

## **HOME STUDY COURSE TEMPORARY FOOD ESTABLISHMENTS (CONCESSIONS)**



This course was designed by Environmental Public Health with one purpose in mind; to help concessionaires set up and operate temporary food establishments in a sanitary and healthy manner, minimizing the possibility of foodborne illness incidents.



The course is structured so that you may study the material at your own pace, and complete the exam. The exam is optional and is only available upon request by completing the “Exam Request Form” on the following page. Please be advised that there is a \$10.00 fee for each exam.



The exam has a total of 25 multiple-choice questions. The passing mark is 80%. Upon successful completion of the exam, you will be awarded a **HOME STUDY COURSE CERTIFICATE**, which is valid for three years.

Thank you for your participation and the interest you have shown. We feel that your time will be well spent, and the information you acquire will make your operation safer and more efficient.







# TEMPORARY FOOD ESTABLISHMENTS (CONCESSIONS)

## Definitions

**Special Event** – an event open to and where food is made available to the general public that operates no more than 15 days within a calendar year in any one health region and includes fairs, festivals, exhibitions, promotional events and carnivals.

**Temporary Food Establishment** – means a food establishment that operates exclusively at special events.

**Community Organization Function** – means an occasional function open to the general public where food is prepared by volunteer caterers. This includes functions run by a community organization for the purpose of raising funds for that organization or for another charitable purpose. This may include community sports events, fall harvest suppers and wild game dinners. This does not include community organization functions operated as part of a special event.

## Getting a Special Event or Temporary Food Establishment Started

A permit is not required for the operation of:

- a community organization function
- a business that provides samples at no charge for the promotion of the sale of that food
- a stall at a farmer's market
- a temporary food establishment at a special event



**Although the above operations are exempt from permit requirements, the operators must ensure that all food handling and physical structures required complies with the Food Regulation.** The Food Regulation falls under the Public Health Act. The Act and the regulation can both be obtained online at the Alberta Queen's Printer website at [www.qp.gov.ab.ca](http://www.qp.gov.ab.ca) or by telephone at (780) 427-4952.



The organizer of a special event must notify the Regional Health Authority of the special event prior to the commencement of the event. The organizer of a special event must also advise the operator of each proposed temporary food establishment that they need to notify the Regional Health Authority regarding the operation of their temporary food establishment at the special event.

An operator who proposes to operate a temporary food establishment at a special event must complete a **Capital Health Special Event Registration Form** prior to the operation of the temporary establishment.

Capital Health, Environmental Public Health Services, recognizes two types of temporary food establishments:

1. **“Type ‘A’ Temporary Food Establishment”** is one which is in operation for more than 3 days but less than 15 days.
2. **“Type ‘B’ Temporary Food Establishment”** is one which is in operation for 3 days or less.

## **Construction and Design of a Temporary Food Establishment**

### **Structure**

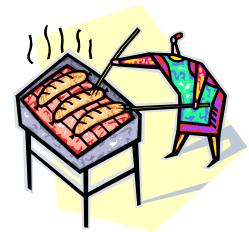
- The event must be held in a dry and well maintained area.
- The food establishment must be set up at least one hour before the special event is scheduled to start.
- The food establishment must be designed so that areas where food is handled are separate from areas accessible to the general public.
- If the special event is scheduled to run more than one day:
  - the floor of a temporary food establishment must be constructed of asphalt, concrete, finished plywood or a similar non-absorbent material, and
  - the walls and ceiling must be constructed of finished plywood, canvas, vinyl or a similar non-absorbent material.

### **Surfaces and Equipment**

- Surfaces for food preparation must be constructed of smooth, non-absorbent and easily cleanable materials.
- Equipment must be of adequate size to keep cold foods cold and hot foods hot.
- All equipment except barbecues must be contained within the temporary food establishment.

### **Barbecues**

- If a barbecue is used and is not contained within the temporary food facility, it must be in a separate area that is next to the temporary food establishment. It should be situated so as to prevent public access and to prevent contamination of the food. A barricade should be provided which is at least one metre high and should keep the public at least one metre away from the barbecue.



