



Prevent Foodborne and Waterborne Illness: Recommendations for Idaho River Outfitters

Proper food handling can prevent the spread of communicable diseases among members of your trip. Although gastrointestinal illnesses are of primary concern, other organisms found in the nose or infected skin can produce toxins that cannot be destroyed by heat and also cause gastrointestinal illness. It usually takes no more than 3 to 4 hours after food has been contaminated to produce enough bacterial growth to cause illness in a large number of people. The following recommendations can interrupt the chain of events leading to an outbreak of human illness.

Food Handlers

- Sick people should not prepare food.
- People with cuts, abrasions, open blisters, or other open wounds on a hand should not prepare food unless the hand is bandaged and covered with an impermeable glove.
- Food handlers should not drink, eat, “snack,” or smoke while preparing meals.

Hand Washing (food handler)

Because disease-causing organisms often get into food from hands of a person preparing food, personal cleanliness is important.

- Hand washing setups should be conveniently located near the food prep area.
- Food handlers should wash their hands frequently.
- Water used for hand washing should be treated with at least 100ppm chlorine (1 capful of regular bleach per 1 gallon of water) if from a non-potable source, alternatively, potable water may be used without additional treatment.
- Soap must be available and used for hand washing.

Food Storage

- Potentially hazardous foods* (including raw eggs) should be stored below 41°F.
- Thermometers should be available and used frequently to check storage-coolers' temperatures.
- Raw meat should be stored so that it will not contaminate other foods. Ideally, raw meat should be stored in separate storage-coolers. When this is not practical, raw meat should be stored in leak-proof containers at the bottom of coolers containing other foods.
- Packaged food should not be stored in contact with ice or water unless the packages are waterproof.
- Unpackaged food should not be stored in direct contact with undrained ice (except raw fruits and vegetables).

Food Preparation

- Cutting boards, knives, etc., used for preparing raw meats, poultry, or fish should be thoroughly cleaned and sanitized before being used for the preparation of other food.
- Potentially hazardous foods should not be in the temperature danger zone (41°F–140°F) for longer than 4 hours total.
- Raw animal foods such as beef, pork, poultry, fish, eggs, and foods containing these raw animal foods should be cooked thoroughly (especially ground beef and chicken). The minimum cooking temperatures specified in the Idaho Food Code should always be attained. For more information, please visit <http://www.foodsafety.idaho.gov>.
- Food thermometers should be available and used frequently.
- Raw eggs should not be cracked and mixed together unless they are to be thoroughly cooked promptly after mixing. Pasteurized egg product is recommended for such use in the backcountry.
- Potentially hazardous food left over from a meal should not be held for re-service.
- Thawing frozen food in coolers is recommended.
- Raw fruits and vegetables should be washed with potable water before use or consumption.

Food Service

- For guests, hand washing facilities should be available near the food service area. Air-drying of hands is acceptable for guests.
- Food should be served with sanitary utensils or gloves.
- Sanitary utensils should be available for all self-service arrangements.

Sanitizing

- Dishes, utensils, etc. should be cleaned and sanitized in a three-container arrangement. The washing and rinsing containers should contain hot water that meets the potable water specifications. The sanitizing container should contain warm water and at least 50–100ppm chlorine. Test strips should be used to check the chlorine concentration. Air-drying and the use of a fourth container for prewash/scraping are encouraged.

All guides are encouraged to complete the Idaho Food Safety and Sanitation Exam to increase their knowledge of proper food handling and sanitation to prevent foodborne illness. To learn more, visit <http://www.foodsafety.idaho.gov>.

Careless food or water handling practices can result in outbreaks of illness among clients and severely affect the company's bottom line.

* Defined in the Idaho Food Code, available at <http://www.foodsafety.idaho.gov>.

Potable Water

Water used for drinking and cooking should be from:

1. An approved public water system.
OR
2. A source known to be free of chemical contamination **and** prepared by one of the two methods listed below.

Boiling: Bringing to a rolling boil for 1 minute. (Add an additional minute for each 1,000 feet above sea level).

Filtering and Disinfecting:

Filtering through an "Absolute" 1-micron filter, or one labeled as meeting American National Standards Institute (ANSI/NSF) (formerly the National Sanitation Foundation) International Standard #53 for "Cyst Removal" followed by disinfection.

Disinfect by adding 8 drops of liquid chlorine bleach per gallon of water and let stand for 30 minutes or use another approved sanitizer per package instructions.

Water storage containers should be free of contamination when in use and sanitized frequently between outings.

Waste Disposal



- Portable toilets should be located at least 50 feet from any water source.
 - A can of spray disinfectant should be available after toilet use. One short shot to the entire surface of the toilet seat is sufficient.
Do not wipe the toilet after spraying with disinfectant—this defeats the purpose.
- A small container with a lid should be present for disposal of feminine hygiene products.
- In environmentally sensitive areas such as river corridors, human feces and other solid waste should be transported to an approved offsite disposal facility unless fixed facilities are available onsite.
- A hand washing station should be located adjacent to the toilet.
- Place buckets directly below wash buckets to catch gray water.
- Provide a sanitation device such as a dribble can, a foot pump, or a "Wishy Washy", that allows guests to wash and rinse their hands with clean water.

Ask Guests to:

- Wash their hands vigorously with soap for 30 seconds after using the toilet.
- Use hand sanitizer — only as an added precaution and not a replacement for washing hands with soap and water.

Waste disposal guidelines adapted from the Idaho Outfitters and Guides Association.

For additional information, contact your public health district:

Hayden 415-5200

<http://www.phd1.idaho.gov>

(serving Benewah, Bonner, Boundary, Kootenai and Shoshone counties)

Lewiston 799-3100

<http://idahopublichealth.com/>

(serving Clearwater, Idaho, Latah, Lewis, and Nez Perce counties)

Caldwell 455-5400

www.publichealthidaho.com/

(serving Adams, Canyon, Gem, Owyhee, Payette and Washington counties)

Boise 375-5211

www.cdhd.idaho.gov/

(serving Ada, Boise, Elmore and Valley counties)

Twin Falls 737-5900

www.phd5.idaho.gov/

(serving Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls counties)

Pocatello 233-9080

www.sdhdidaho.org/

(serving Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida, and Power counties)

Idaho Falls 522-0310

<http://phd7.idaho.gov/>

(serving Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, and Teton counties)