

Food Premises Reference Document, 2019

Ministry of Health and Long-Term Care

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1. Preamble

Reference Documents are program or topic-specific documents that provide information and best practices relevant to implementing the Ontario Public Health Standards: Requirements for Programs, Services, and Accountability (Standards), Protocols and Guidelines. Reference Documents are not enforceable; the aim of Reference Documents is to provide professional staff employed by local boards of health support in operationalizing and implementing requirements outlined in the Standards, Protocols and Guidelines.

2. Introduction

Ontario Regulation 493/17, Food Premises (FPR) (pursuant to the *Health Protection and Promotion Act R.S.O. 1990, Chapter H.7*) is an outcome-based regulation to address current and emerging evidence-based food handling practices.^{1,2} Ontario follows nine other outcome-based provincial/ territorial food safety regulations across Canada.

The Food Premises Reference Document, 2019 (FP-RD) represents generally accepted scientific and evidence-based practices for safe food handling and includes summary information about the FPR. The requirements of the regulation are highlighted in shaded boxes to provide clarity on how the requirement is stated in the FPR.

Purpose

The FP-RD aims to assist food service premise operators and Public Health Inspectors (PHIs) to reduce the risk of foodborne illness, promote compliance with the modernized FPR and promote best practices related to food safety.

The FP-RD promotes safe food handling practices by:

- Promoting communications and positive constructive relationships between food service premise operators and PHIs.
- Identifying operational procedures that reduce the risk of food contamination and foodborne illness.

PHIs are well suited to provide education and practical advice with regards to food safety. PHIs are trained in hazard analysis and critical control point (HACCP) - based principles, operational strategies to promote safe food handling, as well as foodborne illness and outbreak investigations. Throughout this document, food premise operators are encouraged to consult with PHIs to work together toward shared food safety outcomes.

3. Food Safety Overview

Approximately 100,000 cases of foodborne illness occur in Ontario each year due to the top reportable enteric pathogens (*Campylobacter*, *Salmonella*, *E. coli*, *Listeria*, and *Yersinia*) commonly transmitted through food. Only a small fraction of these cases (about 4%) are actually reported to boards of health. Often individuals experience mild or short-lived symptoms and do not seek medical attention, as well, a lab test is often required for the board of health to be notified of the illness and to conduct the appropriate investigation. Some foodborne illnesses can result in serious long term health outcomes such as chronic bowel and gastrointestinal problems, autoimmune disorders, neurologic dysfunction, kidney failure and death. Data also shows that the incidence of foodborne illness is higher in vulnerable populations such as, children less than four years old.³ A physician should be consulted for symptoms related to foodborne illness.

Foodborne outbreaks

Instances of suspect or confirmed foodborne illnesses that are notified to the board of health are investigated to verify the food premise is in compliance with the FPR and are operating in a safe manner.

During an outbreak investigation, PHIs will assess the food items that are deemed to be high risk as a contributing factor in the foodborne illness case. Often, PHIs will obtain food samples to have tested in a laboratory to help determine the source of illness.

PHIs will also identify and provide measures that are taken to stop the spread of foodborne illness.

Best Practices:

- Report unusual instances of foodborne illness complaints to the PHI or board of health.
- Ensure employees are not working while ill with symptoms of vomiting and diarrhea.
- Ensure employees conduct adequate hand washing before handling food, between handling raw and ready to eat food products, handling money and any other time they become contaminated.
- Verify safe food handling practices with a food safety plan and ensure all employees are informed of safe food handling.
- It is recommended to have more than one certified food handler on-site to raise awareness and knowledge of food safety risks.
- Keep raw meats separate from cooked or ready to eat foods during storage and handling.

- Ensure that food safety practices are reviewed when implementing new menu items or training employees on food handling activities that are unfamiliar or new to them.
- Always maintain the food premise in a sanitary condition and ensure adequate cleaning and sanitizing of equipment and utensils.
- Ensure food recalls are followed.

4. Overarching Requirements

The overarching requirements of the *Ontario Regulation 493/17, Food Premises* are highlighted here to provide additional information related new requirements that also apply to *Ontario Regulation 503/17, Recreational Camps* and provide further details to support the implementation of these requirements. The requirements discussed in this section are highlighted for ease of access, however it is recommended to read in full and adhere to the requirements as organized under *Ontario Regulation 493/17, Food Premises*.

Accessibility

- S. 14 (1) Every room where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed shall be kept free from live birds or animals.
- (2) Subsection (1) does not apply to any of the following:
1. Service animals described in subsection 80.45 (4) of Ontario Regulation 191/11 (Integrated Accessibility Standards) made under Accessibility for Ontarians with Disabilities Act, 2005 that are in an area of the food premise where food is served, sold, or offered for sale.
 2. Live birds or animals that are offered for sale on food premises other than food service premises, if the medical officer of health has given approval in writing for the keeping of the birds or animals on the premises.
 3. Live aquatic species displayed or stored in sanitary tanks on food premises.

Section 14 of the FPR refers to 'service animals' to align with regulations under the *Accessibility for Ontarians with Disabilities Act, 2005 (AODA)*.

Under *Ontario Regulation 191/11 (Integrated Accessibility Standards)* under the AODA, an animal is considered a service animal if:⁴

- a) the animal can be readily identified as one that is being used by the person for reasons relating to the person's disability, as a result of visual indicators such as the vest or harness worn by the animal; or
- b) the person provides documentation from one of the following regulated health professionals confirming that the person requires the animal for reasons relating to their disability:
 - (i) A member of the College of Audiologists and Speech-Language Pathologists of Ontario.
 - (ii) A member of the College of Chiropractors of Ontario.
 - (iii) A member of the College of Nurses of Ontario.
 - (iv) A member of the College of Occupational Therapists of Ontario.
 - (v) A member of the College of Optometrists of Ontario.
 - (vi) A member of the College of Physicians and Surgeons of Ontario.
 - (vii) A member of the College of Physiotherapists of Ontario.
 - (viii) A member of the College of Psychologists of Ontario.
 - (ix) A member of the College of Registered Psychotherapists and Registered Mental Health Therapists of Ontario. *O. Reg. 165/16, s. 16.*

Commencement of operations

S. 5 A person who gives notice of an intention to commence to operate a food premise to the medical officer of health under subsection 16 (2) of the Act (HPPA) shall include his or her name, contact information and location of the food premise in the notice.

Notification to the board of health before commencing a new operation is required under the HPPA. This section specifies the information that must be included in the notification from the operator. The operator is responsible for providing contact and location information in the notice of intention to commence a food premise. Many boards of health will have a standardized notification form for the operator. The local board of health should be consulted.

Notification of a new food premise allows the opportunity for the PHIs and new operators to communicate about the FPR and address specific information including:

- Contact information for building and fire departments;
- Information about food safety requirements;
- Discuss preliminary food safety considerations for planned food preparation activities;
- Public disclosure of inspection results;

- Access to food handler training;
- Resources to maintain safe operational practices such as signage;
- Application of the risk categorization tool to determine frequency of routine inspections from one to three times per year;
- Determine whether the food premise will participate in special event activities and provide additional resources as necessary;
- Determine whether the operator wishes to open or participate in a farmers market and provide additional resources as necessary;
- Determine whether the food premise will conduct meat processing activities such as curing, dehydrating, or fermenting with the required food safety plan and provide additional resources if necessary; and
- Any other information deemed important for starting a new food premise, as many boards of health have resources for operators.

Classification of either low or high risk food handling would be determined after notification of operation to the board of health depending on type/risk of food served.

Disclosure of inspection results

S. 6 Every operator of a food premise shall ensure that the results of any inspections conducted by a public health inspector are posted in accordance with the inspector's request.

This is a new requirement under the FPR. Public disclosure of inspection results increases transparency by raising awareness and access to inspection results. Many boards of health have some variation of a disclosure program in place. While approaches to on-site posting requirements, and level of detail may vary, they provide consumers with information to help make informed choices about where they dine.

As of January 2018, all boards of health are required to post inspection results of various regulated settings on their website. The specifics of what will be posted at the food premise will be at the request of the PHI, and is based on what currently exists in their jurisdiction. Typically, the on-site posting will consist of interpretive signs or a summary of results. For those jurisdictions with mandatory on-site posting of results through municipal bylaws, this requirement does not change the existing practice. For boards of health with no disclosure program, a generic on-site posting sign will direct the public on how to access inspection results on the board of health website.

Food handler training

S. 32 Every operator of a food service premise shall ensure that there is a least one food handler or supervisor on the premise who has completed food handler training during every hour in which the premise is operating.