### **Sinks and Water Supply**

- **Type ‘A’ Temporary Food Establishments** must have at least one large all-purpose utility sink that is kept preferably inside the temporary food establishment. It must be easily accessible for washing hands and cleaning equipment. An adequate supply of hot and cold running water must be piped to the utility sink and connected to a faucet. All temporary water lines must be maintained in a clean and sanitary manner that is flushed for 2 minutes at the start of each day.
- **Type ‘B’ Temporary Food Establishments** must have a station for the purpose of handwashing that is supplied with running water, which includes at a minimum, a portable jug with a turnable spout located over a waste water collection bucket.



- Where portable or mobile self-contained water supplies are used, the operator must ensure that potable water tanks are used for storing potable water only. The tanks must be of a sufficient size to provide an adequate supply of water for handwashing and cleaning of equipment. The water tanks must be designed to facilitate cleaning and sanitizing as well as sanitary filling and emptying. Temporary water lines must be constructed of CSA approved hose for drinking water. Garden hoses are not acceptable. Where potable water lines are established, they must be protected against breakage and the main line must be equipped with backflow preventers.



## Cleaning Supplies

- At a minimum, the following cleaning supplies must be provided at the utility sink:
  - Liquid hand soap and single service towels for handwashing.
  - Clean linens, dish detergent and an approved sanitizer for cleaning dishes and equipment.
- An approved sanitizer must be available on site at all times for sanitizing surfaces and utensils and test papers must be available to verify the sanitizer's concentration. Approved sanitizers include:



- **Bleach** A chlorine solution of not less than 100 ppm (parts per million) chlorine. To achieve this concentration, dilute household bleach (chlorine) as follows:
  - one tablespoon per gallon of water, or
  - ½ ounce per gallon of water, or
  - ½ teaspoon per litre of water, or
  - 2 millilitres per litre of water.

These dilutions are approximations based on 5% available chlorine or household bleach. If used for disinfecting surfaces, the diluted bleach (chlorine) should be freshly prepared on a daily basis. Store in a spray bottle labeled accordingly, and keep the solution, as all other chemicals, away from children.

- **Quats** A quaternary ammonium compound (quats) having a strength of 200 ppm. Follow manufacturer's instructions for proper dilution.
- **Iodine** An iodine solution containing no more than 25 ppm available iodine at a temperature not less than 45°C.

## Safe Dishwashing Methods

- Utensils and surfaces that come in contact with food must be maintained in a sanitary condition and washed and sanitized to remove contamination.
- When washing dishes by hand (manual dishwashing), follow the three-step dishwashing method:
  - **Wash** dishes in **warm soapy water** at a temperature of at least 45°C. Change wash water frequently.
  - **Rinse** dishes with **clean warm water** at a temperature of at least 45°C. Change rinse water frequently.
  - **Sanitize**, either by immersing dishes in hot water (77°C) for 2 minutes, or in an approved chemical sanitizer at a temperature of at least 45°C for 2 minutes.



- Test papers are required when using any chemical sanitizer to check for the proper chemical concentrations mentioned above.
- Dishes should be left to air dry on a drain board made of non-corroding and non-absorbent material after washing. Do not towel dry dishes as this may transfer bacteria onto the clean dishware.
- Always examine the dishware for cleanliness and damage. Re-wash any unclean dishware, and throw out any damaged dishware.

### **Solid and Liquid Waste**

- A temporary food establishment requires a wastewater collection system that allows for the disposal of wastewater in a sanitary manner and that prevents wastewater from being dumped on the ground.
- Wastewater holding tanks must be sized to accumulate at least 110% of the volume of the potable water supply.
- Sufficiently sized solid waste or garbage containers, lined with plastic bags, must be provided. They must be emptied at the end of each day.



