

# CHIS CUA Program Food and Beverage Service Guidelines

## 1. FOOD OPERATIONS

a. The safe storage, transport, preparation, and service of food in the backcountry is quite challenging due to the inherent nature of the environment under which the parks and park partners are operating. Despite these challenges, food service must be in compliance with the relevant portions of the FDA’s most current Food Code. Where a strict application of the code is not possible, the changes detailed here are permitted.

### b. Food Handlers

i. At least one guide on each excursion will be a certified food handler and will be responsible for overseeing the storage, preparation, and serving of food. It is strongly recommended, however, that this one guide on each excursion be certified on a manager level. All guides are encouraged to become certified food handlers.

#### ii. Food Handler Certification Requirement Table

Activity	Examples	Food Handler Certification Requirement
<b>Level 1</b>		
Handling ready-to-eat, pre-packaged, food with no time and/or temperature control (TTC) requirements	Individually packaged trail mix, nuts, chips, nutrition bars, candy bars etc.	Not required
<b>Level 2</b>		
Opening and handling exposed non-TCC pre-packaged, ready-to-eat food.	Bulk packages of trail mix, nuts, chips, candy, pastries, etc.	Required
<b>Level 3</b>		
Handling and/or transporting commercially prepared, ready-to-eat, and pre-packaged food with TTC requirements.	Packaged/wrapped sandwiches and salads	Required
<b>Level 4</b>		
Handling and/or transporting commercially prepared, pre-packaged, ready-to-eat TTC food for the purpose of portioning or assembly prior to serving customers.	Deli meat, sliced cheese, prepared salads (e.g. tuna salad, potato salad, coleslaw etc.), hummus, cut fruit etc.	Required
<b>Level 5</b>		
Handling and/or transporting ready-to-eat TTC and non-TTC food to slice, chop, grate, mix, stir, or perform other preparation prior to serving customers.	Cutting/chopping produce or fruit, slicing cheese or meats, slicing tomatoes etc.	Required
<b>Level 6</b>		
Handling and/or transporting and cooking TTC foods for immediate service.	Meat, poultry, fish, hot dogs, sausage, cooked produce or fruit etc.	Required

iii. No persons who are ill will be allowed to prepare food. A person with a gastrointestinal illness will be restricted from food handling and water treatment activities until 72 hours after symptoms have resolved.

iv. Guest volunteers will not be allowed to prepare or handle food other than their own. They may be allowed to perform other duties attendant to food preparation.

v. Bare hand contact should be minimized with ready to eat food products. Gloves or utensils are strongly encouraged when handling foods that will not be cooked.

vi. Food handlers will not eat while preparing food.

### c. Hand Washing

i. Handwashing setups will be conveniently located near the food area.

ii. Handwashing setups which involve the repeated dipping of hands into the treated water container may not be used. Only gravity feed or foot pump pressurized portable handwashing systems that dispense

treated water from a flow-controlled nozzle over the hands and into a grey water catchment basin below during the handwashing process are approved.