To increase food safety knowledge and improve safe food handling practices, food service premise operators are required to ensure that at least one food handler or supervisor is on-site at the food premise who has completed food handler training and is present during every hour the premise is operating.

The FPR requires a food handler who has “completed training”. To complete training, it is expected that all aspects of the food handler training plan, as specified in *The Operational Approaches for Food Safety Guideline, 2018* (or as current),⁵ including the 70% pass and certificate are complete.

The FPR sets out minimum requirements. PHIs can encourage all food premise operators to obtain food handler training as a component of the annual risk categorization under the *Operational Approaches for Food Safety Guideline, 2018* (or as current).⁵ PHIs can also promote additional training or recertification for food handlers whose lack of hygiene or inadequate food preparation practices have been implicated in a foodborne illness or outbreak under the *Food Safety Protocol, 2018* (or as current).

Ontario has recognized a variety of public and commercial food handler certification courses. Culinary programs across Ontario now require food handler training certification as a component of the program. Please refer to the [Ministry of Health and Long-Term Care's Environmental Health website at http://health.gov.on.ca/en/pro/programs/publichealth/enviro/](http://health.gov.on.ca/en/pro/programs/publichealth/enviro/) for more information.

It is advisable to have more than one food handler and/or supervisor trained with a food handler certificate. Increased food safety training and awareness is essential to operating a safe food environment. There may also be instances when a food handler requires back-up or coverage when on sick leave and it is a good practice to have alternative measures in place.

Operators may find it convenient to have copies of the food handler certificate(s) available on-site and to ensure they are easily accessible for the PHI to review.

Note: Food handler certificates expire every 5 years and must be kept up to date.

The *Operational Approaches for Food Safety Guideline, 2018* (or as current)⁵ includes minimum requirements for board of health program delivery including:

- The provision of food handler training programs delivered by boards of health, or on behalf of boards of health;
- Standardized food handler training examinations;
- Provincial food handler certification card and template; and

- Acceptance of certifications awarded by non-board of health providers recognized by the Ministry of Health and Long-Term Care.
- A component of the food handler training program requirements includes a 70% pass on the examination and issuance of a certificate to the successful candidates.

Note: There may be instances as described in the *Operational Approaches for Food Safety Guideline, 2018* (or as current),⁵ where “temporary special event halls (e.g., church basements, community centres, etc.), rent or use the food premise to host private functions.” The following should be considered:

- The structural components of the special event halls are required to be inspected no less than once a year (e.g., adequate potable water).
- A special event hall as defined above would not require a food handler or supervisor on the premise who has completed food handler training so long as the hall is rented or used for the purposes of a private event (those that rent the hall are considered users of the space and it is a private event).
- If the hall is a full-service banquet hall with on-site food preparation and the facility is not usually available for private rental or hire, then the requirement to have a trained food handler or supervisor would apply.

These private functions should be distinguished from commercial food businesses where the commercial food business rents shared community spaces for the purposes of selling food to the public. The requirement to have a trained food handler or supervisor would apply.

5. Mobile Food Premises

Mobile food premises include a trailer, cart or vehicle-mounted food premise or other itinerant food premise which is capable of being readily moved and in which food is prepared and offered for sale to the public. Operators are encouraged to speak with a PHI to ensure they are adequately equipped and follow safe food handling practices.

4. (1) In every mobile food premise,

- (a) food shall be prepared within the premise and served to the public by persons working within the premise;
- (b) only single-service articles shall be used to serve the food;
- (c) separate holding tanks shall be provided for potable water and waste water; and
- (d) every waste tank and water supply tank shall be equipped with an easily readable gauge for determining the waste or water level in the tank.

(2) Clauses (1) (c) and (d) do not apply to mobile food premises that sell only pre-packaged or non-hazardous food.

Mobile premises, including street food vending carts, may serve hazardous foods that are prepared in a safe manner and follow the requirements set out in the regulation. Removing the regulatory list of prescribed foods and permission from the local medical officer of health to serve any food not on the list of prescribed foods provides consistency across boards of health.

Standardized regulatory requirements improve consistency in enforcement across the province, as mobile premises may travel between public health units.

6. Operation and Maintenance

Sanitary conditions

The sections of the FPR pertaining to sanitary operations and maintenance of a food premise have been streamlined to be user-friendly. The requirements are focused on sanitary maintenance of floors, walls, ceilings, food preparation and storage areas, equipment, utensils and multiservice articles, to ensure adequate supply of potable hot and cold running water, hand washing stations and refrigerated space. The applicable sections of the FPR include sections 7-17.

S. 7 (1) Every food premise shall be operated and maintained such that,
(a) the premises are free from every condition that may,
(i) be a health hazard
(ii) adversely affect the sanitary operation of the premises, or
(iii) adversely affect the wholesomeness of food therein;

This section of the FPR prohibits unsafe practices that may cause illness or injury to a person. Where a health hazard exists, a PHI has the authority to issue a health hazard order (s. 13 of the HPPA) to close a food premise.

Under the HPPA, a health hazard is defined as:

- a condition of a premises,
- a substance, thing, plant or animal other than man, or
- a solid, liquid, gas or combination of any of them,
that has or that is likely to have an adverse effect on the health of any person.

S. 7 (1) (b) Every food premise shall be operated and maintained such that no room where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed is used for sleeping purposes.

Food premise operators and employees are prohibited from sleeping in a food premise or have any articles that could be used for sleeping (e.g., mattress, pillows, etc.). It is

particularly important to keep personal items away from food preparation and storage areas.

- S. 7 (1) (c) Every food premise shall be operated and maintained such that the floor or floor coverings are tight, smooth, and non-absorbent in rooms where,
- i. food is prepared processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed,
 - ii. utensils are cleaned, or
 - iii. washing fixtures and toilet fixtures are located.

Operators are responsible for ensuring the floors are constructed in a manner that is easy to clean and supports a sanitary environment. It is also important to prevent pooling of water that can harbour bacteria and to maintain the floor so that there is not a slipping or tripping hazard.

- S. 7 (1) (d) Every food premise shall be operated and maintained such that the walls and ceilings of rooms and passageways may be readily cleaned and may be maintained in a sanitary manner.

Operators are responsible for ensuring the walls and ceilings are constructed and maintained in a manner that is easy to clean and support a sanitary environment.

- S. 7 (1) (e) Every food premise shall be operated and maintained such that every room in the premise where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed is maintained in a sanitary condition so as to prevent the contamination of food;

Operators should develop a regular cleaning procedure to ensure the food premise is maintained in a sanitary condition. Generally, all surfaces are to be maintained so that they are free from accumulated dust, debris, grease, and/or other residues.

Illness causing bacteria can survive on many surfaces and spread through a food premise through cross contamination to other areas. It is important to keep all areas of the food premise clean to prevent potential spread of bacteria.

- S. 7 (1) (f) Every food premise shall be operated and maintained such that every room where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed is kept free from materials and equipment not regularly used in the room;

Removing materials and equipment that are not regularly used will help maintain the food premise in a sanitary condition as it will remove clutter and save time otherwise spent keeping these items clean.

S. 7 (1) (g) Every food premise shall be operated and maintained such that the floors, walls and ceilings of every room where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed are kept clean and in good repair.

Floors, walls and ceilings that are not kept clean or in good repair can result in accumulated debris and other residuals that support the growth of bacteria and attract pests.

S. 7 (1) (h) Every food premise shall be operated and maintained such that single-service containers and single-service articles are kept in such a manner and place as to prevent contamination of the containers or articles.

Since single-service items are used in the serving of food items to customers, it is important to store these items in a manner that protects them from potential contamination. It is important for operators to work with a PHI to identify adequate and appropriate storage areas for these items. These items cannot be re-used and must be discarded after use by a patron.

S. 7 (3) Every food premise shall be provided with,
(a) a supply of potable water adequate for the operation of the premises;
(b) hot and cold running water under pressure in areas where food is processed, prepared or manufactured or where utensils are cleaned;

The supply of adequate potable water means water that is clean and free from contamination. Drinking water is most often supplied from a municipal source or drinking water system regulated under the *Safe Drinking Water Act, 2002* and inspected by the Ministry of Environment, Conservation and Parks. However, some food premises are supplied by a Small Drinking Water System regulated under the HPPA and inspected by a PHI. It is important for operators to discuss drinking water sources with a PHI.

Hand washing

S. 7 (3) (c) Every food premise shall be provided with an adequate number of hand washing stations that are maintained and kept adequately supplied and that are situated for convenient access by food handlers and used only for the hand washing of employees.

