BRIEF SUMMARY

Prior to Departure:

- Schedule an appointment with your health care provider or a travel medicine clinic at least 8 weeks prior to departure. Please note that some vaccines are only available at travel medicine clinics.
- Take an adequate quantity of all your prescription and non-prescription medications to last your entire stay.
- Ensure you are up to date on all routine vaccines. Routine vaccines that should be up to date prior to traveling include: Covid 19, varicella (chicken pox), hepatitis A & B, HPV, influenza, meningococcal, measles/mumps/rubella (MMR), polio, and tetanus/diphtheria/pertussis (TDaP).
- Discuss your specific travel itinerary (including various in-country locations you plan to visit) with your health care provider. We recommend you ask about and discuss:
 - Are you up to date on your routine vaccines including all boosters?
 - Are there additional vaccines recommended or required in Madagascar? These may include but are not limited to:
 - Rabies, Typhoid, Polio
 - Plan for the prevention and treatment of traveler's diarrhea.
- World Learning recommends that the International Certificate of Vaccination or Prophylaxis (ICVP,) also known as the yellow WHO card, along with a copy of your immunization record should be kept with your passport so that it is easily accessible.

While You Are in Madagascar:

- Remember motor vehicle accidents remain the biggest risk for international travelers. Ride in the back seat if possible, wear seatbelts, and do not be afraid to ask your driver to slow down.
- Take preventive measures to avoid tick and other insect bites.
- Take measures to prevent traveler's diarrhea.

- Do not travel alone and maintain an awareness of your surroundings at all times.
- Use condoms if you are sexually active.
- While traveling abroad, minimize high-risk behaviors.
- Notify your Program staff if you become ill.

IMMUNIZATIONS

Immunizations are recommended to protect your health and well-being by building up your immune defenses against specific prevalent diseases. The decision to receive each vaccine should be made with your primary care provider or Travel Medicine clinic provider.

Plan ahead at least 8 weeks since some immunizations require more than one dose for effectiveness. It is recommended that you bring a copy of your immunization record with you and insert this document in your passport so that it is easily accessible.

World Learning RECOMMENDS participants are up to date with each of the following vaccinations including initial series and boosters:

- COVID-19
- Hepatitis A
- Hepatitis B
- Meningococcal (meningitis)
- MMR (measles, mumps, rubella)
- Tetanus, diphtheria, pertussis (Tdap)
- Varicella (chicken pox)
- Polio
 - Some international destinations including Madagascar have circulating poliovirus. Before any international travel, make sure you are up to date on your polio vaccines.
- Rabies
 - Consider rabies vaccination before your trip if your activities will be around dogs or wildlife or if you will be visiting rural areas.

Typhoid

 Recommended for most travelers in Madagascar, especially those staying with friends or relatives or visiting smaller cities or rural areas.

GENERAL INFORMATION

Maintaining good health and safety is a critical element of your successful participation in any World Learning program. While traveling abroad students should always use caution in unfamiliar places and circumstances. Access to emergency care abroad may not be what you are used to at home. A review of health, safety and security information will be provided to students upon arrival in the host country.

To protect your health in Madagascar, you may need certain pre-departure immunizations followed by reasonable health precautions while in the country. The following health guidelines and requirements are based on years of experience and the current recommendations from the US Centers for Disease Control and Prevention. They are designed to inform you of health concerns that may be present in Madagascar.

Although no information sheet can address every conceivable contingency, the following health guidelines and requirements are an attempt to provide you with a standard, which if followed, should optimize good health during your stay abroad.

You may find that local customs and practice, as well as varying US health care providers' approaches, at times conflict with these guidelines. It is essential that you review these health guidelines and requirements with your health care provider and discuss individual issues such as pre-existing medical problems and allergies to specific drugs. Any further questions or concerns should be directed to the US Centers for Disease Control and Prevention (CDC)- www.cdc.gov/travel - or to your own health care provider.

PREVENTION OF INSECT BORNE ILLNESS

Personal Protective Measures (for mosquitos and other insects):

For all the diseases listed below, bug exposure and bite prevention are crucial to reducing the risks to travelers' health. We recommend you take the following steps.

