiosis?**

Cryptosporidiosis is a diarrheal disease caused by microscopic parasites, *Cryptosporidium*, that can live in the intestine of humans and animals and is passed in the stool of an infected person or animal. Both the disease and the parasite are commonly known as "Crypto." The parasite is protected by an outer shell that

allows it to survive outside the body for long periods of time and makes it very resistant to chlorine-based disinfectants. During the past 2 decades, Crypto has become recognized as one of the most common causes of waterborne disease (recreational water and drinking water) in humans in the United States. The parasite is found in every region of the United States and throughout the world.

#### **Prevention of cryptosporidiosis:**

- Wash hands thoroughly and frequently with soap and water; especially after using the toilet and before handling or eating food.
- Protect others by not swimming if you are experiencing diarrhea. Swimming is not recommended for at least 2 weeks after diarrhea stops.
- Avoid water that might be contaminated.
  - **Do not use or consume untreated ice or drinking water.**
  - Do not swallow recreational water.
  - Do not drink untreated water from shallow well, lakes, rivers, springs, ponds and streams.
  - Do not drink untreated tap water during community-wide outbreaks of disease caused by contaminated drinking water.

#### **Protection from insect bites:**

When traveling to Panama you may be at risk of exposure to Dengue Fever and Malaria.

#### **DENGUE FEVER: A risk if traveling east of the former Canal Zone**

Dengue fever is a viral infection transmitted by mosquito bites. The illness is flu-like and characterized by a sudden onset, high fever, severe headaches, joint and muscle pain, and rash. The rash appears 3-4 days after the onset of fever. Since there is no vaccine or specific treatment available, prevention is important.

The mosquitoes that carry Dengue Fever are active at dusk and dawn, but may feed at any time during the day, especially in doors, in shady areas, or when the weather is cloudy. The risk of contracting Dengue is greater in urban areas and lower in rural areas or in high altitude areas (above 4,500 feet).

Travelers can reduce their risk of exposure to Dengue Fever by taking the following steps to protect themselves from mosquitoes.

- Use insect repellent containing DEET or Picaridin. DEET concentrations of 30% to 50% are effective for several hours. Picaridin, available in 7% and 15% concentrations, needs to be applied more frequently. (Note: apply any needed sunscreen before applying insect repellent)
- It may be useful to spray insecticide indoors where the *Aedes* mosquito like to linger, e.g. closets, behind curtains, under the bed, etc.
- Wear lightweight long pants and long-sleeved shirts when outdoors
- Stay in hotels or resorts that are air conditioned. If air conditioning is not available, staying in well-screened rooms can reduce contact with mosquitoes.

#### **MALARIA**

Malaria risk exists in the rural areas of Bocas Del Toro, Darien, San Blas provinces and San Blas Islands. There is no malaria risk in Panama City or in the former Canal Zone.

Malaria is always a serious disease and may be a deadly illness. If you become ill with a fever or flu-

like illness either while traveling in a malaria-risk area or after you return home (for up to 1 year), you should seek immediate medical attention and should tell the physician your travel history.

**Special precaution about anti-malarial drugs:**

You should purchase your anti-malarial drugs before travel. Drugs purchased overseas may not be manufactured according to United States standards and may not be effective. They also may be dangerous, contain counterfeit medications or contaminants, or be combinations of drugs that are not safe to use.

Halofantrine (marketed as Halfan) is widely used overseas to treat malaria. CDC recommends that you do **NOT** use halofantrine because of serious heart-related side effects, including deaths. You should avoid using antimalarial drugs that are not recommended **unless** you have been diagnosed with life-threatening malaria and no other options are immediately available.

**See attached informational sheet on “Malaria and Preventive Measures”. Read the information carefully! If you wish to start prescription anti-malaria medication, contact your private physician or the Counseling and Health Center, 465-2380 before December 5, 2008.**

**After You Return From Your Trip:**

- Monitor your health.
- If you become ill with fever and develop a cough or difficulty breathing or if you develop any illness during this 10-day period, consult a health-care provider. When visiting the health care setting, tell the provider where you have traveled, what you did, how long you stayed, what you ate and drank and if you recall being bitten by insects.

We hope you find this information helpful in preparing for your trip. If you have questions, please contact the Counseling & Health Center, 465-2380 or look for more information at [www.cdc.gov](http://www.cdc.gov) and <http://travel.state.gov>

**Enjoy your trip!!!**

**MALARIA AND CHEMOPHROPHYLLAXIS  
(Aralen)**

**WHAT IS MALARIA?**

Malaria is an illness caused by a protozoan and transmitted by the bite of an infected female Anopheles mosquito. The disease is characterized by “flu-like” symptoms including fever, chills, headache, muscle aches and malaise.

Complications such as anemia, jaundice, kidney failure, coma and death may occur.

Malaria is always a serious disease and may be a deadly illness. If you become ill with a fever or flu-like illness either while traveling in a malaria-risk area or after you return home (for up to 1 year), you should seek immediate medical attention and should tell the physician your travel history.

### **PERSONAL PROTECTION MEASURES**

Due to the mosquito's nocturnal feeding habit, risk of malaria transmissions is greatest between dusk and dawn. Thus, travelers are advised to reduce contact with mosquitoes during that time. Remaining in well-screened areas, using mosquito nets and wearing clothes that cover most of the body best accomplish this. Additionally, insect repellent containing N.N. diethylmetatoluamide (DEET) should be used on exposed areas of skin. A pyrethrin containing insect spray should be used in living and sleeping areas during evening and nighttime hours. These products should be included with your travel supplies.

### **CHEMOPROPHYLAXIS**

For non-resistant forms of malaria, Aralen (chloroquine) a 500 mg oral tablet is taken weekly (same day each week) for one week prior to entering a malarious area, each week while in the area and for 4 weeks after leaving the malarious area.

### **CONTRAINDICATIONS**

- Acute illness with systemic disease, i.e., rheumatoid arthritis, lupus erythematosus
- Other potentially hemolytic drugs
- Acute visual disturbance (retinopathy)
- Glucose - 6 - phosphate dehydrogenase-Pregnancy
- Psoriasis

### **SIDE EFFECTS**

- Short-term treatment (less than 6 years cumulative) rarely causes serious side effects.
- Minor side effects include: gastrointestinal disturbances (GI), headache, dizziness, blurred vision and pruritus.
- If GI disturbances occur, try taking the dose with food or split into 2 doses and taken them on different days.

Aralen should be stored in childproof containers out of the reach of children.

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Information compiled from "Health Information for International Travel", 2008, Centers for Disease Control, Atlanta, GA. [www.cdc.gov](http://www.cdc.gov)