### **Food Handling Requirements**

- All food must be obtained from approved sources. Any food prepared off-site prior to the event must be prepared in an approved food establishment.
- Food must be protected at all times from dust, rain, pests and other potential contaminants.
- Probe thermometers and cold storage thermometers must be used to verify that adequate storage and preparation temperatures are maintained.
- Only single service utensils may be used for food service.
- Re-useable utensils used in food preparation and serving must be washed, rinsed and sanitized according to the three-sink dishwashing method.
- Self-serve condiments must be dispensed from a squeeze or pump container or a container with a self-closing lid.
- High-risk food must be stored, displayed, and transported at less than 4°C or more than 60°C.
- Frozen foods must remain frozen while being stored, displayed, packaged and transported.
- Whole raw shell eggs must be stored, displayed, packaged or transported at a temperature not more than 7°C.
- All food and all utensils used to handle the food must be stored off the ground.
- All food must be displayed in a manner that protects it from contamination.
- All surfaces that come in contact with food must be washed and sanitized at least once a day. Any surface that comes in contact with raw meats must be washed and sanitized before it comes in contact with cooked food products.



### **Food Handler Requirements**

A food handler must:

- exhibit good personal hygiene
- wear clean clothing and footwear
- ensure that food is not contaminated by hair
- wash hands often
- keep fingernails short and clean
- not wear nail polish or fake fingernails



- avoid wearing jewellery
- refrain from smoking in a food area
- not handle food when ill or have an infection

## **Other Requirements**

Compliance with all other relevant legislation is required (i.e. Fire Protection Branch, Building Inspection, Parks and Recreation, Bylaw Enforcement, etc.).

## **What is Foodborne Illness?**

Foodborne illness commonly referred to as food poisoning most often results from consuming food contaminated with harmful microbes or the toxins (poison) that some of these microbes produce. Less frequently, foodborne illness may result from consuming food containing a naturally occurring toxin, or food that has been accidentally contaminated with a chemical during production, harvesting, or storage.

Microbes commonly referred to as germs, are micro-organisms that cannot be seen individually with the naked eye. They can be seen only with the aid of a good microscope. Microbes are commonly found in human and animal feces. They are also present in our surrounding environment including soil, water, dust, ice, air and moisture.



Since microbes are so small, they cannot readily move on their own except in watery fluids. They depend on other methods to move around, such as hands and pieces of clothing, droplets of moisture from sneezes and coughs, rodents, insects, and dust particles. Food and drink can easily become contaminated with microbes that are transferred from contaminated hands, objects or surfaces.

**Symptoms of foodborne illness** commonly include:

- diarrhea
- vomiting
- nausea
- stomach cramps

These symptoms may also be accompanied by:

- fever
- malaise
- headache
- dizziness

You may suffer from only one or a combination of these symptoms and they may take just a few hours or several days to develop, both depending on the type of microbe or toxin that caused the illness.

At one time or another, many of us have had such an experience. Most foodborne illness goes unreported because people just think they have a “24-hour stomach bug”. The symptoms of a foodborne illness may be mild and last only a few hours, but it can also be serious, lasting much longer and requiring intensive medical treatment or hospitalization, and can even result in death.

The severity of the reaction often varies depending on the susceptibility of the individual and the microbe or toxin responsible for the illness.

### Who is Most at Risk?

Some people are more vulnerable to foodborne illness than others. The following groups of people are considered to be high-risk:

- children
- the elderly
- people with compromised immune systems
- pregnant women



These groups of people are most at risk for picking up a foodborne illness and developing complications from the illness, resulting in long term health care problems or even death.

### What Causes Foodborne Illness?

There are several types of microbes that can cause foodborne illness. They tend to fall into these main categories:

- **bacteria,**
- **viruses,**
- **yeasts and moulds,** or
- **parasites**



**Toxins** and **chemicals** can also cause foodborne illness.

It is easy to prevent foodborne illness by understanding some basic facts about the micro-organisms that cause it. These very small organisms cannot be seen individually with the naked eye. In fact, they are so small that it would take 500 million of them to form a single layer on a postage stamp. Bacteria are not always harmful and are naturally present in many foods, particularly raw meats and poultry. Special types of bacteria are useful in food processing, such as for making yoghurt, cheese, and fermented meats such as summer sausage.

