COOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY—COLLEGE OF AGRICULTURE

Food Safety for Travelers Abroad

Contaminated food and drink are often the most serious threat to travelers, whether they're on vacation or business. In particular, diarrhea affects a great number of travelers. Physical pain and discomfort and the lack of suitable medical treatment can spoil your entire stay away from home.

What Is Food-borne Illness?

Food-borne illnesses are defined as diseases, usually either infectious or toxic in nature, caused by agents that enter the body through the ingestion of food. There are several major diseases that are caused by contaminated food and water.

Salmonellosis is acquired through contaminated eggs, poultry, raw milk, and chocolate. Similarly, campylobacteriosis comes from contaminated raw milk, poultry, and drinking water. *Escherichia coli*, perhaps the most dangerous infectious agent, is found mainly in contaminated ground beef. Finally, cholera is transmitted through water, rice, vegetables, and some types of seafood.

In most cases the foods that are of most concern are from animal origin, foods grown near the soil, or foods that have come into contact with contaminated water. Contaminated beverages can also be vehicles for food-borne/water-borne diseases. Other diseases, like **bovine spongiform encephalopathy** ("mad cow disease") are widely publicized, but rare and



usually limited to certain parts of the world.

Food-borne diseases can be a problem anywhere, even in developed countries. Underdeveloped countries, however, have the greatest number of incidents. Infants and children, the elderly, pregnant women, and persons with chronic diseases are at higher risk of acquiring a food-borne illness.

Preventing Food-borne Illness

The World Health Organization (WHO) recommends following these guidelines when traveling away from home:

- Avoid cooked food that has been kept at room temperature for several hours. Bacteria multiply quickly under these conditions.
- Eat only food that has been cooked thoroughly and is still hot. Fully cooked, steaming-hot food is usually safe.
- Avoid uncooked food unless it's a fruit or vegetable that can be peeled or shelled. Avoid fruits with damaged skins. "Cook it, peel it, or leave it" is a good rule to follow. Make sure that you do the peeling or that you supervise whoever is responsible for it.
- Avoid dishes containing raw or undercooked eggs.
- Avoid food purchased from street vendors.

- Avoid ice cream from unreliable sources.
- Obtain advice from locals about the presence of poisonous biotoxins in some species of fish. Do not eat seafood unless you are certain it is safe.
- Boil unpasteurized or raw milk before consuming.
- Boil or treat drinking water if you are doubtful about its safety. Choose bottled water or beverages when possible.
- Wash your hands often, using soap and safe water. If you can't get to a restroom, try moist wipes or a hand sanitizer.

What Should I Do if I Become III?

If you become ill during your trip, chances are you are suffering from traveler's diarrhea (TD). TD is acquired through ingestion of contaminated food or drink. Symptoms include abdominal cramps, bloating, nausea, vomiting, fever, and malaise. The sufferer can expect to have at least four to five loose or watery stools per day for up to a week. These problems can occur while you are out of the country and/or after you return home.

The Centers for Disease Control and Prevention advises that most cases of diarrhea are self-limited and require only simple replacement of the fluids and electrolytes lost during the illness. Avoid iced drinks and dairy products. Stay away from solid food during bouts of diarrhea and vomiting. Take frequent small sips of clear, room-temperature liquids such as water, sports drinks, broth, or caffeine-free tea. Make sure the liquids you consume are safe. WHO recommends replenishing fluids using Oral Rehydration Salts (ORS). ORS packets are available at stores or

pharmacies in almost all developing countries. As a last resort, you can mix your own solution by adding each of the following per gallon of water: 91/3 tablespoons of sodium chloride, 1/4 cup potassium chloride, 31/2 cups glucose, and 73/4 tablespoons of trisodium citrate.

As an added precaution, you might want to bring an antidiarrheal medication like Imodium® and an antacid or Pepto-Bismol®. In mild cases, these are effective in easing discomfort, but are not a cure all.

Water Safety Tips

The safest method of avoiding illness from contaminated water is to AVOID THE LOCAL TAP WATER. This means drinking bottled water or canned carbonated beverages such as soda, beer, or wine instead. If you must drink tap water, be sure to boil it first or see to it that it is boiled. A vigorous rolling boil for one minute will kill bacteria and parasites at low altitudes. At altitudes greater than 2,000 feet, boil the water for three minutes. Boiling is the simplest and most effective way to purify contaminated drinking water; adding a pinch of salt and/or pouring the water from clean container to clean container several times will improve the taste.

Other water purification tactics include iodine or chlorine tablets, water filters, and purification pumps. Tablets available at most sporting goods stores are a reliable solution but should be used for short periods of time only. Long-term use is not recommended. Follow the instructions on individual packaging for best results. Outdoor stores also carry water filters and purification systems. If you choose this method, purchase a filter that suits your needs. The filter must have a very small pore size in order to filter viruses and

keep ALL contaminants from getting through. This is likely the least effective method for avoiding illness.

Here are a few other water safety tips to remember:

- Avoid ice unless you are <u>certain</u> that it was made with safe water.
- Brush your teeth with safe water ONLY. Brushing with contaminated water could be as dangerous as drinking it!
- Wash personal items such as contact lenses and dentures with safe water. Consider all ways that you might be exposed to contaminants.
- Wipe any moisture from cans or bottles before drinking from them. Drink directly from the can or bottle whenever possible and avoid questionable containers.
- Bathe and/or shower only in reliable water.

For information on current outbreaks or immediate risks of food-borne illness in specific countries, consult the U.S. Department of State web site at www.travel.state.gov or the Centers for Disease Control web site at www.cdc.gov.

Resources:

- Centers for Disease Control. "Risks for Food and Drink." "Traveler's Diarrhea." <u>The Yellow Book 2003-2004.</u>
 www.cdc.gov
- Traveler's Resource Center.
 www.independenttraveler.com
- "Food Safety Advice When Traveling Abroad." Purdue University Extension.
 www.ces.purdue.edu/food safety/ind ex.htm
- "NIH Publication No. 01-4730." U.S. Department of Health and Human Services- National Institutes of Health.
 www.nih.gov
- "Fact Sheet No. 237." World Health Organization. www.who.int
- "Guide on Safe Food for Travelers."
 World Health Organization.
 www.who/int/foodsafety/publications/consumer/travellers/en
- American Dietetic Association www.homefoodsafety.org

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