- iii. Food handlers will wash their hands immediately before engaging in food preparation, after using the bathroom, smoking, sneezing, or coughing into hands and as frequently as needed to prevent contamination of food and utensils.
  - iv. Water used for handwashing will be as specified in section 3.1.0 below or treated with 100 mg/L Parts Per Million (PPM) chlorine. If this method is used chlorine test strips will be used to check the concentration. Extra chlorine might be required to achieve 100 PPM in turbid water. The handwash container must be covered to prevent potential re-entry of contaminants and to minimize the potential for chlorine to off-gas once the above treatment process is complete.
  - v. In extreme circumstances where sufficient treated water is not available, food handlers must use hand sanitizers containing 70% ethyl alcohol per the manufacturer's directions after preliminarily washing hands with untreated water.
- d. Food Storage
- i. Time/Temperature Control for Safety (TCS) foods (including raw eggs) will be stored at or below 41°F.
  - ii. Foods will be stored so that they do not contaminate one another. Whenever possible, raw TCS foods should be stored in a separate cooler. When this is not possible (e.g., single cooler trips), raw TCS foods must be stored at the bottom of the cooler in durable leak proof containers. Double bagging is not adequate when storing raw TCS foods in the same cooler as ready to eat foods.
  - iii. Menus should be simplified, and ingredients selected to minimize the amount of raw TCS foods that are needed on each trip.
  - iv. Dry foods will be stored in sealed containers to protect them from moisture and rodents.
  - v. Food will be stored separately from cleaning supplies, fuel, human waste receptacles or solid waste receptacles.
- e. Food Preparation
- i. TCS food left over from a meal will not be held for re-service.
  - ii. TCS food will not be prepared in advance in the backcountry and then cooled down for later service. All TCS foods cooked on site will be consumed or discarded within four hours of preparation.
- f. Food Service
- i. Guest handwashing facilities will be available near the food service area. Air drying of hands is acceptable for guests. Individuals involved in preparation or service of food will use clean, disposable paper towels for hand drying.
- g. Facilities (Vessel Galleys and Campgrounds)
- i. If possible, a tarp will be laid down on the ground before setting up the kitchen to aid in later cleanup activities.
  - ii. Food preparation surfaces will be in good repair without cracks or holes and easily cleanable. All tables and food preparation contact surfaces must be sanitized before and after meals with 100 PPM chlorine.
  - iii. Food handlers will provide necessary measures to prevent environmental contaminants from affecting the food, which may mean overhead and/or side protection during periods of inclement weather.
  - iv. 3-compartment dish washing setup is required in the order of Wash-Rinse-Sanitize. Hot wash water must be used with detergent. Sanitizer must have 100 PPM chlorine residual and be checked with chlorine test strips. Air dry dishes and utensils before storage.

h. Unused Food

- i. Any food product that has been opened must be discarded at the end of the trip. Non-TCS items that will be cooked (e.g., dry pancake batter and seasonings) are exempt from this requirement.
- ii. Unopened TCS foods will be discarded at the end of a trip (i.e., they cannot be taken on more than one trip).

2. POTABLE WATER OPERATIONS

- a. Filtration and disinfection are both required for the treatment of water unless the water is obtained from an NPS approved drinking water source. Appropriate park staff should ensure backcountry users understand that non-potable water is not safe to drink following filtration without disinfection. Failure to add disinfectant after filtration or boiling has resulted in a number of illness outbreaks at times affecting hundreds of people.
- b. There are only three pre-approved methods of providing potable water for drinking and culinary uses:
  - i. Potable Water System: Water will be obtained from an NPS approved drinking water system and will be stored in containers that are free from contamination and are disinfected between every reuse. Transport container disinfection will be provided by placing 2 tablespoons or 6 teaspoons of 8.25% NSF approved chlorine bleach in a 5-gallon container of water, mixing and allowing to stand for 30 minutes. The container will then be emptied, rinsed with potable water, and then filled with water from the NPS approved drinking water system (see RM83A Chapter 1 for further details). Note that leaving the disinfected water in direct sunlight will consume the chlorine and reduce the effectiveness. Thus, shade is recommended for proper container storage.
  - ii. Boiling: Obtain water from a source free of known chemical contamination and bring to a rolling boil for 1 minute (or 3 minutes for elevations over 6,500 ft). If the water is not consumed within 6 hours after boiling and is placed in a sanitized container, that water should be disinfected with a 1 mg/L (PPM) chlorine bleach solution.
  - iii. Filtration and Disinfection: Obtain water from a source free of known chemical contamination and then filter and disinfect the water. If sediment is present in the water, settle overnight or use a settling agent such as alum. Filtering will be through an “absolute” 1 micron filter, or one labeled as meeting the NSF International Standard #53 for “Cyst Removal”. The filtration must be followed by disinfection. If a chlorine residual test kit is available, add drops of unscented NSF-60 approved 8.25% chlorine bleach until a strength of at least 1 mg/L (PPM) is achieved.
  - iv. If no test kit is available, follow the guidance in the table below. Mix and let stand for at least 30 minutes before drinking.

1.

Volume of Water	Amount of Bleach to Add*
1 quart/liter	2 drops
1 gallon	6 drops
2 gallons	12 drops (1/8 teaspoon)
4 gallons	1/4 teaspoon
8 gallons	1/2 teaspoon

\*Bleach contains up to 8.25% sodium hypochlorite.

- a. If the bleach solution contains a different concentration of sodium hypochlorite the above noted values will need to be modified. Please contact your Public Health Consultant (PHC) for assistance in the conversion.

