What This Course Will Cover

1. How diseases are transmitted.
2. How to reduce your risk of becoming sick while traveling.
3. What to bring with you in case you do get sick.
4. What vaccinations and medications are recommended for the countries you will be traveling to.
5. How to make an appointment with UHS Travel Clinic to receive necessary shots prior to departure.
In order to make informed decisions about your vaccinations, you will need the following information during this course:

**Country-Specific Reports:**
You can obtain country-specific "destination information" from the Trip Prep website. This website will ask for you to create a username and password.

Before the account is activated, you will need to have access to your email. Follow the "destination information" link and obtain a report for every country you plan to visit. Printing those reports can be useful when deciding which vaccinations are recommended for your trip.

You can also obtain country-specific destination information by going to the Centers for Disease Control >>
Food and Waterborne Illnesses

Many diseases are transmitted through food and water. Click on the links below to learn about infections that you may be at risk for during your travels.

Hepatitis A
Cholera
Polio
Typhoid Fever
Traveler's Diarrhea
Safe Beverage Choices

**Bottled water:** Make sure that the seal is intact before drinking from bottle.

**Boiled water:** Boiling water for at least one minute kills most disease-causing organisms.

**Iodized water:** Purify your water with iodine crystals in liquid or tablets form, available in most camping stores. To remove the flavor and odor of the iodine, you can add vitamin C, Kool-Aid, Gatorade powder, etc.

**Canned beverages:** Be careful if the can has been stored in a cooler of ice or on a shelf somewhere. Wipe off top of can with sanitizer and if possible, drink through a straw.

**Hidden sources of bacteria:** Avoid brushing your teeth or rinsing your contacts with faucet water. Avoid ice, and frozen beverages (such as margaritas)--the freezing process does not kill the organisms.
Rule of thumb: Boil it, cook it, peel it yourself, or forget it!

Well-cooked meats, fish, veggies. Preferably foods that are served piping hot.

Rice, beans, and breads & other baked goods like tortillas.

Fruits, nuts, veggies with thick skins or shells which you have removed or peeled yourself (such as bananas, cucumbers, peanuts in shells).

Canned foods: They are safe unless the can is dented, swollen or hisses when being opened, which indicate contamination with botulism.

Take a multivitamin daily as directed if you feel that you are not going to get sufficient vitamins and nutrients from your diet abroad.
Foods to Avoid

**Fruit salads** made with fruit that you haven't peeled yourself.

**Leafy green salads** such as lettuce, parsley or cilantro. Contaminated water can cling to large surface areas.

**Thin-skinned fruit** that is non-peelable, such as peaches, tomatoes, berries or grapes.

**Raw or undercooked meat, fish, or shellfish:**
Undercooked shellfish can be carriers of Hepatitis A. Under cooked meat can be a source of typhoid or salmonella.

**Unpasteurized dairy products** such as goat cheese, milk or yogurt. This can be a source of Brucellosis. Read the label to see if it has been pasteurized.

**Food from street vendors:** Food may not be kept at appropriate temperatures and vendors may not be washing their hands. Flies can transmit diseases if they land on uncovered food.
Traveler’s Diarrhea

Traveler’s Diarrhea is common and can be caused by bacteria, viruses or parasites. Bacteria are responsible for about 85% of cases.

**Prevention**

- **Carry hand sanitizer** with at least **60% alcohol** content for those occasions when you cannot wash your hands with soap and water for at least 20 seconds.

- **Pepto-Bismol® (pink bismuth) tablets:** Available over-the-counter (OTC). Take 4 times per day for no more than 3 weeks (Don’t be alarmed by possible side effect of blackening of the tongue and stools. Other rare but potential side effects include nausea, constipation and ringing in the ears.

- **Strict adherence** to food and water precautions.

**Treatment**

- Return to eating when you feel up to it. Food is not essential for many days, but **WATER** is! **Drink lots of purified water!**

- Take an oral rehydration solution or rehydration salts mixture with you. These are available in pharmacies or camping stores. Dissolve in water and drink if there is risk for dehydration.

- At your visit with the Travel Health Nurse, discuss the use of antibiotics and Imodium AD for moderate to severe diarrhea. Antibiotics will require a prescription.

- Seek medical care if you have persistent diarrhea for greater than 3 days.
Mosquito-Borne Illnesses

Mosquitoes can transmit a number of diseases.

The best way to prevent mosquito bites is to use insect repellent that contains 30% DEET.

Treat clothing, shoes and bed nets with Permethrin before leaving on your trip. Most pharmacies, including UHS and outdoor adventure stores sell these products.

Discuss your risk for infection with a travel specialist to determine if you need prophylactic antibiotics or vaccinations.

Click on the link below to learn about each specific mosquito-borne infection.

Dengue Fever    Yellow Fever    Malaria    Japanese Encephalitis
Insect Precautions

- Apply insect repellent containing at least 30% DEET to exposed skin. Concentrations higher than 50% do not improve efficacy and may cause skin irritation. Avoid contact with synthetic material, such as Gorex, as it will damage the material. Cotton is ok.

