

## Health Guidelines: Environmental Studies FSP 2019

### Namibia & South Africa

Faculty: Doug Bolger

**We encourage you to enroll in the Smart Traveler Enrollment Program (STEP), a free service to allow U.S. citizens and nationals traveling abroad to enroll their trip with the nearest U.S. Embassy or Consulate. You will receive important information from the Embassy about safety conditions in your destination country, helping you make informed decisions about your travel plans. This program helps the U.S. Embassy contact you in an emergency, whether natural disaster, civil unrest, or family emergency. To enroll, visit <https://step.state.gov/step/>**

#### I. Traffic Accidents/Personal Responsibility and Safety

1. Traffic accidents – passenger or pedestrian – are the leading cause of death and injury for travelers to developing countries. Water accidents are the #2 cause of death and injury. Use caution.
2. Stay with the group – don't go out alone at night. *Avoid the use of alcohol.*
3. Be aware of your surroundings, avoid/report suspicious activity, don't be a victim of crime or violence.

#### II. Food and Water-borne illnesses – *How to protect yourself:*

1. Drink only boiled or treated water (also for tooth brushing) if uncertain of water quality. It may be difficult to carry as much bottled water as you need (especially when it is hot), so bring purification tablets. **\*\*Always check about water quality.**
2. Bottled water (especially carbonated), soft drinks, coffee, tea, beer and wine should be ok.
3. Ice cubes can easily be contaminated. \*\*
4. Well-cooked foods, especially if eaten hot, should be fine.
5. Raw foods (for example, fruits and vegetables) should be eaten ONLY if you peel them yourself. Caution with salads.
6. To disinfect water with tincture of iodine, add 5 drops per quart of clear water; let it stand for 30 minutes. For very cold or cloudy water, add 10 drops per liter; let it stand for several hours.
7. **Dietary Needs:** It is very important that if you have dietary needs, allergies, illness/medications which need special foods or foods at certain times – PLEASE talk to trip leaders before leaving. If you have problems while in SA, it may impact the trip for the entire group, not just for you. Most problems can be avoided through communication in advance with your trip leaders.

#### III. Sun and Heat

1. Avoiding dehydration is crucial to your health. 9–10 liters a day may be required. Bring 2 bottles on trips and refill them often.

2. Heat exhaustion results from elevation of core body temperature. Symptoms include nausea, dizziness, rapid pulse, and headache. It must be treated immediately, before it leads to heat stroke. Go to a cool spot and take plenty of fluids. (Best to avoid it in the first place!)
3. Use sunscreen all the time with an SPF 30 or more to prevent skin damage. Reapply every 2 hours if you are in the wind, heat or humidity, as its effectiveness is reduced by these conditions. Using insect repellents containing DEET can also reduce sunscreen SPF. (Note: DEET 30% is adequate protection). Be sure to apply a thick enough amount of sunscreen to get the desired SPF (1 oz. for an adult in a bathing suit). Wear a broad brim hat and loose-fitting clothing to cover as much skin as possible. Loose fitting clothes made of light-colored fabric will actually keep you cooler as they reflect the sun's heat.
4. Heat stroke results from a core body temperature of 105 degrees or more. Symptoms include confusion, irrational behavior, low blood pressure, vomiting, shortness of breath and unconsciousness. Heat stroke can be fatal. Treatment consists of cooling as quickly as possible. Remove clothes, wet the victim down, and push fluids if able to drink.
5. Dehydration can lead to constipation, which is often a problem on this trip. Increase your water and fiber intake.

#### IV. Schistosomiasis

1. An illness from larvae found in fresh water, primarily low lying areas. **Avoid swimming or wading in fresh water.** Larvae of this organism can penetrate intact skin and spread to the liver, in some cases resulting in liver failure. Rub skin dry if accidental fresh water exposure.

#### V. Rabies

1. Avoid all contact with animals. Do not consider any animal, even pets, to be safe. Animals are almost never given rabies vaccines in Africa. Immunization is recommended in some cases, but does not eliminate the need for treatment if bitten. Watch out for dogs, jackals, mongooses, and bat eared foxes.... **Untreated rabies is 100% fatal.** An exposure, that is an actual or suspected bite or scratch, will end the trip for you, and will greatly affect the trip for your colleagues.

#### VI. HIV / AIDS

Over 20% of the adult population in South Africa, Namibia and Lesotho is HIV positive.

1. HIV is spread by sexual contact, blood-to-blood contact, transfusions, and dirty needles.
2. Avoid sexual contact with local people. (Remember: Condoms can break. Avoidance is the only safe option.)
3. Avoid needles, period. Do not get a tattoo. Get all necessary immunizations in the USA. Get med-evacuated if necessary.
4. Whenever possible, obtain care through ISOS. Remember to register with them, including scanning any documents/prescriptions to their site. Carry your ISOS card with you.
5. Avoid serious injury (motor vehicles, for example) which may place you in need of IV medications, blood draws or transfusions.
6. If you need emergency dental work call ISOS for a referral to a reliable provider.

