

# Fact Sheet: Food and Water-Borne Illness

Contamination of food and water by protozoa, bacteria, viruses, pesticides, or heavy metals can lead to severe illness. Avoiding contaminated food and water is key to preventing illness. Depending on the contaminant, the symptoms and treatment may vary. Common contaminants include:

- Cryptosporidium
- Giardia intestinalis
- Leptospirosis
- Salmonella
- Shigella
- E. coli
- Enterovirus
- Hepatitis A
- Norovirus

## Symptoms

- Abdominal Cramps
- Nausea
- Vomiting
- Diarrhea
- Dehydration

### Prevention

- In some locations, you may have to avoid uncooked food that may have had contact with unclean water.
- > You may want to request bottled drinks and no ice while dining out in some locations.
- > Only eat food that has been thoroughly cooked and is still hot.
- If you are preparing your own food, make sure food is stored appropriately at the proper temperature.
- Identify if a well has been tested before drinking from it.
- Do not drink from a well that has experienced flooding unless it has an inspection date that post-dates the flooding event.
- If you must utilize non-potable water, there are water treatment techniques that can be used:
  - Boiling can effectively kill most bacterial, viral, or other microorganisms.

<b>DOC #:</b> EHS-0184	
------------------------	--

Page #

- Filtration and chemical disinfection products are also available, be aware that they are only effective for certain types of contamination, and may not be sufficient for all situations.
- These methods cannot remediate metal or chemical contamination. Never drink water near a mine or reclaimed mining area.
- Contacting contaminated water or being exposed to aerosols of contaminated water can also cause illness. Take precautions near bodies of water with known contamination, algal blooms, or large fish kills. Contact the <u>MIT EHS Office</u> if you feel you need a respirator to perform your research activities.
- > Do not allow broken skin to come into contact with water of unknown quality.
- Frequently wash your hands thoroughly with soap and clean water, especially after lavatory use and contact with potentially contaminated water.
- In remote areas, make sure any washing and lavatory use is at least 200 yards from any water source.
- Contact the MIT Medical Department's <u>Travel Health Clinic</u> to identify what preventative measures you can take to manage potential illness.

#### First Aid Treatment

- ➢ Generally, symptoms last for 24-48 hours.
- Treatment includes staying hydrated and controlling symptoms with over the counter medication.
- If the symptoms are present after 48 hours, or become severe (blood present in vomit or stool, development of fever, irregular breathing/heartbeat, blurred vision, etc.), seek medical attention.

#### **References and Additional Resources**

- > CDC Division of Foodborne, Waterborne, and Environmental Diseases
- CDC Traveler's Health Food and Water Safety
- National Park Service article on <u>Water-Borne Disease</u>
- CDC <u>Water Treatment Techniques</u>
- Poison Control Center Hotline: 1-800-222-1222
- Adapted from Food and Water-Borne Illness Fact Sheet by University of Maryland: Department of Environmental Safety, Sustainability & Risk (<u>https://essr.umd.edu/about/research-safety/field-research-safety/planning</u>) with permission.