Although most bacteria are harmless and many are even beneficial, some are potentially dangerous organisms that are responsible for serious symptoms, illness and even death. Harmful micro-organisms are called **PATHOGENS**. Continuing research indicate that the number of pathogens recognized to cause food poisoning is increasing. These pathogens are commonly found in feces, in the soil, in the digestive tract of animals and on raw meat, poultry and fish.

The nose and throat of healthy individuals may harbour *Staphylococcus*, which through sneezing, may contaminate otherwise uncontaminated or safe food. Food may also become contaminated via the **fecal-oral route**. Pathogens from the intestinal tract can be transferred to hands after using the toilet. In turn, the hands contaminate the food being prepared which is then ingested. For this reason, personal hygiene is very important when handling food. Thorough handwashing can remove most of

the microbes that can be transferred from various parts of the body to the hands. In addition, foods should be kept covered to protect them from contamination by flies or other insects and animals.

## What Foods Are Most Associated with Foodborne Illness?

### High-risk foods

“High-risk foods” are those in which food poisoning bacteria grow or multiply rapidly unless proper heat (above 60°C) or refrigeration (below 4°C) is maintained. Food poisoning bacteria grow slowly at 4°C or lower. Refrigerators should be maintained at 4°C or lower.

Food poisoning bacteria show a special liking for the meat, fish and poultry and also for products such as milk, cream and eggs. The following is a list of common high-risk foods:

- Meat and meat products
- Milk and milk products
- Poultry and eggs
- Fish and shellfish
- Cooked vegetables and cereals



### Low-risk foods

“Low-risk foods” are those that may be safely kept at room temperature because they do not support the growth of food poisoning bacteria. The following is a list of some low-risk foods:

- Nuts and peanut butter
- Bread, crackers, cookies and cake
- Jams and jellies
- Dry cereals
- Raw fruit and vegetables
- Pickles, relishes, mustard and ketchup
- All foods in cans and flexible pouches, until opened (unless indicated otherwise on the label)
- Spices



Although low-risk foods do not support bacterial growth, their shelf life is limited when stored at room temperature as some can support the growth of moulds. They can also be responsible for the spread of disease if handled improperly.

## How Can Foodborne Illness Be Prevented?

Most types of foodborne illness can easily be avoided if proper safe food handling practices are followed. Safe food handling practices include:

- practicing good personal hygiene, including thorough handwashing,
- avoiding food preparation while you are ill,
- preventing growth of bacteria with time and temperature control,
- cooking foods to the proper temperature, and
- preventing cross contamination.

## Good Personal Hygiene

Think of your hands and fingernails as always dirty. Just because they look clean does not mean they are clean. If you do not wash your hands properly or keep your fingernails trimmed short, your hands can easily spread germs in food and cause food poisoning. Always wash your hands at the handwashing sink using warm water and soap, and dry hands with disposable paper towels.

### **Wash Your Hands Properly**

It takes at least 20 seconds to wash your hands properly.

- Wet hands with warm water.
- Add soap and lather well.
- Rub hands together.
- Use a nylon nail brush and scrub under the fingernails, between the fingers and backs of the hands.
- Rinse thoroughly using warm water.
- Use paper towel to turn off the taps.
- Dry hands with a paper towel or hot air dryer.



### **Wash Your Hands OFTEN**

- Before you start work and before preparing food
- After using the bathroom
- Before touching food that will not be cooked
- After working with raw meat, fish or poultry
- After covering your mouth when sneezing or coughing
- After smoking
- After using cleaning or toxic chemicals
- When your hands become soiled e.g. after handling dirty dishes or garbage

Gloves can also spread germs onto food so care must be taken when using gloves. Wash and dry hands before putting on the gloves and change the gloves between tasks. The use of gloves **does not** replace handwashing.