- Prevent bug exposure and bites:
 - Wear long sleeves, long pants, shoes, and hats to minimize exposed skin.
 - Wear clothing and shoes treated with the repellant permethrin.
 (Permethrin is not for use directly on skin.)
- Choose an appropriate insect repellent and use it regularly:
- Protection against multiple bugs (mosquitos, ticks, flies, etc.): The CDC recommends a repellent which contains at least 20% DEET.
- Protection against mosquitoes only: Repellents other than DEET protect against mosquitos but may not be as effective against other bugs:
 - o Picaridin (also known as KBR 3023, Bayrepel and icaridin)
 - Oil of lemon eucalyptus (OLE) or para- menthane-diol (PMD)
 - IR3535 (SkinSoSoft)
 - o 2-undecanone (methyl nonyl ketone)
- Always use repellents as directed.
- Please consult your healthcare provider if you have any health concerns regarding bug repellants. (See recommendations above.)
- Avoid transiting tall grass, shrubs, or woody areas and check for ticks afterward.
- Consider using a mosquito net while sleeping.
- Check your entire body for ticks after outdoor activity.
- If you experience symptoms after the program, please consult your healthcare provider and be sure to tell them about your travel.

Treat clothing and gear with products containing 0.5% permethrin. Permethrin can be used to treat boots, clothing and camping gear and remain protective through several washings. Alternatively, you can buy permethrin-treated clothing and gear.

Use Environmental Protection Agency (EPA)-registered insect repellents containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus (OLE), para-menthane-diol (PMD), or 2-undecanone.

Malaria:

Malaria is present in Madagascar and prophylaxis is recommended. Malaria is a disease caused by a parasite. Mosquitoes spread the parasite to people when they bite them. Malaria symptoms usually appear within in 7 to 30 days but can take up to one year to develop. Symptoms may include high fevers, shaking chills, and flulike illness. Without treatment, malaria can cause severe illness and death.

CDC guidelines suggest that prevention of malaria is possible if you carefully follow personal protective measures as described below and take one of the following antimalarial drugs (listed alphabetically) as directed by your health care provider: atovaquone/proguanil (Malarone), doxycycline, mefloquine, or tafenoquine (Arakoda). You and your health care provider should decide which medication is best for you based on your health history and where you are traveling. If, despite adherence to these preventive measures, you develop symptoms of malaria, prompt medical attention may lessen the severity of the illness.

Malaria Medications:

- Atovaquone/proguanil (Malarone) is a combination drug of atovaquone and+B5+J5
- Doxycycline is an antibiotic that is also used to prevent malaria.
 Doxycycline prophylaxis should begin 1–2 days before arriving to XXX. It should be continued daily during travel and for 4 weeks after the traveler leaves the area. The dosage of doxycycline is one capsule daily. Travelers who use doxycycline should be cautioned about possible photosensitivity (severe sunburns even with minimal exposure to sunlight) and vaginal yeast infections.
- Mefloquine is a medication which consists of a single dose to be taken
 weekly, starting 1 to 2 weeks before travel. Prophylaxis should be
 continued weekly during travel and for 4 weeks after the traveler leaves
 the area. Travelers who use mefloquine should be cautioned about
 possible psychiatric side effects, cardiac conduction side effects, and
 seizures.
- Tafenoquine (Arakoda) should be taken daily for 3 days prior to arriving in South Korea, then weekly while you are there and 1 more week after leaving. Tafenoquine should not be used if you have G6PD deficiency or a psychotic disorder.

World Learning suggests that if you have further questions, visit the CDC website: http://www.cdc.gov/malaria/travelers/index.html

Dengue:

Dengue viruses are spread to people through the bite of an infected mosquito, primarily during the daytime. Dengue symptoms usually start within a few days of being bitten but can take up to 2 weeks to develop. Not everyone who gets infected with dengue will feel sick. Symptoms can be mild or severe and can include fever with nausea, vomiting, rash, headache, eye pain, joint and muscle pain. In severe cases, dengue can cause shock, internal bleeding, and even death. Travelers can protect themselves from dengue by following the personal protective measures to avoid mosquito bites as listed above.

Chikungunya:

Chikungunya virus is spread to people by the bite of an infected mosquito. Symptoms usually begin 3–7 days after being bitten by an infected mosquito. The most common symptoms of chikungunya are fever and joint pain. Other symptoms include headache, muscle pain, joint swelling, or rash. Most people feel better within a week. In some people the joint pain may persist for months. Travelers can protect themselves from Chikungunya by following the personal protective measures to avoid mosquito bites as listed above.

Plague:

Though rare, urban outbreaks of plague have been reported in Madagascar. Plague is a rare disease caused by bacteria that can infect people and animals. People can get plague after being bitten by infected fleas, handling an infected animal, or breathing in infectious droplets from an infected person or animal. Plague can cause numerous symptoms including fever, headache, painful swollen lymph nodes, black fingers and toes, cough, and shortness of breath. The risk to travelers is low however, camping, hunting, hiking, or working outdoors can increase your risk. Travelers should follow standard personal protective measures to avoid insect bites and avoid touching sick or dead animals.

