

PUBLIC HEALTH RIVER GUIDE

(Keep this reference card in each trip's Public Health Kit!)

FOOD

STORAGE, HANDLING, PREP, SERVICE

Storage - Whenever possible, raw Potentially Hazardous Food (PHF*) should be stored in a separate cooler. If this is not possible (e.g. single cooler trips), raw potentially hazardous foods must be stored at the bottom of the cooler in durable leak-proof containers. Double bagging is not adequate when storing raw potentially hazardous foods in the same cooler as ready-to-eat foods. All food items should be stored separately from cleaners, fuel, human waste or solid waste receptacles.

Temperature – Store all PHF below 45F. Use a thermometer to monitor PHF temperatures in storage coolers.

Food Handlers may not eat while preparing food, must protect any cuts or sores before preparing food, and are strongly encouraged to wear gloves when handling ready-to-eat foods.

Illness – Guides who experiences symptoms of diarrhea or vomiting are restricted from food handling and water treatment for 72 hours after symptoms resolve.

Guests are not allowed to prepare or handle any food items other than their own. If guests experience symptoms of diarrhea or vomiting it *may* be advisable to serve them food away from the food service area for 72 hours after symptoms resolve. Also *consider* placing them on the same boat location each day for 72 hours after symptoms resolve.

Sanitize raw PHF contact surfaces (*such as utensils, cutting boards, containers, etc*) before use with other foods. Sanitizer strength should be 100 ppm. Use test strip to check.

Thermometers – Use a stem thermometer to check the internal cooking temperatures of raw animal foods (165F for most PHF. Good idea to use 165F as a general rule. However, the FDA Food Code allows eggs to be cooked @145F, steaks @ 145F, and ground meat@155F).

Separate Utensils or Gloves should be used by servers for each food item. A good practice, but not required, is to have a food handler place food on guest's plates as they walk by rather than guests touching each utensil. This is especially important if anyone in the group is ill. Sick individuals should have a plate of food served to them separately.

Food protected – From environmental contaminants. Overhead or side protection should be used as needed to protect food from rain, wind, overhead vegetation, etc.

Cooked PHF consumed or discarded within 4 hours – PHF is not allowed to be prepared in advance in the backcountry and then cooled down for service at later meals.

***Potentially Hazardous Food (PHF)** Include: 1-**Raw or cooked meat, fish, shellfish, poultry, eggs**, and **dairy** products. 2-**Cooked** (but the raw form is **not** PHF) **rice, beans, or vegetables**. 3-**Raw sprouts**. 4-**Cut melons**.

POTABLE WATER METHODS

Hauled Water – Use only an approved Municipal System Source. Before hauling disinfect the container by: (1) Add 2 TBLS bleach to 5 gallon container. (2) Fill with potable water. (3) Wait 30 min. (4) Empty, then rinse w/potable water. (5) Fill with potable water for hauling.

Water Filtration and Disinfection - If sediment in water, let settle overnight or use settling agent (i.e. alum). Filter with no larger than 1 micron filter. Disinfect with 1 ppm free Cl. (*Start with ¼ tsp unscented bleach per 5 gal. This may vary with changing water conditions. Use a test kit to determine actual chlorine residual level and adjust bleach additions to acquire 1 ppm free Cl.*) Let water stand 30 min before consumption.

Boiled Water – Bring water to a rolling boil for 1 minute.

HANDWASHING PRACTICES

Handwashing Setups – Ensure there is 100 ppm Cl residual in source water. Test strips should be used to check Cl levels. Liquid soap shall be provided and used. Repeated dipping of hands in source water is not allowed. Air drying hands is ok for non-food handlers, but not for food handlers.

Location – Locate handwashing setups conveniently near food prep area and also near toilet areas.

Food handlers shall wash hands immediately before food preparation, after using toilet, after touching hair or clothing, and after other potential contamination. Food handlers use clean paper towels to dry hands.

Guests – Guests should be regularly encouraged to wash their hands after using the toilet and before getting food service.

Alternative handwashing setups – In extreme circumstances where sufficient treated water is not available, 62% ethyl alcohol sanitizer may be used after washing hands with untreated water.

DISHWASHING AND SANITIZING

3-compartment dishwashing setup - In the order of Wash-Rinse-Sanitize. Hot wash water with detergent. Sanitizer must have 100 ppm Cl residual.

Test Strips – Use to check Sanitizer compartment Cl residual.

Air Dry – Air Dry dishes and utensils before storage.

Sanitize surfaces – Sanitize tables and other non-food contact surfaces between uses. Sanitizer at 100 ppm Cl residual.

ILLNESS REPORTING

1 or 2 persons (including crew) sick – Complete the GI Illness form (one for each person sick) at the time of illness. Submit the form(s) at the conclusion of the trip.

3 or more sick – Complete the form (one for each person) at the time of illness. Call out ASAP to report using SAT phone. If no SAT phone is available then try any of the following:
(1) Use another groups SAT phone. (2) Report to NPS Patrol
(3) Use radio if available. (4) Use Phantom Ranch phone.