Adequate hand washing is a critical step to prevent the transmission of foodborne pathogens in food. It is one of the most important activities that keep food safe. It is important to encourage frequent hand washing through convenient, unobstructed, and fully stocked hand washing stations with liquid soap from a dispenser.

Adequate refrigeration space

S. 7 (3) (d) Every food premise shall be provided with refrigerated space adequate for the safe storage of potentially hazardous food.

Potentially hazardous foods are those items that must be maintained at 4° Celsius or less to ensure food safety. Over stocking refrigerators can result in temperature fluctuation and poor air circulation that can expose food items to inadequate temperatures. It is also important that food items are stored properly to prevent contamination and allow for proper turnover such as using a “first-in first-out” method. This method will ensure food items that first enter the refrigerator are used first and will contribute to serving customers quality ingredients.

Equipment, utensils and multi-service articles

S. 8 (1) All equipment, utensils and multi-service articles that are used for the preparation, processing, packaging, serving, transportation, manufacture, handling, sale, offer for sale or display of food in a food premise shall be,

- (a) of sound and tight construction;
- (b) kept in good repair;
- (c) of such form and material that it can be readily cleaned and sanitized;
- and
- (d) suitable for their intended purpose.

(2) Equipment and utensils that come into direct contact with food shall be,

- (a) corrosion-resistant and non-toxic; and
- (b) free from cracks, crevices and open seams.

Equipment, utensils and multi-service articles often come into contact with food or food residuals either directly or indirectly. These articles must be constructed and maintained so that they can be thoroughly cleaned and sanitized to prevent the spread of bacteria. If there are cracks or crevices, harmful bacteria may be hard to remove. It is also important that the equipment and utensils that are in direct contact with food are corrosion-resistant and non-toxic so that it does not contaminate the food item.

Arrangement of furniture

S. 9 Furniture, equipment and appliances in any room or place where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed shall be so constructed and arranged as to permit thorough cleaning and the maintaining of the room or place in a clean and sanitary condition.

Constructing and arranging furniture, equipment and appliances to permit thorough cleaning enables the operator and employees to adequately remove food debris and food residual which prevents the spread of harmful bacteria, prevents pest and rodent infestations, and supports a clean and sanitary operation.

Illumination

S. 10 The levels of illumination required under *Ontario Regulation 332/12* (Building Code) made under the *Building Code Act, 1992* shall be maintained in a food premise during all hours of operation.

Adequate lighting is required for the safe preparation of food and to promote cleanliness by facilitating the identification of unclean areas. It is also important to have a shield covering the light bulb to prevent contamination of food from glass or plastic fragments should the light bulb break.

The FPR does not directly set out prescriptive requirements for lighting. Instead, it refers to the lighting requirements set out in *Ontario Regulation 332/12* (Building Code or OBC).⁶ The OBC establishes standards for the construction of buildings, which are enforced by local building officials. Section 10 of the FPR (*O. Reg. 493/17*) requires owner/operators to maintain those lighting requirements set out in the OBC during all hours of operation of a food premise, as adequate lighting is critical to allow food to be prepared safely. In the event that the owner/operators of a food premise do not maintain these levels of illumination, PHIs can address non-compliance with this section of the FPR. PHIs are encouraged to consult with local building officials regarding specific concerns related to the lighting requirements set out in the OBC.

For reference, the following are some of the Building Code requirements regarding minimum levels of illumination that are incorporated into the FPR:

Ontario Regulation 332/12 (Building Code)

Selected sections:

3.2.7.1. Minimum Lighting Requirements

- (7) Every area where food is intended to be processed, prepared or manufactured and where equipment or utensils are intended to be cleaned shall be equipped to provide illumination to a level of not less than 500 lx measured at the floor level.
- (8) Every storage room, dressing room, sanitary facility, service area and corridor serving the areas in Sentence (7) shall be equipped to provide illumination to a level of not less than 300 lx measured at the floor level.

3.2.7.3. Emergency Lighting

- (1) Emergency lighting shall be provided to an average level of illumination not less than 10 lx at floor or tread level in,
 - (j) Food preparation areas in commercial kitchens.

Ventilation

S. 11 The ventilation system in every food premise shall be maintained to ensure the elimination of odours, fumes, vapours, smoke and excessive heat.

The ventilation system in the food premise must be free from excessive dust, odours, or grease build-up that can lead to excessive heat as these are potential sources of food contamination and can pose as a fire hazard.

Garbage and wastes

S. 12 Garbage and wastes, including liquid wastes, shall be collected and removed from a food premise as often as is necessary to maintain the premise in a sanitary condition.

It is recommended that operators discuss appropriate management of their waste streams such as garbage, recyclables and source separated organics, as well as liquid wastes with a PHI. It is important to ensure the waste generated by the premise does not attract pests and that it does not accumulate in a manner that prevents the premise from operating in a sanitary condition. It is often recommended to have a regular waste collection schedule, to keep lids on waste receptacles, and to keep the waste receptacles clean, and if necessary, rodent resistant.

Pest control

- S. 13 (1) Every food premise shall be protected against the entry of pests and kept free of conditions that lead to the harbouring or breeding of pests,
- (2) Every operator of a food premise shall maintain records of all pest control measures that are undertaken in the premise and shall retain the records for at least one year after they are made.

The addition of pest control requirements are to ensure a food premise is protected from and addresses pest activity. This requirement ensures that operators are responsible for monitoring and control measures such as integrated pest management. Whether an operator has a contract with a pest control company or monitors pests on their own, records are to be retained.

Live birds or animals

- S. 14 Every room where food is prepared, processed, packaged, served, transported, manufactured, handled, sold, offered for sale or displayed shall be kept free from live birds or animals.

Exemptions to this requirement are for service animals (discussed previously), live aquatic species stored in sanitary tanks, live birds or animals that are offered for sale on food premises other than food service premises, and if the Medical Officer of Health (MOH) has given written approval in writing for the keeping of the birds or animals on the premises.

Table covers, napkins and serviettes

- S. 15 Table covers, napkins or serviettes used in the service of food shall be clean and in good repair.

All articles are to be clean and in good repair to ensure the premise is operating in a sanitary manner.

Cloths and towels

- S. 16 Cloths and towels used for cleaning, drying or polishing utensils or cleaning food contact surfaces shall be,
- (a) in good repair;
 - (b) clean; and
 - (c) used for no other purpose.

Cloths and towels can be a source of harmful bacteria and can spread bacteria within the premise if used improperly or if they are not properly maintained. Cloths that are used in the food preparation areas should not be used for cleaning other surfaces or sanitary facilities. It is recommended that each area have its own cloth or towel and that is used only for its intended purpose. It is also important to ensure reused cloths and towels are cleaned and sanitized to prohibit microbial growth and function as a source of cross contamination.

Vending machines

- S. 17 (1) Every vending machine in a food premise that automatically mixes water to create a product shall be provided with a potable water supply piped into the machine under pressure.
- (2) The name and telephone number of the operator of a vending machine shall be prominently displayed on or near the vending machine if an employee of the operator is not in full-time attendance.

This requirement addresses the unique nature of vending machines in a premise since many operate automatically without employee assistance. Vending machines are not exempt from the FPR requirements (e.g., adequate maintenance, temperature control (if applicable), cleaning as per manufacturer's instructions etc.).

Sanitary facilities (Part V of Reg. 493/17)

S. 24 (1) No operator of a food premise shall alter the floor space, number of toilets or washbasins in a sanitary facility without first receiving approval in writing from a public health inspector

(2) Subsection 1) does not apply if the food premise is a meat plant licensed under Ontario Regulation 31/05 (Meat) made under the *Food Safety and Quality Act, 2001* or a plant licensed under the *Milk Act*.

Once a food premise has been approved by the MOH to operate and has also obtained other applicable approvals such as licensing approvals from building and fire inspectors, the design and operation of the sanitary facilities must not be changed or used for any other purpose. If a food premise operator wants permission to alter this space, approval in writing from a PHI is required. Prior to making any alterations the necessary building permits must be obtained from the local building officials.

S. 25 (1) Every operator of a food premise shall ensure that sanitary facilities are maintained in accordance with the design, construction and installation requirements in Ontario Regulation 332/12 (Building Code) made under the Building Code Act, 1992.

