

Health risks associated with ecotourism

By Michael Muehlenbein



Canada 67 Mowat Avenue, Suite 036 Toronto, Ontario M6K 3E3 (416) 652-0137
USA 1623 Military Road, #279 a Niagara Falls, New York 14304-174 5 (716) 754-4883
New Zealand 206 Papanui Road Christchurch 5

www.iamat.org | info@iamat.org

Michael Muehlenbein, PhD MsPH MPhil, is an Associate Professor of Anthropology and International Studies at Indiana University, Bloomington, USA. His research focuses on health and disease in relation to primate-based tourism, particularly in Asia. More information about his research can be found at <https://michaelmuehlenbein.org>.

What is ecotourism?

Nature-based tourism accounts for a growing proportion of international tourism activity. Ecotourism is specifically a sustainable version of nature-based tourism that attempts to educate visitors while minimizing modification or degradation of natural resources and broadly benefiting the social and natural environments by involving the participation of local communities.

Certainly most activities traditionally considered to be ecotourism-related, like the proverbial zip-line experience through a forest fragment, do not technically fit the definition of ecotourism. That said, true ecotourism experiences run by local individuals, with money going back into local communities, can protect natural and cultural heritages and facilitate conservation of biodiversity.

Health risks associated with ecotourism are both similar and different to other travel experiences. Unfortunately, when travellers book a trip, many don't consider the health risks of their destination. Preventive health strategies like paying attention to food and water safety (avoiding salads, shellfish, and tap water, for example), understanding the sources and causes of infection, taking preventive medication if needed, and physician advice, are often ignored.

Tourists are also stressed due to sleep dysregulation, unfamiliar diets and climate, and exposure to novel pathogens. Consequently, illness during travel is very common, particularly gastrointestinal and respiratory infections. This is certainly the case for those visiting exotic destinations to view wildlife.

Risks to travellers

Actual health risks of travel depend on a variety of factors. These include where you are going, time of year, how long you are staying, your planned activities, and your pre-existing health conditions, among other things.

Ecotourism activities place travellers at risk due to participation in risky activities in extreme or remote environments. This might include high altitude sickness while mountain climbing, decompression sickness while scuba diving, as well as motor vehicle accidents in regions with poor infrastructure.

Booked your eco-adventure trip, check. Packed all your gear, check.

But wait a minute, what about health considerations? Many of us don't consider the health risks associated with ecotourism, including how we affect the health of the animals and communities we encounter abroad.



Photo by Jonathan Adrianzen, Freeimages.com

Infectious disease threats to ecotourists include the usual intestinal pathogens acquired through fecal-oral transmission, usually involving contaminated food and water. You must be mindful of your basic hygiene and what you are consuming. Vector-borne diseases like Malaria, Dengue, Chikungunya, Japanese Encephalitis, Yellow Fever, African Tick Bite Fever, and others can be common. You should therefore be mindful of protecting yourself against biting insects, which may involve avoiding going outdoors at dawn and dusk, checking yourself for ticks, using repellents and proper clothing, and sleeping under an insecticide-treated bed net.

You should be also mindful of how your activities put you into direct and indirect contact with wildlife. Caving is associated with transmission of Histoplasmosis from bat guano. Exposure to water contaminated with animal urine is associated with Leptospirosis. Direct animal contact is associated with Rabies. Over half of all human infections are zoonotic (nonhuman animal) in origin. Enjoy animals from a distance, and of course be sure to consult your travel health practitioner to make sure you are travelling with the correct preventive medication. You should also be prepared for a potential lack of in-country healthcare where you are travelling. Emergency evacuation insurance might be advisable.

Travellers putting wildlife and destination communities at risk

On the flip side, humans are also responsible for the transmission of pathogens to nonhuman animals (known as anthroozoonoses), especially in the context of ecotourism as travellers experience direct encounters with wildlife. This is particularly the case for primates that are genetically closely related to humans and are therefore particularly susceptible to many human pathogens.

The relative contribution of tourists to the spread of pathogens to wildlife is unknown, but the number of tourists visiting wildlife sanctuaries worldwide is increasing substantially. Pneumovirus and influenza are examples of pathogens transmitted from human to nonhuman primate populations that have been either suspected or confirmed to date. These outbreaks have affected nearly all major long-term chimpanzee and gorilla study populations, like Bwindi, Mahale, Gombe, Kibale and others.

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It is critical that tourists, while visiting wildlife sanctuaries, maintain a respectful distance from wild animals. Arguably, this can be difficult to do. My own work in Malaysia and Japan has involved interviewing over 2000 tourists to date. In general, we are a species with intensive affinity for close interactions with wild animals. Of 650 people surveyed at the Sepilok Orangutan Rehabilitation Centre in Sabah, Malaysia in 2009, 98% believed that humans can give diseases to wild animals, yet 35% of them would still try to touch a monkey or ape if they had the opportunity. Of 686 people surveyed at the Takasakiyama Monkey Park in Kyushu, Japan in 2012, 61% of participants expressed desire to feed monkeys at the park, and 23% would own one as a pet. Of course there are regulations in place at many sanctuaries to prevent such contact, although these regulations can be difficult to enforce sometimes. People know there are disease risks associated with animal contact, yet their affinity for animals can cloud their better judgment, particularly when vacationing. We must be mindful of our actions on other animals, particularly when it comes to endangered species.

Travellers also put at risk the destination community members they are visiting. This might involve habitat degradation, the introduction of invasive species, pollution, overcrowding, and even the facilitation of sex trade. In a survey I conducted with colleagues from the Responsible Travel Group of the International Society of Travel Medicine, we found that most travellers get advice on preventing the spread of pathogens (mainly sexually transmitted infections) to host inhabitants in destination communities, but little information is given on how to minimize traveller impact on destination communities and habitats.

Be prepared

I believe the best advice for any type of travel is to be prepared. This goes double for international travel, and triple for travel involving risky activities. Travel health practitioners can provide great resources, and there seem to be ubiquitous health regulations and advertisements both at home (including online) and abroad. However, it is ultimately up to you, as the traveller, to be a responsible one.

Prepare yourself based on where you are going, what you plan to do, and other risk factors. I recommend you evaluate your vaccination status, as this not only protects you, but also the wildlife and destination communities you plan on visiting. I also recommend following local health regulations while travelling. This might involve doing things you might not want to, like wearing a facemask while trekking for mountain gorillas. Ultimately, you must think about the risks imposed upon you as well as the risks you place upon others. Use common sense and be respectful of the environment. 