PREVENTION OF FOOD/WATER BORNE ILLNESS

Diarrhea Producing Infections:

"Traveler's diarrhea" is the most common form of travel related illness. In otherwise healthy adults, diarrhea is rarely serious or life-threatening, but it can make a trip very unpleasant. The diarrhea may last several days and is characterized by watery, non-bloody bowel movements. Traveler's diarrhea usually requires no treatment other than fluid replacement by drinking plenty of water or using an Oral Rehydration Solution (ORS) to prevent dehydration. ORS can be purchased as a prepacked solution. Antidiarrheals such as Imodium or Lomotil may be used short-term in some circumstances as long as the traveler stays well hydrated and has no bloody stools or abdominal pain. Pepto Bismol can be used to treat diarrhea, but large quantities are required. Antibiotics may be indicated for more severe cases of traveler's diarrhea especially if the traveler has fever or stools with blood or mucous. Ask your health care provider before your program begins for their recommendations regarding traveler's diarrhea.

More protracted and disabling diarrheal illnesses may be due to giardiasis, dysentery, cholera, and typhoid. Other diseases such as hepatitis A are also transmitted via contaminated food and water. These infections as well as "traveler's diarrhea" are often caused by contaminated food and water. Therefore, the best way to decrease your risk of such infections is by sticking to safe food and water habits including the following:

DO:

- WASH your hands scrupulously with non-contaminated water and soap before eating.
- DRINK:
 - Bottled water that is sealed
 - Water that has been disinfected
 - Ice made with bottled or disinfected water
 - Carbonated drinks
 - Hot coffee or tea
 - Pasteurized milk

- PURIFY YOUR WATER if it is not bottled or from a reliable source. Options for purification include...
 - Boiling: bring to a full rolling boil for 1 min (3 min at elevations over 6,500 ft)
 - Disinfectants such as iodide and chlorine dioxide (follow the manufacturer's instructions)
 - Filtration devices and UV light (follow the manufacturer's instructions)
- DO EAT:
 - o Food that is cooked and served hot
 - Hard-cooked eggs
 - Fruits and vegetables you have washed in clean water or peeled yourself
 - Pasteurized dairy products

DON'T:

- DO NOT DRINK:
 - Tap or well water
 - Ice made with tap or well water
 - Drinks made with tap or well water (such as reconstituted juice)
 - Unpasteurized milk
- DO NOT EAT:
 - o Food served at room temperature
 - o Food from street vendors
 - Raw or soft-cooked (runny) eggs
 - Raw or undercooked (rare) meat or fish
 - Unwashed or unpeeled raw fruits and vegetables
 - Unpasteurized dairy products
 - Bushmeat" (monkeys, bats, or other wild game)

There may be times when refusing an offer of food or beverage, even a drink with ice or avoiding a salad will be considered rude. You must decide for yourself, but polite refusals, thought out in advance, are often handy. Discuss these alternatives with your Program staff.

Hepatitis A:

Hepatitis A is a highly contagious virus that causes liver inflammation. It is most commonly spread through contaminated food and water and is best avoided by practicing safe food and water habits as listed above.

Typhoid:

Typhoid is an infection caused by the salmonella bacterium. People infected with these bacteria can spread them to others. This typically happens when an infected person uses the bathroom and does not wash their hands. The bacteria can stay on their hands and contaminate everything that the person touches, including food and drinks. In countries with poor sanitation, the water used to rinse and prepare food and beverages, including tap water, can also be contaminated with these bacteria. Travelers who eat foods or drink beverages contaminated with these bacteria can then get sick. People with typhoid may have a fever that can be as high as 103 to 104°F (39 to 40°C). They also may have weakness, stomach pain, headache, diarrhea or constipation, cough, and loss of appetite. Antibiotics are used for treatment. To prevent the infection, follow safe food and water habits as listed above and talk with your health care provider about getting the vaccine prior to traveling.

Schistosomiasis:

Schistosomiasis (Bilharzia) is prevalent in Madagascar. Schistosomiasis is a disease caused by a tiny parasitic worm that lives in freshwater. It can enter a person's body through the skin when a person wades or swims in contaminated freshwater. Within days of becoming infected, a person may develop a rash or itchy skin. Fever, chills, cough, and muscle aches may begin within one to two months of infection. Most people have no symptoms early on, but left untreated, schistosomiasis can cause more serious health problems. The best way to prevent the disease is to avoid wading or swimming in fresh water.

A Note on Swimming...

