TANZANIA

GENERAL INFORMATION
The following health guidelines are based on years of experience, insights from our partners in-country, and current recommendations from the US Centers for Disease Control and Prevention (CDC) and from International SOS (ISOS). These guidelines are designed to inform you of health concerns that may be present in Tanzania, especially as you venture to smaller cities off the usual tourist track or spend time in small villages and rural areas.

USING THESE GUIDELINES
Please review these health guidelines and discuss this information with your healthcare provider.

These health guidelines complement other Experiment and external resources to help you prepare for a safe and healthy program. Please use the information here in conjunction with:

- Your Experiment Tanzania Packing List
- Your Experimenter Handbook
- The Experiment Family Handbook
- The Experiment Guide to Travel Vaccinations and Medications
- The Experiment Guide to Traveling with Allergies
- The CDC travel site for Tanzania
- The Experiment’s ISOS Member Portal and Pre-Travel Support

ACCESSING THE ISOS MEMBER PORTAL
Through The Experiment’s partnership with International SOS (ISOS), we are pleased to connect Experiment families with ISOS’s extensive resources. Please follow these steps for access:

1. Follow this link to the ISOS Member Zone
2. Enter 11BYCA639556 (not case-sensitive) under: “Already a Member?”
3. Choose your Experiment country from the drop menu in the light blue box on the left

On each country page, ISOS provides in-depth information on health concerns under the Medical Tab found immediately below the country name:

Please consult the “Before You Go” subtab for the most up-to-date vaccination and medication recommendations for Tanzania.

For additional questions or clarification:

1. You can call the ISOS Philadelphia Assistance Center at: +1 215-942-8226.
2. Identify yourself as traveling with The Experiment and reference our member number: 11BYCA639556.
3. It may help to specify that you are calling regarding travel plans for an adolescent. ISOS supports many business travelers as well as educational programs, and while many recommendations are relevant across age ranges, some may be different for individuals under age 18.
HEALTH RISKS IN TANZANIA
Health risks in Tanzania include exposure to diseases through bug-bites, contaminated food or water in certain locations, and other infectious disease and environmental challenges. The following guidelines can help you mitigate these risks and stay healthy on your Experiment program.

BUG-VECTOR ILLNESSES
Several diseases can be transmitted by bugs (such as mosquitos, ticks, flies, etc.) in Tanzania. Many cannot be prevented with vaccines or medication, so preventing bug bites and exposure is the best way to reduce the risk of these illnesses.

CONCERNS:

African Sleeping Sickness
African Sleeping Sickness is a parasitic infection, transmitted through the bite of tsetse fly. Symptoms include fever, skin lesions, rash, and swollen lymph nodes. There is no vaccine for African sleeping sickness, and avoidance of tsete fly bites is the main prevention strategy. Tsete flies are not affected by insect repellent and can bite through light weight clothing. Areas with tsete fly activity should be avoided.

Chikungunya
Chikungunya is a viral infection transmitted by day-biting mosquitoes. Symptoms typically include fever and joint pain. There is no FDA approved vaccine for chikungunya; mosquito precautions are the main prevention strategy.

Crimean- Congo Fever (CCHF)
Crimean Congo hemorrhagic fever (CCHF) is a viral infection transmitted by ticks or by direct contact with an infected animal or human. Symptoms include fever, chills, head ache, body ache, and bleeding. There is no vaccine for CCHF; tick precautions are the main prevention strategy. Risk to travelers is considered low.

Dengue Fever
Dengue is a viral infection transmitted by day-biting mosquitoes. Symptoms typically include fever, headaches, and muscle pain. There is no FDA approved vaccine for dengue; mosquito precautions are the main prevention strategy. Risk to travelers is considered low.

Filariasis
Filariasis is a parasitic condition transmitted via mosquito bites. Initial symptoms include skin redness, swollen arm and leg lymph nodes, headache, weakness, muscle pain, coughing, wheezing, and fever. There is no vaccine for filariasis. Mosquito precautions are the main prevention strategy. Risk to travelers is considered low.