The OBC sets out the technical requirements that govern the construction, renovation, demolition and change of use of a building. The OBC includes a number of design, construction and installation requirements for sanitary facilities, including setting out the minimum number of required sanitary facilities, air ventilation requirements and requirements for barrier-free accessibility. Section 25(1) of the FPR requires operators of food premises to ensure sanitary facilities are maintained in accordance with the OBC requirements for sanitary facilities. In the event that the operator of a food premise does not ensure the sanitary facilities are maintained, PHIs can address non-compliance with this section of the FPR. PHIs are encouraged to consult with local building officials regarding specific concerns related to the sanitary facility requirements set out in the OBC.

- S. 25 (2) Every sanitary facility in a food premise shall be kept sanitary, properly equipped and in good repair at all times.
- (3) Every sanitary facility in a food premise shall be equipped with,
- (a) A constant supply of hot and cold running water;
 - (b) A supply of toilet paper;
 - (c) A durable, easy-to-clean receptacle for used towels and other waste material;
 - (d) A supply of soap or detergent; and
 - (e) A method of hand drying that uses single-service towels or hot air dryer.

Sanitary facilities are important for personal hygiene, hand washing, and preventing the spread of harmful bacteria from the sanitary facility to food preparation and service areas. The above requirements provide for adequate hygiene, hand washing, and the sanitary maintenance of the facilities. It is important to always wash hands after using the sanitary facility.

Where water-flush toilets cannot be installed, the operator may be exempt from the sanitary facilities requirements (3) (a), (3) (d), and (3) (e), however this would not be a common circumstance as sanitary facility construction must follow the *Building Code Act, 1992*. It is recommended that operators discuss this requirement with a PHI if necessary.

7. Safe Food Handling

Food safety plan

A food safety management plan, as discussed in the *Operational Approaches for Food Safety Guideline, 2018* (or as current), is recommended to ensure proper food safety practices, and procedures are implemented and monitored. A food safety management plan is a documented, systematic approach, applied by food premise operators to identify and assess hazards and risks associated with a food operation and defining the means of their control. Examples of components to consider in a food safety management plan include:

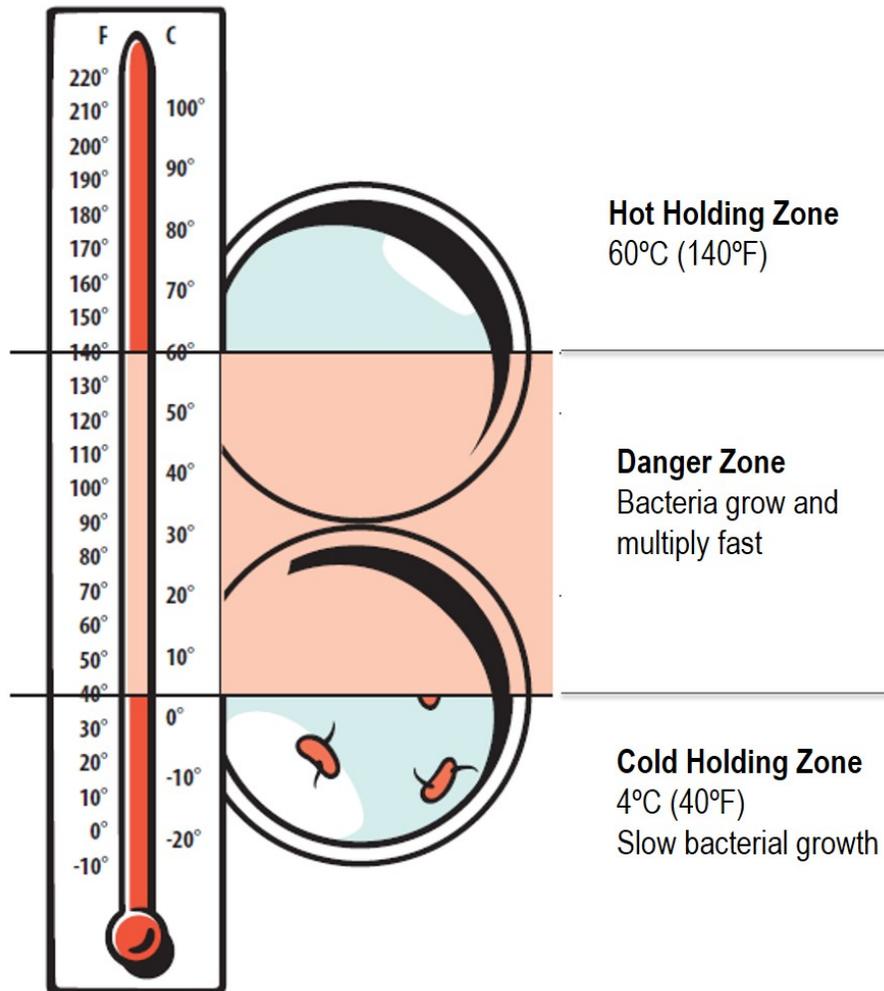
- Hazard analysis: Identify all possible food safety hazards that could cause a food item to be unsafe for consumption and the measures that can be taken to control those hazards.
- Critical control point (CCP) monitoring: Identify the points in the food preparation process where an action can be taken to prevent, eliminate, or reduce a food safety hazard to an acceptable level.

- Critical limits for each CCP: A critical limit is the limit at which a hazard is acceptable without compromising food safety (i.e., specific time and temperature for cooking).
- Monitoring procedures to monitor CCPs: This includes signage at CCPs for hot holding and refrigeration temperatures and recording internal temperatures of potentially hazardous foods.
- Corrective actions: Actions must be taken to bring the food item back to safe levels or determination for the product to be discarded. Verification procedures ensure that the monitoring and corrective actions are conducted according to the food safety management plan.
- Record keeping: Recording the time and temperature of potentially hazardous foods for monitoring purposes through each preparation stage.

Food safety management plans are a best practice that can help enhance a food premises yearly risk assessment that determines food inspection frequency and can also be used for specialty food items.

Food safety management plans are **mandatory** for manufactured meat products and must be approved by an MOH or PHI.

The leading cause of foodborne illness is time and temperature abuse. Temperature abuse of food occurs when food is left at temperature that is above 4°Celsius or below 60°Celsius. This temperature range is commonly called The Danger Zone. Below is an illustration of the temperatures that should be known.



Food handling requirements

Food premise operators are advised to consult with the local PHI to review food handling practices of potentially hazardous foods to ensure it is processed in a manner that makes food safe to eat.

- S. 26 (1) All food shall be protected from contamination and adulteration.
 (2) All food must be processed in a manner that makes the food safe to eat.
 (3) Subject to subsection (4) food that has previously been served to a customer shall not be re-served.*
 (4) low-risk food that was previously served in packaging or a container that protects the food from contamination may be re-served if the packaging or container has not been compromised and the food has not been contaminated.
 (5) Ice used in the preparation and processing of food or drink shall be made from potable water and shall be stored and handled in a sanitary manner.

Internal cooking temperatures

All temperatures referenced in this document refer to internal food temperatures that can be monitored by using a probe thermometer.

Internal cooking temperatures are not specified in the FPR, instead the FPR focuses on evidence-based food safety practices.

An outcome-based requirement to ensure food is processed so that it is safe to consume and allow flexibility for other evidence-based safe food processing methods is included to allow for new dishes or food trends such as sous vide.

Operators are expected to continue to follow evidence-based internal cooking temperatures, unless they are able to demonstrate evidence-based safe practices and approved by a PHI or MOH.

Therefore, potentially hazardous food should be cooked to the minimum internal temperature specified and the temperature should be held for 15 seconds to ensure the food item is safe to eat. Internal temperatures can be verified through use of a cleaned and sanitized probe thermometer. Other validated internal temperatures, timelines and cooling parameters by partner agencies are available, such as the Canadian Food Inspection Agency (CFIA) [Meat Hygiene Manual of Procedures](#).

Item	Minimum Internal Cooking	Minimum Reheating
Whole poultry	82°C (180°F)	74°C (165°F)
Ground poultry, poultry products, poultry pieces	74°C (165°F)	74°C (165°F)
Food mixtures containing poultry, eggs, meat, fish or other hazardous food	74°C (165°F)	74°C (165°F)

Item	Minimum Internal Cooking	Minimum Reheating
Pork, pork product, ground meat other than ground poultry	71°C (160°F)	71°C (160°F)
Fish	70°C (158°F)	70°C (158°F)
Seafood	74°C (165°F)	74°C (165°F)

Cooling after cooking

Improper cooling of hot foods is one of the top contributing factors of foodborne illness; however, illnesses arising from this are often underreported due to the more mild and limited onset of symptoms. For most food items, fully cooking the dish prior to cooling often prevents bacterial growth; however, some pathogens such as *Clostridium perfringens*, a heat-resistant spore forming bacteria, can survive in the food and cause illness if left in the temperature danger zone for long lengths of time.

