

# FOOD SAFETY IN THE GREAT OUTDOORS

## NOBODY WANTS FOODBORNE ILLNESS

Everybody loves a summer picnic or outdoor adventure - but nobody wants to acquire foodborne illness from food that was not prepared, cooked, transported or stored safely. Careful planning and handling of food in the outdoors is essential to reducing harmful bacteria that can multiply and cause foodborne illness.

The risk of foodborne illness increases in the summer for three main reasons:

1. Summer weather is often hot and humid, and the kinds of bacteria that cause foodborne illness, such as Salmonella and E. coli multiply quickly in warm, moist conditions;
2. When you cook or eat outdoors, you don't always have easy access to the safety features found in kitchens such as refrigerators and washing facilities; and
3. If you are camping or backpacking, you may have to pack for more than a day, and you may have limited access to grocery stores to acquire missing items or replenish food supplies if something goes wrong.

**FOODSAFE TIP:**  
Use only safe drinking water for washing food, washing dishes and brushing teeth.



## PLANNING... IS THE KEY TO OUTDOOR FOOD SAFETY

1. Know in advance if there is a source of clean drinking water. Even when lakes, rivers and streams look clean, untreated water from these sources can carry bacteria and parasites (such as Giardia and Cryptosporidium) that can contaminate food and cause illness.

### If there is no treated water supply:

- Purify water by boiling. Bring the water to a rolling boil and continue to boil for at least one minute; OR
  - Use water purification tablets combined with water filters; OR
  - Bring your own water supply.
2. Wash fruits and vegetables with cooled, boiled water – or wash them at home, before you leave.
  3. Prepare meats before you leave home to reduce the need to handle them when you are outdoors.
  4. Refrigerate and/or freeze food the day before you pack it for a trip.
  5. Take more ice than you think you will need. (Freezer packs or blocks of ice are preferable as they last longer than ice cubes.)
  6. Don't forget cutting boards, clean plastic bags and containers, disposable sanitizing wipes, paper towels and a probe food thermometer.

## QUESTIONS ABOUT FOOD SAFETY?

Contact a Public Health Inspector at one of these Northwestern Health Unit offices.

### KENORA

Phone: (807) 468-3147  
or 1-800-830-5978

### DRYDEN

Phone: (807) 223-3301  
or 1-888-404-4231

### FORT FRANCES

Phone: (807) 274-9827  
or 1-800-461-3348

**CONTROL...  
THE TEMPERATURE OF HIGH-RISK FOOD.**

Not all foods are created equal. Some high-risk foods (also called hazardous foods) grow bacteria more easily than other foods.

**HAZARDOUS FOODS include: meat, eggs, poultry, dairy products, processed deli meats, seafood, cooked rice, cooked pasta, cooked vegetable dishes, and salads (such as potato salad) that contain hazardous ingredients.**

Take extra care to keep hazardous foods out of **The Danger Zone** which is the temperature range between 4°C to 60°C (40°F to 140°F).

**Hazardous foods left in **The Danger Zone** for more than 2 hours must be thrown out.**

Pack foods that do not require refrigeration such as peanut butter, jelly, dried fruits, fresh and canned fruits and vegetables, canned beans and meats, nuts and seeds, dry pasta and soup mixes, juice boxes, breadsticks, pretzels, bagels, rice cakes, muffins, granola, trail mix, crackers and freeze-dried foods.

**HOW TO KEEP HAZARDOUS FOODS OUT OF THE DANGER ZONE.**

- When transporting foods to picnic or outdoor sites, it can be difficult to keep food hot, so keep it cold instead. Then heat the food up when you get to your destination.
- Don't pack food that has just been cooked and is still warm. Chill food overnight in the refrigerator before packing.
- Freeze all foods that can be frozen before packing them in a cooler.
- Thaw hazardous foods in the cooler – never on the picnic table.
- Food must be cooked to 74°C or a safe minimum internal temperature to destroy harmful bacteria. (See: COOKING TEMPERATURES.)
- Use a probe food thermometer to ensure foods have reached a safe minimum internal temperature.
- Serve food immediately after cooking or just before eating.
- Return perishable foods to the cooler as soon as possible.
- Serve small batches at a time and don't let food sit out after serving.
- Discard all hazardous foods once the ice has melted or freezer packs have thawed.