Leishmaniasis
Leishmaniasis is a parasitic infection transmitted by biting sand flies active between dusk and dawn (overnight). Symptoms can include skin ulcers (cutaneous type) or fever, weight loss, organ swelling, and abnormal blood tests (visceral type). Symptoms may not appear for weeks or months after exposure. There are no FDA approved vaccines for leishmaniasis; bug precautions are the main prevention strategy, including limiting outside activity between dusk and dawn.

Malaria
Malaria is a protozoal infection transmitted by mosquitos that bite between dusk and dawn (overnight). Malaria is characterized by fever and flu-like symptoms. There is no vaccine for malaria, but prophylactic medications are available. Mosquito precautions remain important. Malaria is present year round in some areas of Tanzania. Please see this map for for sample program...
locations and comparison to malaria risk maps provided by the CDC and ISOS.

**Onchocerciasis (river blindness)**
Onchocerciasis is a parasitic infection transmitted by fly bites. No vaccine is available for Onchocerciasis, and bug precautions are the main prevention strategy. Onchocerciasis is present in some areas of Tanzania.

**Plague (bubonic, septicemic, pneumonic)**
Plague is a bacterial infection which mainly effects rodents but may be transmitted to humans by fleabites. Bubonic plague is the most common form of the infection, which travels through the lymphatic system. Septicemic plague occurs when the infection travels through the bloodstream, most often fatal when untreated. Pneumonic plague occurs when the infection primarily targets the lungs. Initial symptoms include fever, headache, weakness, and cough that produces sputum. Plague vaccine is no longer available, so practicing good hygiene as outlined below and avoiding close contact with animals—especially rodents—are the best prevention measures.

**Tick Bite Fever (TBF)**
TBF is an bacterial infection transmitted via a bite from an infected tick. Common symptoms included fever, rash, and an eschar (i.e. a black mark on skin surrounded by inflamed red area). TBF can be treated with antibiotics. Tick precautions are the main prevention strategy.

**Yellow Fever**
Yellow fever is a viral infection transmitted by day-biting mosquitos. Symptoms take 3–6 days to develop and include fever, chills, headache, backache, and muscle aches. About 15% of people who get yellow fever develop serious illness that can lead to bleeding, shock, organ failure, and sometimes death. There are vaccines for yellow fever, though supplies are limited. Please consult the CDC and ISOS for current regional recommendations for yellow fever vaccination for Tanzania and reference [this map](#) for sample program locations.

**Zika**
Zika is a viral infection transmitted by day-biting mosquitos. Many individuals infected with zika develop no symptoms. Symptoms can include fever, rash, joint or muscle pain, and conjunctivitis. There is no FDA approved vaccine for zika; mosquito precautions are the main prevention strategy. There have been no documented cases of Zika in Tanzania, though the mosquito which transmits Zika is present.

**PREVENTION:**
For all the diseases listed above, bug exposure and bite prevention are crucial to reducing the risks to Experimenters’ 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 repellent permethrin. (Permethrin is not for use directly on skin.)
- Use topical insect repellent regularly. (See recommendations below.)
- Avoid transiting tall grass, shrubs, or woody areas and check for ticks afterward.
- Consider using a bug net while sleeping. (Look for a net with fine mesh to exclude both mosquitos and sand flies.)

**Choose an appropriate insect repellant:**
- **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:
- Picaridin (also known as KBR 3023, Bayrepel, and icaridin)
- Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD)
- IR3535
- 2-undecanone (methyl nonyl ketone)

- Always use repellents as directed.
- Please consult your healthcare provider if you have any health concerns regarding bug repellants.

If bitten or exposed:
- Avoid scratching bug bites and apply hydrocortisone cream or calamine lotion to reduce itching.
- Check your entire body for ticks after outdoor activity.
- Let group leaders know immediately if you experience any symptoms on program (e.g. fever, aches, nausea, etc.)
- If you experience symptoms after program, please consult your healthcare provider and be sure to tell them about your travel.