- Wear a light-colored, long-sleeved shirt, pants, and a hat to minimize exposed skin. Mosquitoes often bite below the knees. Tuck pants into socks.

- Spray or wash clothing, bedding, & screens with Permethrin. Do not apply to skin. Use mosquito netting if advised per country recommendations. You can usually purchase this in local markets in the country you are traveling to.

- Reduce the amount of time spent outdoors at and after dusk when mosquitoes infected with Japanese encephalitis and malaria are most active. Day time mosquitoes carry Dengue and Yellow Fever.

Protection against mosquitoes, ticks, fleas, other insects and anthropods >>
A number of countries encourage the use of antimalarial medications for prophylaxis. The following medications are often used:

<table>
<thead>
<tr>
<th>Medication Name:</th>
<th>When to Take:</th>
<th>Side Effects may Include:</th>
<th>Avoid if You Have:</th>
<th>Other Considerations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroquine (Aralen®)</td>
<td>1/week</td>
<td>Upset stomach, headache, dizziness, blurred vision, itching</td>
<td>Psoriasis</td>
<td>Not effective in many parts of the world</td>
</tr>
<tr>
<td>Mefloquine (Lariam®)</td>
<td>1/week</td>
<td>Upset stomach, insomnia, dizziness, vivid dreams, increased anxiety, depression</td>
<td>History of epilepsy, serious psychiatric illness, heart conduction abnormalities, depression, anxiety or panic attacks</td>
<td>A black box warning was issued in July 2013 due to potential neurological and cardiac side effects. UHS will rarely prescribe this medication.</td>
</tr>
<tr>
<td>Malarone™</td>
<td>1/day</td>
<td>Upset stomach, abdominal pain, headache, vomiting</td>
<td></td>
<td>For Chloroquine-resistant countries. Expensive</td>
</tr>
<tr>
<td>Doxycycline (Vibramycin®)</td>
<td>1/day</td>
<td>Upset stomach (take with meals), sunburn (use sunblock and hat), yeast infections in women</td>
<td>During pregnancy</td>
<td>For Chloroquine-resistant countries. Inexpensive. May protect against diarrhea</td>
</tr>
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</table>

A travel specialist should discuss which medication is most likely to provide you with the best protection and the least side effects. These medications will require a prescription.
Blood, Body Fluid, Airborne and Other Illnesses

The following diseases are transmitted through contact with blood, body fluids, including semen, vaginal secretions, and saliva, or the airspace of an infected person. Some infections, including rabies, can be transmitted from animals to people.

Click on the links below to learn about each specific infection.

- Influenza
- Diphtheria
- Hepatitis B
- Meningococcal Meningitis
- HIV
- Tuberculosis
- Sexually Transmitted Infections
- Rabies
Prevention of Blood-borne, Fluid-Borne, and Airborne Illnesses

- Make sure your tetanus shot is up-to-date for all international travel. If more than 5 years have passed since your last tetanus shot, consider obtaining a booster.

- Do not get tattoos, piercings, or acupuncture while traveling. HIV and Hepatitis C are easily transmitted by contaminated needles or ink.

- Do not touch or feed animals. They can carry infection, including rabies, which is fatal if not treated. If you are bitten by any animal, wash the area of the bite with soap and water for 15 minutes and get medical attention within 24 hours. Consider obtaining Rabies vaccine if you will have direct contact with animals or will not have accessible health care within 24 hours.

- Bring condoms from home. Sexually transmitted infections, including hepatitis B, syphilis, gonorrhea, herpes, HPV, and chlamydia are common worldwide. Bringing condoms just in case is a good idea.
Altitude Sickness

If you are planning to visit locations higher than 8,000 feet (2500 meters), you may experience altitude sickness.

**Symptoms may include:**
- Headache
- Nausea
- Fatigue
- Loss of appetite

Most symptoms will resolve when you go back to a lower altitude.

**Altitudes of common destinations**
- Cuzco, Peru: 11,203 ft (3395 m)
- Lhasa, Tibet: 13,000 ft (3965 m)
- Machu Piccu, Peru: 7,972 ft. (2430 m)
- Mexico City = 7,349 ft (3057 m)
- Mt. Kilimanjaro, Tanzania 19,341 ft (5895 m)
- Quito, Ecuador = 9,252 ft (2820 meters)
- Rocky Mountains, CO: 10-13,000 ft (3048-3096 m)

Find out more about altitude sickness >>
Preventing Altitude Sickness

**Do:**

- Ascend slowly.
- Include rest days at intermediate altitudes.
- Drink plenty of water.
- Eat a diet high in carbohydrates.
- If you have experienced symptoms in the past or have no time to acclimate, consider taking Acetazolamide (Diamox). It should be taken 2-3 days before ascent and for at least 3 days at highest elevation. Discuss this with a medical provider as this medication requires a prescription.

**Avoid:**

- Overexertion during the first few days at a high altitude.
- The effects of alcohol and other medications may be increased at high altitude.
- Avoid medications that decrease breathing rate. These include sleeping pills, tranquilizers and narcotic based pain relievers.
Motor Vehicle Accidents

According to the World Health Organization, motor vehicle accidents are the leading cause of preventable death of travelers.