- b. Alternative disinfection methods must be approved by the PHC. Use of ultraviolet light as an alternative to adding disinfectant will not be approved. UV disinfection does not provide a

### 3. ILLNESS REPORTING PROCEDURES

- a. The trip leader will complete a separate Gastrointestinal (GI) Illness Report Form (See Appendix 3) for each person who becomes ill with a GI illness on a trip.
- b. The forms will be submitted within the appropriate time frame described below. For commercial trips, reports will be sent to the park concession specialist. For all other trips, reports will be sent to the park superintendent. All reported GI reports will be forwarded to the Public Health Consultant for further review.
- c. Reporting Timeframe
  - i. If 1 or 2 persons (visitors or employees) experience GI illness during a trip, the illnesses and GI Report Form can be reported to the NPS at the end of the trip.
  - ii. If 3 or more persons (passengers or employees) experience GI illness during a trip, the trip leader must do the following:
    - 1. Complete a GI Form at the time of illness for each person who becomes ill.
    - 2. Notify NPS within 24 hours of the illnesses (via satellite phone, if needed) and include the following information:
      - a. Illness symptoms
      - b. Dates and times of illness onset
      - c. Suggestions as to the cause of the illness
      - d. Trip itinerary
      - e. Water treatment (includes sources and treatment)
      - f. Specific menu (includes snacks and beverages) for the entire trip
      - g. Food suppliers
      - h. Passenger manifests with contact information
      - i. If there was any illness at the company prior to the trip
      - j. Provide daily updates via satellite phone of new illnesses and progress of cases that have stabilized
  - iii. Submit all GI Forms to NPS at the end of the trip.
    - 1. If a GI complaint is received after a trip has been completed, a GI report form will still be completed and forwarded to NPS.

### 4. ADDITIONAL INFORMATION AND REFERENCES

- a. NPS Disease Prevention and Response – Internet Site: <https://www.nps.gov/subjects/healthandsafety/disease-prevention.htm>
- b. NSF International: <https://www.nsf.org/>
- c. The Centers for Disease Control and Prevention: [Centers for Disease Control and Prevention \(cdc.gov\)](https://www.cdc.gov/)
- d. Food and Drug Administration's (FDA) Food Code: [FDA Food Code | FDA](https://www.fda.gov/food/food-code)
- e. State and Local Health Departments: Council of State and Territorial Epidemiologists (cste.org) <https://www.naccho.org/membership/lhd-directory>

**GASTROINTESTINAL (GI) ILLNESS REPORT FORM**  
National Park Service - Public Health Program



Park Identifier: \_\_\_\_\_

**Personal Information**

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_(mm/dd/yy) Sex: Female  Male

Parent's Name (if child<18): First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_

State/Province \_\_\_\_\_ County \_\_\_\_\_ Country \_\_\_\_\_

Postal Code \_\_\_\_\_ Telephone \_\_\_\_\_ Alternate Phone \_\_\_\_\_

Email \_\_\_\_\_

Check One:  Park Visitor  NPS Employee  Concessionaire Employee  Park Resident

Race/Ethnicity:  White  Hispanic  Black or African American  Asian  
 Native Hawaiian or Pacific Islander  American Indian or Alaska Native

**Symptoms Experienced During this Illness**

Nausea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Sweats/Chills	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Hives	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Vomiting	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Fatigue	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Metallic Taste	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Diarrhea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Muscle Aches	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Numb/Tingling	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Blood in stool	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Headache	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Blurred Vision	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Stomach cramps	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Sore Throat	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Constipation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Difficult to Swallow	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Difficult to Breathe	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Burning in Mouth	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Jaundice	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Paralysis	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Fever	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Difficult to Speak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Did animal or insect bite occur prior to symptoms	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Highest Temp _____ °F								

If yes to "other" symptom or animal/insect bite describe: \_\_\_\_\_

\_\_\_\_\_

Date of Illness onset: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(mm/dd/yy)

Time of onset: \_\_\_\_\_  AM  PM

Location of onset: \_\_\_\_\_

Has person recovered:  Yes  No

Date of recovery: \_\_\_\_/\_\_\_\_/\_\_\_\_ (mm/dd/yy)