FOOD- AND WATER-BORNE ILLNESSES
Several diseases can be transmitted through food and water contaminated with microbes unfamiliar to your system. These illnesses can range from minor to moderate GI distress to serious conditions. Care in selecting safe food and water and hygienic practices for handling food and water are crucially important to limiting exposure.

CONCERNS:

Cholera
Cholera is a bacterial infection caused by contaminated food or water. The most common symptom is severe diarrhea. While cholera is present in Tanzania, Experiment groups do not travel to areas where there is known active cholera transmission. Safe food, water, and hygiene practices as detailed below remain important.

Diarrhea-Producing Infections
Traveler’s diarrhea is a common intestinal infection caused by contaminated food or water. Bacteria are responsible for most cases of traveler’s diarrhea, though viruses and protozoa account for a few. Fluid replacement is important with all cases of diarrhea to maintain hydration. Be sure drinks are from safe sources (see below) and avoid sugary drinks which can cause additional fluid loss in the intestines. For severe cases of dehydration, oral rehydration solutions (ORS) are recommended. Antidiarrheals such as Imodium or Lomotil may be effective short-term to relieve symptoms. Antibiotics may be indicated for persistent cases of diarrhea. Safe food, water, and hygiene practices as detailed below can help minimize risk of exposure to the microbes which can cause traveler’s diarrhea.

Hepatitis A
Hepatitis A is a viral disease that causes liver inflammation and can be transmitted through contaminated food and water. Symptoms can begin 2-8 weeks after exposure and may include fever, chills, fatigue, abdominal pain, nausea, vomiting, dark urine, and jaundice. A very effective vaccine is available and should be administered 2–3 weeks prior to travel. Many Experimenters may have already received this vaccine as part of their recommended childhood vaccination course. Please consult your healthcare provider. Safe food, water, and hygiene practices as detailed below remain important to minimize exposure to the Hepatitis A virus.

Nodding Syndrome
Nodding syndrome is a novel form a epilepsy that
is known to effect children between 5 to 15 years of age. Symptoms include inability to think or concentrate, followed by head-nodding. The exact cause of nodding syndrome is unknown, and no vaccine is available. ISOS categorizes identifies nodding syndrome as present in Tanzania, and categorizes it under threats from food and water. Safe food, water, and hygiene practices as detailed below remain important. Any symptoms experienced on program should be immediately reported to group leaders. If any symptoms develop after program, please consult your healthcare provider and be sure to tell them about your travel.

**Typhoid Fever**
Typhoid is an infection caused by a salmonella bacterium that can be transmitted through contaminated food and water. Symptoms include high fever, weakness, stomach pain, headache, and loss of appetite. Typhoid vaccination (injection or oral) is not 100% effective and is not a substitute for being careful about food and water. Please consult your healthcare provider. Safe food, water, and hygiene practices as detailed below remain important to minimize exposure to the salmonella bacterium that causes typhoid.

**PREVENTION:**
Tap water is considered unsafe in Tanzania. Drink only bottled water or other bottled or canned beverages, avoid ice in drinks, and only use water known to be safe for brushing your teeth.

If you are unsure of the food and water quality in the area you are visiting, check with a reliable source before using. You can protect your health in Tanzania by observing the following food, water, and hygiene do’s and don’ts:

**DO PRACTICE GOOD HYGIENE BY**
- Washing your hands thoroughly with non-contaminated water and soap before meals and snacks. If handwashing is not possible, use hand sanitizer with > 60% alcohol.
- Avoiding touching your face, particularly the eyes, nose, and mouth. If you need to touch your face, wash your hands first.
- Not sharing water bottles, cups, or eating utensils and by washing personal equipment like water bottles regularly.
- Avoiding close contact with sick individuals.

**DO DRINK**
- Bottled or canned beverages such as water, soda, or soft drinks from trusted sources. (Always ensure caps are sealed).
- Hot beverages such as coffee or tea.
- Water that has sustained a rolling boil for at least one minute at sea level and longer at higher elevations.
- Carbonated mineral water.