Avoid swimming or wading in fresh water. Many parasites and bacteria live in fresh water and can cause serious illness. If you are unsure about the safety in the area you are visiting, check with a reliable source before swimming. Properly chlorinated pools and salt water are generally safe from infectious diseases.

OTHER HEALTH CONCERNS

COVID 19:

COVID-19 is a respiratory virus that is spread through direct contact with an infected person as well as through respiratory droplets produced when an infected person coughs or sneezes. Symptoms of COVID-19 may appear 2-14 days after exposure and may include fever, cough, and shortness of breath. The illness can also cause muscle or body aches, sore throat, vomiting and diarrhea. Reported illnesses have ranged from mild symptoms to severe illness and death.

It's recommended all eligible travelers should be up to date with their COVID-19 vaccines which is the best way to prevent infection. Please see Your COVID-19 Vaccination for more information.

World Learning recommends that students check the country's consular website for up-to-date information on entry and exit requirements.

Other precautions to minimize your exposure to Covid include:

- Clean your hands frequently with soap and water or alcohol-based disinfectant.
- Wear an N-95 mask when in large crowds or on public transportation.
- Avoid people with suspected or confirmed Covid infection.
- Inform your Program staff immediately if you have a respiratory illness; have a fever or are feeling sick; if you have been in close contact with a person known to have COVID-19; and/or have recently traveled from an area with widespread or ongoing community spread of COVID-19.
- Avoid travel if you are sick or have a fever. Your Program staff will make appropriate accommodations for students who are ill.
- Wear an N-95 facemask, especially when you are around other people (e.g., sharing a room or vehicle) and before you enter a health care provider's office.

Rabies:

Rabies is a deadly disease caused by a virus. You can get rabies if you are bitten or scratched by an animal with rabies. In many countries around the world, bites from

dogs (including puppies), bats and monkeys are the main source of rabies infections in people.

Rabies affects the central nervous system (the brain and spinal cord). Once symptoms of rabies appear, the disease is nearly always fatal. For these reasons, it is recommended that you do not touch animals while traveling, especially dogs and monkeys. Please note that not all countries require pets to be vaccinated against rabies. Even animals that appear healthy can spread rabies.

If you do get bit or scratched by an animal, immediately wash the wound(s) well. Use plenty of soap and running water. Seek medical care immediately, even if you don't feel sick or the wound does not look serious.

To prevent rabies, start treatment immediately. Treatment for rabies includes getting a vaccine after you have been bitten. Even if you were vaccinated before your trip, you still need to seek care if you get bitten or scratched by an animal. Be prepared to travel back to the United States or to another area to receive treatment. Vaccination and medicine for rabies exposure is not available everywhere in the world.

For some travelers, it may make sense to get the rabies vaccine before your trip. Check with your health care provider if rabies vaccine is appropriate for you and your specific itinerary.

Tuberculosis:

Tuberculosis (TB) is a bacterial disease spread by airborne droplets from an infected person. Bacteria in the lungs can move through the blood to infect other parts of the body, such as the kidney, spine, and brain. TB occurs throughout the world but is much more common in some countries including PERU. Travelers can protect themselves by avoiding close contact with people who are coughing and who look sick. If you believe you were exposed, you should ask for TB testing when you return home.

Blood Borne Pathogens:

Pathogens such as Hepatitis B and C and HIV are more prevalent in certain parts of the world and can cause severe, long-term illness. Practices to minimize transmission through sanitization may be less regulated than at home.

You can minimize your risk by:

- Practicing safe sex, including the use of condoms
- Not sharing needles, syringes, razors, toothbrushes, or medical equipment, such as a glucose monitor.
- Not getting tattoos while traveling overseas.

Sun Exposure:

World Learning recommends the use of sunglasses, wide-brimmed hats, sunscreen lotions, and lip protection to reduce problems related to sun exposure.

Air Quality:

Students with a history of asthma, other lung disease or allergies should be warned that air pollution may be worse than you are used to, causing more symptoms while you are traveling. Asthmatics should carry emergency medicines for severe asthma attacks.

Dehydration:

Dehydration occurs when the body is losing fluid faster than it can be replaced. This can be extreme in cases of diarrhea or vomiting, or gradual in cases of exertion without adequate fluid intake especially in hot climates and at high altitude. Travelers should drink safe water or other safe beverages regularly and should avoid excessive sugary or caffeinated beverages as these can increase fluid loss. Consistent fluid consumption throughout the day is best.

World Learning is committed to supporting the emotional and physical wellbeing of all students. If you have any questions or concerns about any of these health guidelines, please reach out to the Student Health Office associated with your upcoming Program.