#### VII. Malaria

1. There is no medication available which will prevent malaria entirely. Severe falciparum malaria can rapidly lead to a coma and death.
2. The best protection, if possible, is to avoid being bitten by mosquitoes. Malaria is spread by the female *Anopheles* mosquito.
  - a) The Anopheles mosquitoes bite mainly from DUSK TO DAWN, so be especially careful at those times. Wear long pants and long sleeved shirts in the evening.
  - b) Use an insect repellent with 30% DEET on any exposed skin, according to the directions. While there is some scanty evidence that DEET may be associated with neurologic events (seizures) in children, the evidence of the safety of DEET is overwhelming, especially in the face of malaria transmission.
  - c) When possible, use mosquito netting for beds or fastidiously screened bedrooms in malaria areas. Keep netting tucked in around the bed. Duct tape works for a quick net/screen repair. Tents provide adequate protection.
  - d) Mosquito coils or sprays may be available locally.
3. There are three drugs that will help you prevent malaria in Africa: Malarone, Mefloquine and doxycycline. Dick's House typically recommends Malarone for its superior side effect profile. Your travel consult provider can review any questions you have about malaria prevention medications and strategies.
4. If you develop an illness with fever, sweats, headache, and/or muscle aches on the trip or afterwards, you may have malaria and need to be seen by a doctor at once.
5. You can develop malaria up to 1–2 years after leaving Africa, so make sure to mention your travel history if you need to visit a physician after returning home.

#### VIII. Traveler's Diarrhea

1. This illness is caused by organisms to which local inhabitants have developed immunity. Even though you may be eating exactly the same food as the local people, your body does not have this acquired immunity and you may get quite sick. You will probably develop immunity yourself in time, but it will wear off about 3 months after you return home.
2. Traveler's diarrhea is not usually serious. It does not involve high fever or bloody stools. If you have either of these things, you have a more serious form of Traveler's diarrhea and you need antibiotic treatment. A prescription for Azithromycin is provided to all travelers and is suggested you have this filled and with you for possible use during your trip. Stop taking the medication as soon as you feel better. Do not use with Imodium or other anti-diarrheal medication.
3. Traveler's diarrhea usually goes away within 5 days with no treatment at all, but you may be uncomfortable and incapacitated during this time. Pepto-Bismol (2 tablets every ½ hour for a total of 8 doses) or Imodium, an over-the-counter anti-diarrhea medication, in small doses, will make you more comfortable and perhaps avoid dehydration. Be careful. Do not overuse these medications, or you may become quite constipated. And *do not use these medications at all if you have bloody stools or high fever.*
4. Take plenty of fluids with any diarrhea illness to prevent serious dehydration. Hydration will also help you avoid constipation.

#### IX. Immunizations

1. Tetanus booster or Tdap.
2. Polio– if you have not had an adequate childhood series
3. Typhoid– strongly recommended. A series of 4 capsules that must be taken at least 2 weeks before leaving the US or as an injection. Oral typhoid vaccine protects for about 5 years while injection protects for about 2 years.
4. Hepatitis A vaccine– strongly recommended. A single dose before you leave will provide significant protection. Full and long–term protection is provided by a second dose of vaccine 6–12 months after the first.
5. Hepatitis B vaccine– recommended (3 in the series).
6. Yellow Fever vaccine– only required if you are traveling elsewhere in Africa outside the planned program itinerary.
7. Be sure you carry your Yellow Card “International Certificate of Vaccination” listing all of your immunizations or a print–out of your vaccination history if you have not been vaccinated for YF.

Note: Do not get a cholera vaccine while in Africa. We do not recommend cholera vaccination, and getting vaccinated there would put you at risk for possible infection from poorly sanitized needles.

#### **X. TB Exposure**

1. There is a lot of TB – both latent and active, in the countries on this itinerary.
2. If you develop fevers, night sweats, or unexplained weight loss, please see your health care provider and tell them your travel history. You should be tested for TB after returning from South Africa if you develop symptoms.

#### **XI. Ticks**

1. Ticks are common in the areas you will be traveling.
2. Ticks carry many illnesses including Tick Bite Fever.
3. Remember to use tick precautions and 24/7 personal protection precautions (see “Malaria” above).
4. Have a TICK BUDDY. Shower each night and have someone check your skin in areas you can’t see yourself – do the same for your buddy.

#### **XII. Miscellaneous**

1. Foot care: Appropriate foot wear is necessary more often than you might expect, due to the high risk for foot injury in many places.
2. Dental checkup is recommended before the trip.
3. Take things you may not be able to get there (e.g., dental floss, cosmetics, sunscreen, DEET containing bug repellent, Purell (hand sanitizer), contact lens solution, etc.)
4. Take all prescription medications that you might need. Be sure they are properly labeled with the original pharmacy labels (e.g., asthma medicines, acne medicines, birth control pills, etc.). **DO NOT PACK MEDICATIONS IN YOUR LUGGAGE, CARRY THEM IN YOUR CARRY–ON BAG.**
5. Take condoms if there is even a remote possibility that you might need them. Plan B is available over the counter in the US and it is suggested that women might want to take a dose

with them. Medical evacuation is the best option if you have high risk sexual intercourse, so that you can get HIV prophylaxis.

6. Take spare eyeglasses or contact lenses, as well as a copy of your prescription.
7. Find out about your health insurance coverage, and know how to contact your insurance carrier if you need care. All students have ISOS coverage for medical evacuation.
8. Epi-pen, Benadryl if needed for allergies.
9. There are other diseases spread by insects, such as Chikungunya, which can be very serious. You should plan on using 24/7 insect precautions.

## **Scheduling an Appointment with Dick's House**

- ✚ You can schedule an appointment for your travel consult online. Please sign on to your banner page and find the health services site. There will be an option on this site to schedule an appointment. You will be prompted to fill out a questionnaire about your trip prior to scheduling the appointment. We recommend you schedule the appointment in the next few weeks (at least one month prior to your trip) because it takes time for the vaccines to take effect. If you have difficulties scheduling online you may call the appointment office at 603-646-9401. If you have any questions about the cost of vaccines we recommend you contact the billing office at 603-646-9439.