Protect yourself:
- Use safety belts when available.
- Avoid driving in rural areas after dark.
- Rent larger vehicles with seat belts and airbags.
- Don’t drink and drive.
- Avoid riding in large vehicles that are overcrowded, overweight, or top-heavy.
- Visit the [Association for International Road Travel](http://example.com) to learn more about road safety and country-specific driving risks.
General Travel Health Considerations

There’s a lot to think about when you are preparing to travel to a different country.

Because of airline security rules, aerosol sprays and liquids must be kept in checked luggage. Check airline regulations for your specific airline before packing.
Take enough to last your entire trip. Call your insurance company well in advance to arrange to get a long-term supply of medicine if necessary. Most insurance’s have a “vacation plan”.

Bring medication in the original package with a prescription label that includes both the trade and generic name, if possible.

Certain countries will not allow ADHD medications to be brought into the country.
Over the Counter Medicines

Take enough to last your entire trip. Consider medication for diarrhea, cramps, headaches, nausea, allergies, etc.

Travel Health Kit
For items you might want to include in your kit, check out the following links from the CDC & UHS:

- CDC: Traveler’s Health Kit
- UHS Travel Kit Recommendations
Allergies

If you have any serious food allergies, insect reactions, or anything else that may cause a serious reaction, consider wearing a medical alert bracelet.

- Remember to take an Epi Pen or other needed supplies with you in case you experience an allergic reaction. Tell a co-traveler about the potential for a reaction.
Personal Hygiene Items

- Remember to bring enough tampons, pads, condoms, or other essential personal items with you.
- Feminine hygiene products may be hard to find in some parts of the world and condoms may be counterfeit.
Alcohol and Other Drugs

- Find out the laws of the country you'll be visiting.

- Minimum alcohol age may be younger than in the U.S. but drug laws are often extremely strict.
Jet Lag

Jet lag is a temporary sleep disorder caused by rapid travel across 3 or more time zones causing sleep disturbance, fatigue, irritability, headache, shortened attention span and poor concentration.

How long does it last?
East to West: number of days equal to 2/3’s the number of time zones crossed
West to East: number of days equal to 1/2 the number of time zones crossed.

Strategies for minimizing symptoms:

- Force yourself into the sleeping routine of the new time zone. Go to bed 1 – 2 hours later for a few days before traveling eastward and shifting the timing of sleep to 1-2 hours earlier for a few days before traveling westward. Shift meal times to coincide with these changes.

- Seek exposure to bright light in the evening if traveling westward and in the morning if traveling eastward.

- Drink plenty of fluids before, during and after your flight.

- Sleep during long flights if possible.

- Avoid large, fatty meals, caffeine and alcohol during the flight.

- Minimize activity and avoid rich, spicy or heavy meals the first day after your arrival.

- Take short naps, 20 – 30 minute duration, to increase energy but not undermine nighttime sleep.
Medical Insurance

Most private medical insurances do not provide overseas coverage. Make sure to check with your own insurance company prior to departure. Medical evacuation back to the United States or to a country with adequate health care is very expensive and most insurance companies do not provide this. Consider purchasing short term, reliable international insurance.

For students and scholars affiliated with study abroad or exchange programs from the University of Wisconsin, international medical insurance is required and is usually included in your program fee. Click here to review the policy.

For students volunteering outside of University of Wisconsin affiliated programs, you can review insurance options by searching online for “International Medical Insurance”.

There are many reasonable choices, including the following examples:

International SOS >>
HTH Worldwide >>
What’s the Next Step?

If you need prescription medications and would like to discuss risks associated with your upcoming travel, you will need to make an appointment at UHS to see a travel specialist. Please review the following criteria to determine the best option for you.

**Vaccinations only**
This is a 10-minute appointment if you are familiar with international travel or traveling to developed countries with minimal risk for traveler’s diarrhea, malaria or other mosquito transmitted infection. Such countries include Canada, Western Europe, United Kingdom, Scandinavia, Australia and New Zealand. There is no cost associated with this appointment other than the cost of the vaccines. Prices are listed on the UHS Travel Web site.

**Travel consult and vaccinations**
This is a 20-minute appointment to review country specific guidelines and provide you with vaccinations and prescription medications needed to stay safe during your travel experience. There is no cost associated with this appointment other than the cost of the vaccines.

**Forms, physical exam, travel consult and vaccinations**
This is a 30-minute appointment to complete required forms and/or a physical examination, review country specific guidelines and provision of vaccinations and prescription medications needed to stay safe. There is a $50.00 charge for this visit, along with the cost of each vaccination.
Congratulations! You have just completed your travel tutorial and should be prepared to deal with some of the challenges of international travel. We hope you will prevent illnesses and accidents from occurring based on the information we have provided. Happy and safe travels! We look forward to seeing you at your Travel Clinic appointment.

The UHS Travel Clinic Health Care Staff

Click to log into MyUHS to schedule an appointment and complete a travel questionnaire. Call 608-265-5607 if you have questions.