COOKING TEMPERATURES	Temp (C)	Temp (F)
<b>POULTRY</b>		
Whole (chicken or turkey)	82	180
Breasts	74	165
Thighs & Wings	Cook until juices run clear	
Duck, Goose, Pheasant	82	180
<b>GROUND MEAT &amp; MEAT MIXTURES</b>		
Turkey, Chicken	74	165
Veal, Beef, Lamb & Pork	71	160
<b>HAM</b>		
Fresh (raw)	71	160
Precooked (to reheat)	60	140
<b>SEAFOOD</b>		
Fish, Shellfish & other Seafood	70	158
<b>STEAKS and ROASTS</b>		
Beef, Veal, Lamb & Goat	60-74	140-165
Pork	71	160

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## COOLER KNOW-HOW

- Hazardous foods must be kept in an insulated cooler with enough ice or freezer packs to keep food cold at 4°C (40°F) or lower.
- Take the temperature of hazardous foods held in coolers frequently to ensure food is cold enough.
- All foods must be frozen or thoroughly chilled in the refrigerator before being packed. Coolers have good “cold retention,” but are not up to the job of chilling food down.
- Pack meat or poultry on the bottom (or better yet in a separate cooler ) – always wrapped carefully and/or placed in sealed containers so the juices can’t drip onto other food in the cooler.
- Pack beverages in a separate cooler as the beverage cooler is likely to be opened more frequently.
- Frozen juice boxes and bottles of potable water can be used to keep food cold in coolers without adding extra weight to your load.
- Transport coolers in the passenger area of the vehicle – not in the hot trunk.
- Place coolers in shade or sheltered areas, away from direct sunlight. Coolers can also be wrapped in blankets or sleeping bags for added insulation.
- Drain melted ice water often from coolers.
- Avoid unnecessary lifting of the lid which lets cold air out and warm air in.

### Choose the right cooler...

Choosing the right cooler is an important part of planning for an outdoor trip. Foam chests are lightweight, low-cost and actually have good “cold retention” power. But they are fragile and may not last. Plastic, fiberglass or steel coolers, on the other hand, are more durable and can take a lot of outdoor wear. They have excellent “cold retention” power, but once filled, may weigh 30 or 40 pounds.

Choose this...



or this...



but not this.



## AVOID CROSS-CONTAMINATION

- Any foods, that are pre-prepared and will be consumed without re-heating (such as cheese, salads, quiche, bean casseroles or sandwiches) must be carefully protected from cross-contamination and stored at 4°C or less until they are served.
- Use different coolers to separate raw meats from ready-to-eat or non-hazardous foods.
- Wash, rinse and sanitize coolers before packing them.
- Discard all foods which have come into direct contact with melted ice water in coolers.
- Do not use picnic tables or other outdoor equipment for cutting boards. Bring your own cutting boards.
- Don't cut vegetables or other ready-to-eat foods on the same cutting board as raw meat without thoroughly cleaning and sanitizing the knife and cutting board first.
- Put cooked foods on a clean plate. Never put cooked burgers back on the same plate that held the raw patties. Bring extra plates and utensils for serving cooked foods.
- Do not place washed produce back in its original container or wrapper.
- Clean and sanitize the probe food thermometer between uses.
- Keep all food bowls covered at all times to avoid contamination from birds, insects, flies and other outdoor critters.



## HANDWASHING

Handwashing is one of the best ways to prevent foodborne illness. Do it often and do it long (at least 15-20 seconds) in warm soapy water. Wash **before**, **after** and **between** handling different foods during food preparation - and always **before** eating, especially after visiting the privy, touching animals or working in the outdoors.

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**In situations where handwashing facilities are not available, bring along lots of moist towelettes and hand sanitizer.**

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## CLEANING AND SANITIZING

**Clean (wash) and sanitize** everything that touches food or a person's mouth: plates, cutlery, pans, utensils, thermometers, coolers and food preparation surfaces. (Disposable, single-service dishes and utensils provide convenience in the outdoors as they do not need to be washed or sanitized before use.)

## What is the difference between cleaning and sanitizing?

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### CLEANING

Cleaning removes food particles, food juices, dirt, debris and stains from dishes, equipment, and food preparation surfaces by using a solution of soap or detergent, hot water (45°C / 113°F or hotter), and a clean cloth.

### SANITIZING

Sanitizing kills harmful bacteria which you cannot smell, see or feel, but which may cause illness in humans.

## How to Sanitize

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Wash dishes and utensils well in hot, soapy water. Rinse well. Then soak them in a **sanitizing solution** of 10 mL (2 tsp) of liquid household chlorine bleach mixed with 1L (4 cups) of water for 45 seconds. Spray the solution on counters and cutting boards and let stand for at least 1 minute. Let all articles air dry.