While there are no prescribed cooling parameters in the FPR, best practices for the rapid cooling of hot foods include:

- Use shallow stainless steel food storage containers.
- Store hot food mixtures within an ice bath and stir the food mixture often.
- Use a clean ice wand.
- Most commercial refrigerators are designed to hold food that is already chilled; most are not intended to cool large volumes of hot food. Be sure to monitor the refrigerator temperature to ensure adequate temperature control is maintained.
- Monitor the internal temperature of the food item to ensure it meets the accepted cooling parameters.

Accepted cooling parameters

60°Celsius to 20°Celsius within 2 hours and, 20°Celsius to 4°Celsius within 4 hours.

Cooling from room temperature

This generally means foods prepared at room temperature (or their ingredients) and placed back into the refrigerator prior to serving, have approximately 4 hours to reach 4°Celsius. For example, fresh whole vegetables stored at room temperature that are sliced or chopped into a salad would require refrigeration if not served immediately.

Cold holding

S. 27 (1) (a) Potentially hazardous food shall be distributed, maintained, stored, transported, displayed, sold and offered for sale only under conditions in which the internal temperature of the food is 4°Celsius or lower.

All potentially hazardous food must be stored at a temperature of 4°Celsius or less. This includes foods that have been prepared and cooled to be served cold.

Hot holding

S. 27 (1) (b) Potentially hazardous food shall be distributed, maintained, stored, transported, displayed, sold and offered for sale only under conditions in which the internal temperature of the food is 60°Celsius, or higher.

Potentially hazardous foods that have been prepared, cooked, and are intended to be served hot, must be held at a temperature of at least 60°Celsius.

Ensure equipment for refrigeration or hot-holding of potentially hazardous food is of sufficient size and contains accurate indicating thermometers that are easy to read.

Holding in temperature danger zone (2 hour max)

S. 27 (2) Subsection (1) does not apply,
(a) to a potentially hazardous food during those periods of time, not to exceed two hours, that are necessary for the preparation, processing and manufacturing of the food;

Clarification has been included in the FPR to allow for realistic occurrences of some food items entering the temperature danger zone during preparation activities for no more than two hours.

- This does not allow potentially hazardous foods to be held at room temperature for any other reason.
- This does not apply to low-risk food items identified with a label indicating *shelf stable* or does not indicate a requirement for refrigeration on the package.

Best Practice:

- Foods are clearly marked with the time at which they were removed from temperature control and with the time at which they must be discarded.
- Foods must be at or below 4°Celsius or at or above 60°Celsius at the starting time.

- Sanitary conditions in the premises are maintained to adequately protect food from contamination.

Frozen food to be kept frozen

S. 28 Food that is intended to be distributed, maintained, stored, transported, displayed, sold or offered for sale in a frozen state shall be kept in a frozen state until sold or prepared for use.

Frozen food items tend to have better quality when stored at colder temperatures. In a jurisdictional review of regulatory requirements for a specified freezing temperature it was found that 39/67 (58%) of national and international food safety regulations do not have a specific temperature for foods held under freezing temperatures.

Food processing records and approved source

S. 29 (1) Any food that is liable under law to inspection by the Government of Canada or Ontario, or by an agency of either, in a food premise must be obtained from a source that is subject to inspection by that entity unless otherwise permitted under this Regulation and,

(2) Every operator of a food premise shall ensure that records of the purchase of food for use in the premise are retained on the premise at least until the first anniversary of the purchase.

Operators must obtain food products (e.g., dairy meat, hen eggs, honey) from sources that are subject to inspection under provincial and federal legislation, such as the CFIA and Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA). This is to ensure all food items are from safe and approved sources.

Food items that do not fall under provincial or federal legislation, must be safe to consume (e.g., quail eggs) and a record of purchase must be retained.

Records must also be retained for all food items used in the food premise for one year. This requirement will aid in verifying product traceability in the event of foodborne illness and outbreaks where a product may be implicated in a food recall.

Potentially hazardous food storage

- S. 30 The equipment used for refrigeration or hot-holding of potentially hazardous foods must,
- (a) Be of sufficient size to store any potentially hazardous food and maintain it at the applicable temperature set out in section 27; and
 - (b) Contain accurate indicating thermometers that may be easily read.

Potentially hazardous food must be maintained at the correct temperature at all times; however, if the size of the equipment is inadequate it becomes possible that the food item may be at risk of temperature abuse. It is also important to monitor the temperature of the refrigerator or hot holding equipment to verify that the equipment is capable of maintaining the potentially hazardous food items at the correct internal temperature. Where it is difficult for equipment to contain an accurate indicating thermometer, such as a steam table, it is advised to consult with the PHI. The focus is to ensure adequate hot holding of the food item and food safety. The use of temperature monitoring through probe thermometers and recording of temperatures on a log sheet has been discussed as a recommended approach by some local boards of health.

Other food storage

- S. 31 Racks, shelves or pallets that are used to store food in a food premise must be designed to protect the food from contamination and must be readily cleanable.

This is an outcome-based requirement that reflects the variety of food storage practices a food premise may require. It is important for operators to work with a PHI to determine the best method for protecting food from contamination, or possible contamination, and maintaining the storage equipment in a clean and sanitary manner.

Demonstration of safe food handling

The following are regulatory requirements under the FPR with additional information on safe food handling.

- S. 33 (1) Every operator of a food premise shall ensure that every food handler in the food premise shall,
- (a) not use tobacco while engaged as a food handler;

Smoking indoors is prohibited in Ontario and tobacco is not to be used while handling food.

S. 33 (1) (b) Every operator of a food premise shall ensure that every food handler in the food premise shall be clean and practise good personal hygiene;

When working in a food premise it is important to have good personal hygiene to prevent direct or indirect contamination of food.

S. 33 (1) (c) Every operator of a food premise shall ensure that every food handler in the food premise shall wear clean outer garments;

Outer garments that are unclean, have food debris, residuals, or grease on the surface can directly or indirectly contribute to contamination of hands, surfaces, or food items within the food premise.

S. 33 (1) (d) Every operator of a food premise shall ensure that every food handler in the food premise shall take reasonable precautions to ensure that food is not contaminated by hair;

Operators are to ensure that every food handler in the food premise takes reasonable precaution to ensure that food is not contaminated by hair. This may include the use of hair nets, baseball caps, visors and beard nets at the operator's discretion as long as the outcome is adequately protecting food from contamination.

S. 33 (1) (e) Every operator of a food premise shall ensure that every food handler in the food premise shall wash hands as often as necessary to prevent the contamination of food or food areas;

Food handlers are to thoroughly wash their hands before commencing work, each time after using the bathroom, when returning from a break, after consuming food, after handling raw food products, or any other activity or instance where hands may become soiled. Thorough hand washing includes vigorously rubbing together the surfaces of the lathered hands and exposed arms for at least 20 seconds followed by rinsing with clean water. Particular attention should be given to the tips of the fingers and between the fingers where food contact is most likely to occur.

S. 33 (1) (f) Every operator of a food premise shall ensure that every food handler in the food premise shall be free from any infectious agent of a disease that may be spread through the medium of food;

Many human illnesses can be transmitted to food from sneezing, coughing, vomiting, or diarrhea. It is very important to protect the food from contamination from human illness. If a food handler is experiencing vomiting and diarrhea they must not be permitted to handle food until symptom free for 24 hours, or symptom free for 48 hours after

discontinuing use of anti-diarrheal medication. It is also important to note that the bacteria or viruses can survive after symptoms resolve and continue to spread if the individual does not practice adequate hand washing or personal hygiene.

S. 33 (1) (g) Every operator of a food premise shall ensure that every food handler in the food premise shall submit to such medical examinations and tests as are required by the medical officer of health to confirm the absence of an infectious agent mentioned in clause (f); and

The MOH has the authority to ask a food handler to submit to medical examination and tests to confirm the absence of an infectious agent.

S. 33 (1) (h) Every operator of a food premise shall ensure that every food handler in the food premise shall refrain from any other conduct that could result in the contamination of food or food areas.

(2) A person who has a skin disease shall not perform any work that brings him or her into contact with food unless he or she has obtained the approval of the medical officer of health in writing before performing the work.

The skin is a vital barrier of protection but it can also be a mechanism to transmit bacteria such as *Staphylococcus aureus* or other harmful bacteria. Since there are a variety of skin diseases, it is important to ensure the skin condition cannot make other individuals sick.