**DO EAT**
- Cooked vegetables, fruits with thick covering such as citrus, bananas, and melons; well-washed raw fruits and vegetables.
- Meat or fish that is thoroughly cooked—pork and lamb should be very well done.
- Pasteurized dairy products from large commercial dairies.
- Food that has been freshly cooked and served hot; busier restaurants may be more likely to serve freshly cooked food.

**DON’T EAT OR DRINK**
- Unwashed or pre-peeled raw fruits and vegetables, salads.
- Fruits that do not have a thick peel.
- Rare or raw meat, fish, or shellfish.
- Dairy products from small, independent vendors without pasteurizing facilities.
- Raw (unpasteurized) milk or milk products.
• Food of any kind that has been stored warm (e.g. over a chafing dish or bain marie) or left out in the sun.
• Well water or tap water outside major cities.
• Ice or drinks made with tap or well water.
• Flavored ice and popsicles.

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 use your best judgement in such circumstances. Polite refusals, thought out in advance, are often handy.

**OTHER DISEASES & HEALTH RISKS**

Disease-causing pathogens can also be transmitted by animal exposure and contact with human bodily fluids, while environmental factors can exacerbate an illness or pose health risks in their own right. The following guidelines include a variety of strategies to keep you safe and healthy in Tanzania.

**AIR-BORNE ILLNESSES**

**Tuberculosis**

Tuberculosis (TB) is a bacterial infection spread by droplets coughed or sneezed into the air from an individual with active TB disease. Not everyone exposed to or infected with TB virus will become sick; symptoms of active infection can include a cough, fever, fatigue, lack of appetite, weight loss, and night sweats. TB is present in Tanzania; risk to travelers is considered low, as prolonged, close exposure to an infected individual is usually required to contract TB. Experimenters can reduce their chances of TB exposure in Tanzania by limiting time spent in crowded locations, avoiding individuals with coughs, and practicing good hygiene.

**ANIMAL-VECTOR ILLNESSES**

**Anthrax (cutaneous, inhalation, and intestinal)**

Cutaneous anthrax accounts for 95% of anthrax infections. It is a bacterial infection transmitted to humans through contact between the hides, hair, bone, and wool of an infected animal and cuts and abrasions on the skin. Initial symptoms include the development of a skin lesion that can spread at the site of contact. If untreated, the infection may spread to the bloodstream and become fatal.

Inhalation anthrax symptoms initially resemble a common cold but can develop to cause severe breathing problems and shock. This form is more often fatal. Intestinal anthrax is caused by the ingestion of contaminated food, most commonly infected beef. Initial symptoms include, nausea, loss of appetite, vomiting, and fever. All three forms of anthrax infections can be treated by antibiotics, which are most effective when taken as soon as possible after exposure. Avoiding contact with unknown animals minimizes the chance of exposure to anthrax bacteria.

**Rabies**

Rabies is a viral disease transmitted by animal bites and scratches. Dogs and bats are common carriers of rabies, but a bite or scratch from any animal must be taken very seriously.

A pre-exposure vaccine is available for rabies—please consult the CDC and ISOS for the most current rabies vaccination recommendations for Argentina and discuss with your healthcare provider.

Regardless of vaccination status, the following steps are important for minimizing rabies exposure risk and for responding appropriately if you may have been exposed:

- Avoid contact with unknown animals and especially avoid handling or feeding puppies, kittens, bats, and monkey. They can have rabies before it is obvious.
- If you have been bitten, scratched, or have had direct contact with the saliva of a suspected rabid animal, immediately wash the affected area with a soap and water and a povidone-iodine solution if available. Then proceed **immediately** for post-exposure treatment.
- If possible, the animal should be captured and kept under cautious surveillance until the diagnosis and therapy are completed. If capture is not possible, a clear description of the animal and the circumstance of contact should be carefully recorded.
**BLOOD-BORNE ILLNESSES**

Diseases transmitted through contact with blood or other bodily fluids are concerns throughout the world, including Tanzania. Universal precautions against contact with any other individual’s bodily fluids including blood, vomit, sexual contact, etc. should be practiced at all times. This includes refraining from body piercings and tattooing while abroad, as prohibited by The Experiment’s Code of Conduct.