### **If You Are Sick, Do Not Work With Food**

When people are ill with vomiting and diarrhea, they can shed millions of germs. An ill food handler can easily pass these germs on to food, equipment, dishes and utensils, co-workers or patrons. The fecal-oral route is a common way of transferring pathogens from one person to another. The fecal-oral route occurs when food handlers do not wash their hands properly after using the toilet. Germs will remain on the fingertips so when food handlers prepare food, the food or utensils they touch can become contaminated with these same germs. Customers who in turn eat this food or come in contact with contaminated utensils may become sick.

So it is important to remember the following:

- Do not work with food while you are ill with vomiting and/or diarrhea.
- Do not prepare food for others until at least 48 hours after symptoms of the illness stops.
- Do not work with food if you have yellowing of the skin or your urine is dark brown in colour as this may be an indication of jaundice.
- Do not work with food if you have an infected cut, boil or burn on your hand.
- Do not work with food if you have a fever and/or a sore throat.
- Do not work with food if you are sneezing, coughing or have a runny nose.



The person in charge of the special event or temporary food establishment shall not allow a food worker to handle food if they are aware that the food worker is ill with vomiting and/or diarrhea. If you develop symptoms of foodborne illness obtain medical advice from a physician before returning to work with food related duties.

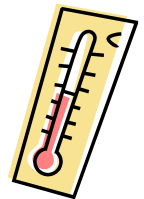
**A person must not work if prohibited from working by or under the Communicable Disease Regulation.**

### The Time and Temperature Rule

Most potentially harmful bacteria may not be dangerous when present in foods in very small numbers. They typically will not cause food poisoning unless they are allowed to grow and multiply in the food. Because bacteria are living organisms, they need food and warmth in order to grow to numbers that can cause illness. Foods, which are moist and rich in protein, provide good conditions for bacterial growth. Meats, poultry, eggs, milk and other dairy products, foods with sauces and gravies, and cream-filled pies and cakes are excellent breeding grounds for bacteria. Under ideal temperatures, they can **double** their number every **20 minutes**. At this rate one bacterium can multiply to more than **2 million in 7 hours**.



The temperature range between 4°C and 60°C is known as the "**temperature danger zone**". Between these temperatures bacteria can multiply rapidly in food. Below 4°C (at normal refrigeration temperatures), bacterial growth is slowed down. However, the bacteria are not killed and can begin to grow and multiply again when the food is within the temperature danger zone. "Hot holding" temperatures above 60°C also prevent bacterial growth and toxin formation. Bacteria are usually killed by hot temperatures and prevented from multiplying by cold temperatures. To ensure bacteria are killed, foods that are cooked or reheated should reach a temperature of 74°C.



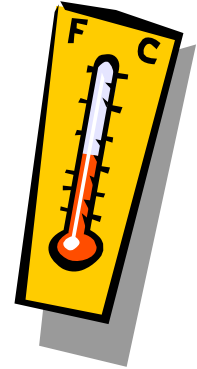
It is very important to keep the time during which food is exposed to the “**temperature danger zone**” to a minimum. Food which has been kept at temperatures between 4°C and 60°C for more than two hours can potentially cause foodborne illness and should be discarded. For this reason, cold foods should always be kept cold below 4°C and hot foods should always be kept hot above 60°C.

## **Never keep “high-risk foods” in the temperature danger zone for more than 2 hours.**

Temperature control is vital in the prevention of foodborne illness. Remember these rules when handling or preparing food:

### **Hot and Cold Holding**

- Avoid food poisoning from “high-risk foods by keep **hot foods hot** (above 60°C) and **cold food cold** (below 4°C.) This keeps food out of the **danger zone** where bacteria and other micro-organisms can grow rapidly.
- Ensure proper temperatures are maintained even when foods are being transported from one location to another.
- Use chilled ingredients to keep the temperature of foods cold during preparation.
- Cook or serve foods immediately after preparation or refrigerate below 4°C until ready to do so.
- Prepare food as close to service times as possible in order to avoid holding foods at room temperature for long periods of time.
- Serve food fresh and do not consume food that is more than 2 or 3 days old.
- Never mix old food with new batches of food.