Additional Recommendations:

- Use of thermometers: Accessible probe thermometers are located conveniently for food handlers to monitor time and temperature control of potentially hazardous foods.
- Records for monitoring temperature control: It is recommended to have a system in place for monitoring and recording temperatures of potentially hazardous food items.
- Sanitation procedures: This may include cleaning and sanitizing frequency of food contact surfaces and equipment, recording the concentration of sanitizers used, and schedules for cleaning equipment and sanitary maintenance of the food premise.
- Best practices to protect food from contamination may include, but are not limited to:
 - Food is protected by enclosed containers, cabinets, shields and shelves.
 - Food is transported in enclosed containers.
 - Food items are handled in a manner to prevent cross contamination by unclean equipment, utensils, food storage and preparation practices.All food is stored off the floor.

Additional Considerations

Food recalls

The CFIA initiates the food safety investigation and recall process when there is reason to believe that a potentially contaminated product has entered the marketplace. The CFIA informs the public of a recall, oversees the implementation of the recall and verifies that all recalled products are removed from store shelves. Food safety investigations are initiated when:

- There are cases of illness linked to a food or product.
- Food is tested and the results indicate a possible contamination.
- Inspection findings identify a concern.
- Consumer complaints are received.
- There are recalls from other countries that demonstrate a food safety risk.

Recalls can occur after food safety investigations are completed. The board of health supports food recall notifications by:

- Immediately notifying the CFIA's Area Recall Coordinator when a recalled product is found.
- Monitoring for recalled food in the marketplace as part of regular inspections of food premises.
- Educating operators of institutions that serve vulnerable populations (such as hospitals, long-term care facilities, and child care centres) to ensure they are aware of CFIA's web-based Food Recalls and Allergy Alerts so that they are able to take appropriate action.

Refer to the full *Operational Approaches for Food Safety Guideline, 2018* (or as current).

It is recommended that all food premises are informed of food recalls and to subscribe to [food recall notifications](#).

Farmers markets

The FPR exempts certain farmers' market food vendors from being subject to compliance with the regulation. However, in accordance with the *Operational Approaches to Food Safety Guideline, 2018* (or as current), boards of health must use a consistent approach to assess and recognize exempted farmers' markets:

- The board of health is to request initial verification from each farmers' market operator or agent of the farmers' market, to assess, whether an exemption applies. This assessment should be based on the anticipated peak of the farmers' market operation and based on the best available information provided by the market operator.

- The exemption applies if greater than 50% of the vendors are producers of farm products who are primarily selling or offering for sale their own products intended for use as food. All vendors including non-food vendors should be considered as part of the farmers' market. Operators exempted from the FPR will be requested to maintain an inventory of vendors on-site or have access available to the inventory for the PHI to monitor the ongoing application of the exemption.
- Farmers' market operators that do not demonstrate the majority of vendors are producers of farm products who are primarily selling or offering for sale their own products will be subject to the FPR.
- Additional assessments and/or inspections should be carried out as necessary to ensure compliance with the *HPPA* including recommendations from PHIs, suspected food-borne illness/outbreaks, consumer complaints and food recall action.

Refer to the full *Operational Approaches for Food Safety Guideline, 2018* (or as current).

Special events risk assessment

In accordance with the *Operational Approaches for Food Safety Guideline, 2018* (or as current), the board of health is responsible to develop a plan to manage and assess special events in order to determine appropriate public health action that includes education and/or inspection. The board of health is to determine whether a special event and/or individual food vendors are exempt from the FPR. If the special event vendor and/or individual food vendor is not exempted from the FPR, the following factors should be considered, at a minimum in assessing further public health action:

- The type of food being served
- Complexity of food processing and preparation
- The length of the event (e.g., number of days)
- Expected number of attendees
- Expected number of food vendors
- Previously linked foodborne illness/ outbreak
- If special event is serviced by municipal water or power
- If the participating food vendors are routinely inspected food premises

For more information refer to: Association of Supervisors of Public Health Inspectors of Ontario (ASPHIO) *Common Approaches for Farmers' Markets and Exempted Special Events: a Guide for Public Health Units*; as well as the requirements for boards of health, outlined in the *Operational Approaches for Food Safety Guideline, 2018* (or as current).

Food donations

Food donations are one component of a comprehensive food system. Food donations from an inspected food premise to a food charity can be done safely by ensuring both

the donor and recipient follow safe food handling practices and meet the requirements of the FPR. Operators are encouraged to discuss all instances of food donation with a PHI to ensure all food donations are done safely.

Priority populations

It is also important to keep in mind when assessing food safety practices the population that is served. *The Operational Approaches for Food Safety Guideline, 2018* (or as current) defines priority populations as: Those that are experiencing and/or at increased risk of poor health outcomes due to the burden of disease and/or factors for disease; the determinants of health, including the social determinants of health; and/or the intersection between them. They are identified using local, provincial and/or federal data sources; emerging trends and local context; community assessments; surveillance; and epidemiological and other research studies.

Vulnerable or at-risk populations are more likely to experience serious complications associated with the consumption of contaminated food, such as immunocompromised individuals, the elderly, pregnant women and children. Food premises that serve these populations include kitchens and serveries in hospitals, nursing or long-term care homes and child care settings.

8. Specialty or High Risk Food Items

Due to the variable nature of potential foodborne illness risks with the example food items discussed below, PHIs have the authority to approve or deny these practices based on a risk assessment within their public health unit. Specialty food items include dishes such as raw meat dishes (e.g., steak tartare, carpaccio), sushi and sashimi and sous-vide. Note: The [Food Safety for First Nations People of Canada: A Manual for Healthy Practices](#) may be a suitable resource for the preparation of First Nations and Indigenous foods. The manual is intended to raise awareness on the safe handling, preparation, and storage practices of traditional and store-bought foods, in order to reduce the incidence of foodborne illnesses. As well, further guidance on [ready-to-eat smoked fish and multi-ingredient products containing smoked fish](#) is available from Health Canada.

Raw meat dishes: Steak Tartare and Carpaccio

Raw meat dishes from beef, lamb and pork can be contaminated with pathogens. The risk of foodborne illness depends on the pathogen type and load, which can vary depending on the animal species, different cuts of meat, and on-farm, abattoir, processing plant and restaurant practices. There is also evidence that consumption of contaminated raw meat has led to many foodborne illness outbreaks internationally.⁷

Best Practice:

- For the operator to create a food safety management plan using HACCP-based principles.
- Raw meat dishes should not be served in settings where vulnerable populations are the primary consumer (e.g., child care centres, long-term care homes, retirement homes, hospitals etc.).
- Demonstration of safe food handling practices including a food safety plan should be considered in addition to:
 - Ensure egg and beef are received and stored at 4°Celsius or lower.
 - Use pasteurized eggs or egg products.
 - Rinse and clean the lemon and onion prior to chopping.
 - Meat must be purchased from an approved source.
 - Prepare and consume the raw meat dish as soon as possible after slaughter.
 - Use whole muscle or intact, fresh meat.
 - Prepare the raw meat dish as close to service as possible (15-20 minutes).
 - Apply heat treatment to the meat before grinding or chopping. Similarly sear-and-shave procedures (high temperature treatment of intact meat followed by shaving off the cooked portion of the meat) has the potential to reduce the microbiological load on intact pieces of meat but cannot completely eliminate the risk of food-borne illness. Cook or sear the meat on both the top and bottom sides, to a surface temperature of 63°Celsius.
 - Ensure meat is cooled within evidence-based limits.
 - The addition of garlic, lemon juice and yoghurt to raw meat has been shown to assist in reducing microbial load, but does not eliminate the risk of foodborne pathogens from consuming raw meat dishes.
 - Demonstrate good sanitation and food handling practices.
 - Equipment used for the preparation and processing of raw meat should be thoroughly cleaned and sanitized after each use or as often as necessary, in consultation with a PHI.

Note: The FPR has some flexibility to prepare and serve food that was once prohibited such as steak tartare. However, some foods are known to be high risk are not allowed

to be served in Ontario. One example is raw or undercooked ground meat. Ground meat, such as hamburgers, must be cooked to an internal temperature of 71°Celsius to be safe.

Sushi / Sashimi

Sushi preparation includes preparation of raw fish that is intended to be consumed raw, as well as preparation of sushi rice that often includes the addition of vinegar.