**Hepatitis B**

Hepatitis B is a serious and often chronic viral infection of the liver, transmitted by bodily fluid contact. Universal precautions are essential to prevent Hepatitis B transmission. Vaccination series of two or three injections given over six months are available. Many Experimenters may have already received the Hepatitis B vaccine as part of their recommended childhood vaccination course. If an Experimenter is not vaccinated for Hepatitis B, they may begin a vaccination series before travel and receive the final dose after travel. Please consult your healthcare provider.

**HIV**

The Human Immunodeficiency Virus (HIV) is a concern worldwide, transmitted by bodily fluid contact. Those infected with HIV can develop Acquired Immune Deficiency Syndrome (AIDS) that can result in life-threatening infections. There is no vaccine for HIV—universal precautions are essential to prevent HIV transmission.

**ENVIRONMENTAL HEALTH**

The Experiment Tanzania program involves active, outdoor elements and the accompanying environmental health challenges. Proactive self-care and awareness can mitigate health risks from environmental factors.

**Altitude**

Altitude illness is not a major concern for Experimenters in Tanzania, as program locations are generally not above 5,000’. (Altitude sickness is most common above 8000’.) However, some individuals may experience symptoms including headache, fatigue, lack of appetite, nausea, and vomiting. Mild symptoms can be managed with rest and over the counter medications and should resolve within a few days. For more serious or persistent symptoms, medical care should be sought.

**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. Experimenters should drink safe water or other safe beverages regularly and should avoid excessive sugary or caffeinated beverages as these can increase fluid loss. Chugging water bottles or beverages should also be avoided, as this can rapidly change the electrolyte balance in the body, causing additional problems. Consistent fluid consumption in small sips is best.

**Sun Exposure**

Experimenters in Tanzania spend a great deal of time outside and are susceptible to sunburn. Coverage with clothing and appropriate sunscreen (SPF 30+) is the best way to protect skin and prevent burns. Please consult your Experiment Tanzania packing list for clothing and sunscreen recommendations.

**Water Safety**

Schistosomiasis (bilharzia) is a parasitic infection that can be transmitted when swimming, wading, or bathing in fresh water. Symptoms may include a rash or itchy skin within a few days of infection, followed by fever, chills, cough, and muscle aches within 1-2 months. Schistosomiasis is present in South Africa, and Experimenters should not wade, swim, or bathe in fresh water outside of itinerary-approved water activities. Please see The Experiment’s Water Policy for additional information on water safety measures.

**GENERAL HEALTH & WELLNESS**

Taking good care of your health while traveling is important for getting the most out of your Experiment program:

- Practice good hygiene
- Get plenty of sleep
• Eat regular, balanced meals
• Reach out to your group leader if you feel unwell at any time

VACCINATIONS FOR TANZANIA
For current travel vaccination recommendations for Tanzania, please reference:
  • The CDC travel site for Tanzania
  • The Experiment’s ISOS Member Portal and Pre-Travel Support
(Instructions for logging into the ISOS Member Portal can be found on page 1 of this guide.)

Please also reference The Experiment Guide to Travel Vaccinations and Medications for additional information and answers to frequently asked questions about vaccinations and medications. Please note that the Guide to Travel Vaccinations and Medications is a general resource for all Experiment programs and is designed to complement the recommendations of the CDC and ISOS, as well as the information provided here.

Please consult your healthcare provider when considering travel vaccinations or medications.

The following vaccinations are required for participations in all Experiment programs:
• MMR (measles, mumps, rubella): Two doses of MMR or individual vaccination against measles, mumps, and rubella are required. The MMRV combination vaccine is acceptable for both MMR and Varicella requirements.
• Tetanus, diphtheria, pertussis: The primary child series and a current booster are required. Boosters (Td or Tdap) are effective for 10 years.

Enjoy your trip! Please note that these robust guidelines are intended to help ensure that you have a healthy and memorable Experiment to Tanzania.