### **Reheating**

- Reheat foods to a minimum internal temperature of 74°C to ensure bacteria are killed. Reheat only as much food as needed for service and discard any unused portion of the reheated food. **Foods should not be reheated more than once.**

### **Cooling**

- Rapid cooling reduces the amount of time “high-risk food” is held in the danger zone. This reduces the risk of bacterial growth.
- Cool hot foods quickly by dividing it into smaller portions and storing it in the refrigerator in shallow metal containers.
- Ice baths can also be used for rapid cooling. Place the pot of hot food in an ice water bath and stir food frequently. Use a thermometer to check the internal temperature of the food as it cools.
- For large pieces of meat such as a roast or a turkey, break it apart in sections or de-bone and then refrigerate for rapid cooling.

### **Freezing**

- Ensure frozen foods remain frozen while in storage, on display or in transit. Freezing food does not kill bacteria, it only stops their growth. Once the food begins to thaw, bacterial growth will continue.

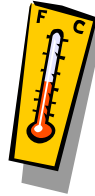
## Thawing

- Thaw or defrost meat and poultry in the refrigerator, under cold running water, or in the microwave oven.
- However, if using a microwave oven to thaw food, cook immediately after defrosting.
- Refrigerate foods after thawing under cold running water if the food is not going to be used immediately.

## Cooking

- Cook poultry and ground meats well. Use a meat thermometer to ensure that meat and poultry have been thoroughly cooked before being served. Cook the following to these internal temperatures:

• Poultry	85°C
• Stuffing	74°C
• Beef	74°C
• Pork	71°C
• Ground Meat	71°C
• Fish	65°C
- Cook all poultry at an oven temperature of 150°C or higher to be certain that food poisoning organisms are destroyed.
- Cook eggs thoroughly. Avoid recipes that call for raw eggs. Use pasteurized eggs instead.



## Prevent Cross Contamination

Harmful bacteria can be transferred from raw foods (particularly raw meats and poultry) to cooked and ready-to-eat foods, via hands, utensils, containers and work surfaces in the kitchen. This transfer of bacteria is known as **cross contamination**. Proper food handling practices are important in the prevention of cross contamination. Well-scrubbed hands will help prevent the spread of bacteria to food. Making sure kitchen utensils, containers and work surfaces are thoroughly cleaned; especially those that have been in contact with raw meat and poultry will also help stop cross contamination. Sometimes obvious sources of cross contamination are overlooked, for example, when a can opener is not wiped clean between uses or when meat cooked on the barbecue is placed on the same platter or container used for the raw meat.

To prevent cross contamination, observe the following precautions:

- Keep hands, utensils and work area clean.
- Before handling food **wash hands** thoroughly using soap and hot water.
- Thoroughly wash and **sanitize** all surfaces such as knives, cutting boards, countertops and sinks that have been in contact with raw meats, fish and poultry. Wash with hot, soapy water. Sanitize using a dilute solution of household bleach (½ ounce or 1 tablespoon of bleach per gallon of water) or other approved sanitizer. Sanitizing will kill food poisoning bacteria remaining on the surface.
- Use a designated cutting board for raw meats and poultry and another **separate** cutting board for cooked or ready-to-eat foods.
- Store raw meats on a **lower** shelf in the refrigerator below ready-to-eat foods.
- Always use a clean utensil when tasting food. Do not double dip.

## Safe Food Sampling Tips

- If food samples are provided to the public, cook the food by following manufacturer's cooking instructions and pre-cut into sample portions.
- Prevent the public from handling food samples by providing them with toothpicks or single-use containers.
- Replace samples if they have been displayed for over an hour and discard leftover samples and those that may have been contaminated.

**Unsafe food does not always have an altered appearance, odour, or taste.** So, if you ever doubt the safety of the food you have prepared, do not use it; **someone's health may be at stake.**

## When in Doubt Throw it Out