Preparation of raw fish

A food safety plan for the safe preparation of raw fish that is intended to be eaten raw is recommended. Although rare, instances have occurred where parasites have been consumed from eating raw fish.

Best Practice:

- Fish is purchased from inspected sources and records for food purchases, including fish, are kept on-site.
- Operators are encouraged to source out suppliers with pre-frozen raw fish or freeze fish themselves as per the below specifications:
 - Frozen to a temperature of -20° Celsius or below for 7 days; or to a temperature of -35° Celsius or below for 15 hours in a blast freezer.
- Once the raw fish is thawed for preparation, ensure it is kept cold at 4° Celsius or less.
- Ensure all potentially hazardous foods including raw fish are protected from contamination.
- Maintain the food premise in a clean and sanitary condition.

Sushi rice

Sushi rice is often prepared with vinegar to lower the pH to a level that can inhibit microbial growth. However, there is evidence that shows *Bacillus cereus* can grow in acidified rice at a pH of 4.6.⁸

Best Practice:

- Potentially hazardous food items have two hours during preparation at which they can be held in the temperature danger zone.
- Once the preparation is complete, the prepared sushi and rice must be served immediately or cooled in a refrigerator to 4 °Celsius or less.
- A food safety plan is recommended which includes a recipe, ingredients list, retaining temperature control monitoring records and demonstration of safe food handling.

Sous-vide

Sous-vide involves cooking potentially hazardous food products under anaerobic conditions at lower internal temperatures in food grade vacuum packaging. While the benefits of vacuum packaged food include preserving quality and appearance, it can still allow for spore-forming pathogens to grow such as *Clostridium botulinum*, *Clostridium perfringens*, and *Bacillus cereus*. As well, facultative anaerobic pathogens such as *Listeria*, *Salmonella* and pathogenic *E. coli* can also survive under anaerobic (without oxygen) environments.⁹ Therefore the temperatures involved in sous-vide may not be sufficient to eliminate spores and all pathogenic cells.

Best Practice: Create a food safety plan that utilizes multiple strategies to prevent pathogen growth such as:

- Receive potentially hazardous food items at temperature below 4°Celsius; store at 4°Celsius.
- Purchase ingredients from an approved source and prevent cross contamination.
- Use approved length of time and temperatures applied during the heating process. It is advised to preheat the sous-vide cooker a few degrees higher than the recommended temperature.
- Minimize the time that potentially hazardous foods are kept at room temperature (less than 2 hours). If vegetables are used, ensure they are washed and prevent cross contamination (e.g., separating ready to eat and raw food items).
- Use approved food grade packaging designed for sous-vide applications.
- Use appropriate vacuum sealer capable of maintaining 90-95% pressure and avoid overlapping foods within pouch.
- Ensure use of a validated recipe and temperature chart that ensures adequate heat treatment. Verify with a thermometer to ensure required temperature is reached.
- Ensure food items are cooled quickly after the heating process or kept frozen, if not served for immediate consumption.
- Ensure cold storage temperatures are 4°Celsius or lower if not served immediately.
- Consider the properties of the food item such as nutrient content, water activity, and pH value.
- Ensure adequate sanitation and demonstration of safe food handling practices are in place.

9. Cleaning and Sanitizing Equipment and Utensils

Cleaning and sanitizing is a key component in maintaining a sanitary environment for food safety practices. It is well documented that pathogens such as Norovirus may persist on environmental surfaces such as dishware, countertops, and commonly touched surfaces such as door handles for up to two weeks. Norovirus can spread very easily from person to person, from a contaminated surface to a person, and can persist on contaminated food for several days. Adequate cleaning of dishware, equipment, and food preparation surfaces with detergent followed by sanitizing can significantly reduce transmission of pathogens.

Considerations

Since there are a variety of different types of food service establishments and volume of utensils and dishware used in the daily operation, consideration must be given to ensure the cleaning and sanitizing process are sufficient to meet the operational needs.

Due to the volume and capacity needs of a food service establishment, mechanical dishwashers should be designed for commercial use; such as NSF/ANSI Standard 3.

To achieve the best results, dishware and utensils should have complete removal of food residues on the surface of the utensil or dishware article and be subject to either a two or three compartment sink dishwashing method or commercial dishwasher that has sufficient heat accumulation from washing, sanitizing, and final rinsing.¹⁰ The following section reviews the requirements in the FPR for cleaning and sanitizing.

Equipment for cleaning and sanitizing

- S. 18 One of the following types of equipment must be provided in a food premise for the cleaning and sanitizing of utensils:
- (1) Mechanical equipment.
 - (2) Equipment for washing by hand consisting of drainage racks of corrosion-resistant material and,
 - i. a three-compartment sink, or three sinks, of corrosion-resistant material of sufficient size to ensure thorough cleaning and sanitizing of utensils, or
 - ii. a two-compartment sink, or two sinks, of corrosion-resistant material for the cleaning and sanitizing of utensils, if,
 - A. the food premise does not use it for multi-service articles,
 - B. washing and rinsing can be done effectively in the first sink, and
 - C. the second sink is used for sanitizing as described in section 19.

Utensil sanitization

- S 19. Utensils shall be sanitized through the use of,
- (a) clean water at a temperature of at least 77° Celsius, or more, for at least 45 seconds;
 - (b) a clean chlorine solution of not less than 100 parts per million of available chlorine at a temperature not lower than 24° Celsius for at least 45 seconds;
 - (c) a clean quaternary ammonium compound solution of not less than 200 parts per million at a temperature not lower than 24° Celsius for at least 45 seconds;
 - (d) a clean solution containing not less than 25 parts per million of available iodine at a temperature not lower than 24° Celsius for at least 45 seconds; or
 - (e) other sanitizing agents if,
 - (i) they are approved for use by Health Canada, the Canadian Food Inspection Agency or the medical officer of health for the intended purpose,
 - (ii) they are used in accordance with the manufacturer's instructions, and
 - (iii) a test reagent for determining the concentration of sanitizer is readily available where the sanitizing takes place.

Flexibility is provided to allow other sanitizing agents if: they are approved by Health Canada, the CFIA or the MOH for the intended purpose; are used in accordance with manufacturer's instructions; and, have a test reagent for determining the concentration of the sanitizer.

- Food contact sanitizers are regulated by the Bureau of Chemical Safety, Food Directorate, Health Products and Food Branch, Health Canada.
- Food contact sanitizers that were deemed acceptable were previously issued a Letter of Acceptance (LOA) from the CFIA. Acceptable food contact sanitizers were also included in CFIA's Reference Listing of Accepted Construction Materials, Packaging Materials and Non-Food Chemical Products ([Reference Listing](#)). As of July 2, 2014, the CFIA no longer evaluates materials for inclusion in the Reference Listing.
- Going forward, acceptable sanitizers will have a Letter of No Objection (LONO) from Health Canada or a Letter of Guarantee (LOG) from the supplier of the product or material.
- Disinfectants or sanitizers with disinfectant claims (i.e., claims to kill microbial pathogens) are evaluated by the Natural and Non-prescription Health Products Directorate, Health Products and Food Branch, Health Canada. Not all disinfectants are suitable for use on food contact surfaces and products should specify the intended/appropriate use of the disinfectant. Disinfectants are issued a unique Drug Identification Number (DIN) by Health Canada.

Note:

- Always follow the manufacturers' instructions for use and safety precautions.
- Test reagents for chlorine, quaternary ammonium and iodine are recommended to verify the sanitizing concentration at the prescribed level.
- Concentration levels may vary depending on the functioning of dispensing equipment and frequency of replenishing sanitizing solutions.

Mechanical dishwashers

- S 20. (1) Mechanical dishwashers must be,
- (a) so constructed, designed and maintained that,
 - (i) the wash water is sufficiently clean at all times to clean the dishes and is maintained at a temperature not lower than 60° Celsius or higher than 71° Celsius, and
 - (ii) the sanitizing rinse is,
 - (A) water that is maintained at a temperature not lower than 82° Celsius and is applied for a minimum of 10 seconds in each sanitizing cycle, or
 - (B) a chemical solution described in clause 19 (b), (c), (d) or (e); and
 - (b) provided with thermometers that show wash and rinse temperatures and that are so located as to be easily read.
- S 20. (2) Subsection (1) does not apply to a mechanical dishwasher that bears a certification from NSF International that certifies it for commercial use.

NSF/ANSI Standard 3 for Commercial Ware-washing Equipment is tested under laboratory conditions and demonstrates adequate microbial removal.

