

Food Safety for Travelers Going Abroad

Whether on a vacation or on business, no one wants to get sick when traveling abroad. The main source of infection is contaminated food or water. High-risk destinations are the developing countries of Latin America, Africa, the Middle East and Asia. What precautions can be taken to avoid illnesses from food and drink?

CHOOSE FOODS WISELY

Especially in areas where hygiene and sanitation are inadequate, assume that all raw foods may be contaminated. Avoid salads, uncooked vegetables and raw, peeled fruits, unpasteurized milk and milk products (including cheese). Choose cooked foods that are still hot, and fruits and vegetables that the traveler has peeled personally if they will be eaten raw. Consider these facts:

- Undercooked and raw meat, fish and shellfish can carry intestinal pathogens.
- Cooked food that has been allowed to stand for several hours at room temperature may be contaminated by bacteria and should be thoroughly reheated before serving.
- Food and drink purchased from a street vendor is more likely to cause illness.

MAKE SURE BEVERAGES ARE SAFE

In areas where chlorinated tap water is not available or where hygiene and sanitation are poor, choose these beverages:

- Bottled or canned carbonated beverages;
- Bottled juice or water from trusted sources; Juice that has been reconstituted from water that is contaminated would not be safe.
- Hot tea or coffee made with boiled water;
- Beer and wine;
- Infant formula prepared from commercial powder and boiled water for infants that are not breastfed.

Boiling is by far the most reliable method to make water of uncertain purity safe for drinking. Water should be brought to a vigorous rolling boil for 1 minute and

allowed to cool to room temperature. Do not add ice. At altitudes above 6,562 feet, water should be boiled for 3 minutes. To improve the taste of boiled water, add a pinch of salt or pour the water several times from one clean container to another.

In places where water might be contaminated, ice should also be considered contaminated and should not be used in beverages. It is safer to drink directly from the original can or bottle than to transfer the beverage to a questionable container. However, if ice has been in contact with containers used for drinking, thoroughly clean the containers, preferably with soap and hot water, before drinking. Always dry the outside of cans or bottles that are wet, and wipe clean the surfaces with which the mouth will have direct contact.

Avoid brushing teeth with tap water in places where water may be contaminated.

BSE: "MAD COW DISEASE"

Since 1996, strong evidence has accumulated for a causal relationship between outbreaks in Europe of a disease in cattle called bovine spongiform encephalopathy (BSE or "mad cow disease") and a disease in humans called variant Creutzfeldt-Jakob disease (vCJD). Both are fatal brain diseases with unusually long incubation periods, measured in years.

The numbers of reported BSE cases and incidence rates, by country, are available on the Internet web-site of the Office International des Epizooties at http://www.oie.int/eng/info/en_esb.htm. The current risk of acquiring vCJD in the United Kingdom (UK) from eating beef and beef products appears to be extremely small, approximately 1 case per 10 billion servings. In the other countries of the world, this current risk, if it exists at all, would not likely be any higher than that in the UK, particularly if BSE-related public health control measures are being well implemented.

Public health control measures, such as surveillance, culling sick animals, or banning specified risk materials, have been instituted in European countries to prevent

potentially BSE-infected tissues from entering the human food chain. The most stringent of these control measures, including a program that excludes all animals more than 30 months of age from the human food and animal feed chains, have been applied in the UK and appear to be highly effective. In June 2000, the European Union Commission on Food Safety and Animal Welfare strengthened the European Union's BSE control measures by requiring all member states to remove specified risk materials from animal feed and human food chains as of October 1, 2000. Such bans had already been instituted in most member states.

To reduce any risk of acquiring vCJD from food, travelers to Europe or other areas with cases of BSE may consider either avoiding beef and beef products altogether or selecting beef or beef products, such as solid pieces of muscle meat (rather than brains or beef products such as burgers and sausages), that might have a reduced opportunity for contamination with tissues that may harbor the BSE agent. Milk and milk products from cows are not believed to pose any risk for transmitting the BSE agent.

SEAFOOD

Special precautions should be taken if purchasing seafood when traveling abroad. Seafood poisoning can occur from eating seafood that has not been handled properly, raw or improperly cooked seafood, or fish from tropical waters that harbor a toxin. Purchase seafood from reputable markets and restaurants. For information on recognizing signs of spoilage in seafood, see HGIC 3482 *Safe Handling of Seafood*.

Scombroid Poisoning: This is a type of foodborne illness caused by eating fish such as tuna, mackerel, bluefish, dolphin or mahi-mahi, and amberjack that have been handled improperly. Scombroid poisoning cannot be detected by appearance or taste. Freezing, cooking, smoking, curing or canning does not destroy the toxins. Proper handling of fish is the best safeguard. Toxic histamine levels which cause scombroid poisoning can result within less than six to 12 hours exposure without ice or refrigeration. Symptoms of scombroid poisoning suggest an allergic reaction appearing within just minutes to two hours after eating the spoiled fish. Scombroid poisoning can easily be confused with an allergy or other form of food poisoning. For more information, see HGIC 3662 *Scombroid Poisoning*.

Ciguatera: Ciguatera illness generally occurs in marine waters near tropical reefs, commonly between latitudes 35° south and north, such as in the Caribbean. In the United States primary areas are Hawaii, Guam and Puerto Rico. Any tropical marine fish could become ciguatoxic, but in the Caribbean the fish with the worst reputation are amberjack and other jacks, moray eels, and barracuda. Fish with questionable reputations are hogfish, scorpion fishes, certain triggerfish, and certain snapper and groupers. However, local fishermen may use different names, making a list of ciguatoxic fish less useful.

Ciguatoxic fish cannot be detected by appearance, taste or smell. Prior knowledge of potential ciguatoxic areas and fish is the best source of caution in avoiding this unique form of food poisoning. Travelers purchasing tropical marine fish from reef waters should buy from reputable dealers and restaurants. Do not eat foods prepared from the heads or internal portions of tropical reef fish species.

Initial gastrointestinal symptoms of nausea, cramping and vomiting can begin within less than six hours of eating a ciguatoxic fish. This is followed by neurological symptoms such as headaches, flushing, muscular aching and weakness, tingling and numbing sensation of the mouth, and dizziness. Victims usually recover in a few days, but neurological symptoms may last for months and even years. For more information, see HGIC 3661 *Ciguatera*.

Sources:

1. Centers for Disease Control and Prevention (CDC). 2001, July. *Travelers' Health: Risks from Food and Drink*. [WWW document]. URL <http://www.cdc.gov/travel/food-drink-risks.htm>
2. Centers for Disease Control and Prevention (CDC). 2003, June. *Bovine Spongiform Encephalopathy and Variant Creutzfeldt-Jakob Disease*. [WWW document]. URL <http://www.cdc.gov/travel/diseases/madcow.htm>

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