Differences in the Ontario specifications compared to the NSF/ANSI standard¹:

Item	Ontario	NSF/ANSI Standard 3
Wash water temperature	Both high temp and chemical 60°C-71°C	high temp dishwasher 66 °C -74°C chemical sanitizer ≥ 49°C
Hot water sanitation	82°C	74°C; 82°C
Chlorine	min. 100 ppm at 24 °C	min. 50 ppm at 49°C
Iodine	min. 25 ppm at 24°C	12.5-50ppm at 24°C
Quaternary ammonium	min. 200 ppm at 24°C	150-400ppm at 24°C

Commercial dishwashers certified to NSF/ANSI standard 3 are tested under strict laboratory conditions and verified to achieve a 5-log₁₀ or 99.999% reduction of bacteria.

Hot water sanitization for stationary rack mechanical dishwashers must reach at least 74°Celsius, and all other commercial dishwashers must reach 82°Celsius.

S 20. (3) Subsections (1) and (2) do not apply if the medical officer of health is satisfied that the mechanical dishwasher will effectively clean and sanitize utensils and is appropriate for use at the food premise.

Flexibility in the FPR allows for emerging technologies that, upon technical and scientific review, can be granted approval by the MOH. There are instances where residential dishwashers have been requested for use in limited settings such as child care programs due to the low volume of dishware used in the premise. NSF/ANSI Standard 184 Certified residential dishwashers could be considered as an alternative if the model is deemed to meet the 5-log₁₀ bacterial load reduction when operated per manufacturer's instructions.

Cleaning and sanitizing of utensils

S. 21 (1) Multi-service articles shall be cleaned and sanitized after each use.
(2) Utensils other than multi-service articles shall be cleaned and sanitized as often as is necessary to maintain them in a clean and sanitary condition.

Multi-service articles used by a patron must be cleaned and sanitized after use. Other utensils must be cleaned and sanitized as often as is necessary. While, there are a variety of food premises and contexts, it is generally recommended to replace utensils every four (4) hours with a clean article to prevent bacterial growth. It is also recommended that all multi-service articles and utensils be cleaned and sanitized throughout the day to keep up with demand and to maintain the premise in a sanitary manner. It is recommended that operators discuss cleaning and sanitizing schedules with a PHI.

Best practice for cleaning and sanitizing deli meat slicers

Adequate cleaning and sanitizing of deli meat slicers is important to prevent the spread of illnesses such as *Listeria*. Deli meat slicers should be disassembled, cleaned and sanitized at least every four hours. The manufacturer's instructions for cleaning and sanitizing the slicing equipment should be followed as there are a variety of sizes, types, and components to consider when cleaning and sanitizing deli meat slicers. It is important to discuss cleaning and sanitizing procedures with a PHI and ensure employees responsible for using the equipment are properly trained on cleaning, sanitizing and inspecting the components for open seams, cracks or crevices. It is recommended that slicers should be free of damage and their seams and seals be routinely inspected before being disassembled for each cleaning.¹¹

- **Cleaning:** Detailed cleaning and scrubbing of deli meat slicers is recommended in a way that effectively removes gross debris, soil, and bacterial films. The cleaning process should include disassembly of slicers and should ensure that hard-to-reach areas where *Listeria* can reside are addressed.
- **Sanitizing:** After cleaning, deli meat slicers should be sanitized. The following are recommendations for sanitizing:
 - Follow the manufacturer's recommendations for the sanitizer used (e.g., concentration, temperature, and contact time);
 - Use hot water/moist heat combined with chemical sanitizers on hard to clean surfaces; and
 - Periodically rotate sanitizers.
- **Maintaining Sanitary Conditions**
 - Maintain sanitary conditions of the food preparation area and other environmental surfaces throughout the day to prevent cross contamination.

Cleaning and sanitizing of surfaces

S. 22 The surfaces of equipment and facilities other than utensils that come into contact with food are cleaned and sanitized as often as is necessary to maintain such surfaces in a sanitary condition.

Equipment that is used for food preparation should be cleaned and sanitized as often as necessary. It is recommended that operators work with a PHI to discuss recommended cleaning and sanitizing schedules.

Storage of substances

S. 23 Toxic or poisonous substances required for maintenance of sanitary conditions shall be,

- (a) kept in a compartment separate from food so as to preclude contamination of any food, working surface or utensil;
- (b) kept in a container that bears a label on which the contents of the container are clearly identified; and
- (c) used only in such manner and under such conditions that the substances do not contaminate food or cause a health hazard.

Toxic or poisonous substances such as concentrated or mixed cleaning and sanitizing products can contaminate food, surfaces, or utensils if improperly handled. It is also

important to label the containers to ensure employees/are aware of the product and have been provided instructions for use.

Best Practice:

Develop a written sanitation plan including:

- A process to ensure that all multi-service articles such as dishware and cutlery are cleaned and sanitized after each use.
- To ensure utensils other than multi-service articles are cleaned and sanitized as often as is necessary to maintain them in a clean and sanitary condition.
- To ensure all surfaces of equipment and facilities other than utensils that come into contact with food are clean and sanitized as often as is necessary to maintain such surfaces in a sanitary condition.
- Employees are aware of cleaning and sanitizing procedures and ensure that any toxic or poisonous substances required for maintenance of sanitary conditions are kept in a compartment separate from food so as to prevent contamination of any food, working surface or utensil.
- Cleaning or sanitizing agents are kept in a container that bears a label on which the contents of the container are clearly identified and used in a manner that the substances do not contaminate food or cause a health hazard.
- Monitor the sanitizer concentration with a test reagent.
- Ensure a process to verify the mechanical equipment is kept in good repair and suitable for its intended purpose.
- Provide documentation such as a list of all cleaning and sanitizing agents used in the premise including their concentrations and uses.
- Provide written procedures on cleaning and sanitation, including procedures for monitoring with test reagents. Include the manufacturer's instructions.
- Provide the required test reagent for determining the concentration of sanitizer and ensure that it is readily available where the sanitizing takes place.

10. Commodity requirements

Manufactured meat

Manufactured meat products undergo various processes such as curing, smoking, dehydration, and fermenting. These processes are required to be carefully planned and monitored following HACCP-based principles. Example food items include cured deli meats, smoked meats, jerky, and pepperettes.

Manufactured meat products include:

- Jerky and jerky-like products: Lean meat that is dehydrated and ready to eat.
- Whole muscle dried meat: Larger cuts of meat, mostly pork or beef that are cured with nitrite/nitrate/ or salt and slowly dried. (e.g., prosciutto).

- Fermented ready to eat meat: The use of bacterial culture to produce lactic acid to bring down the pH to preserve meat, includes a dry or semi-dry process (e.g., fully cooked pepperettes, cold-smoked pepperoni, and salami).

Other provincial resources may be useful in providing guidance on food safety hazards associated with manufactured meat products, such as OMAFRA's [Meat Plant Guidelines](#).

Written food safety procedures

- S. 34 (1) Every operator of a food premise at which manufactured meat products are manufactured must develop written food safety procedures relating to the manufactured meat products designed to ensure that no health hazard arise in relation to their use.
- (2) The written procedures referred to in subsection (1) must be approved by a medical officer of health or public health inspector.
- (3) Subsection (2) does not apply if the food premise is a meat plant licensed under *Ontario Regulation 31/05 (Meat)* made under *the Food Safety and Quality Act, 2001*.
- (4) The operator referred to in subsection (1) shall ensure that the procedures are followed in the food premise.

Food safety procedures are necessary to ensure all stages of the meat processing activities are planned to address HACCP-based principles and activities to ensure the food products are safe to eat. The food safety procedures must be approved by the MOH or PHI.

A Food Safety Plan that follows HACCP and CCP principles will help ensure the food item is processed safely. An example of meat processes to destroy microbial contaminants, examples include:

- Often the meat is frozen and requires a tempering process: thaw under refrigeration or fresh cold running water.
- Cure with salt and nitrates at the appropriate ratios.
- Heat meat prior to drying (e.g., cooked jerky > 71°Celsius for 15 seconds).
- Dehydrate to reach appropriate water activity (Aw). Ensure to control humidity levels.
- Adequate fermentation at the appropriate temperature and length of time to reach pH levels sufficient to prevent the growth of pathogens.
- Follow adequate curing/ drying temperatures and length of time.

Note: Domestic equipment for meat processing is not sufficient to be used commercially.

Consumption of manufactured meat products

- S. 35 In a food premise, manufactured meat products shall be subject to a process sufficient to destroy pathogenic bacteria, parasites, and cystic forms of parasites and any other forms of contamination that would render the products unsafe to eat.

There are a variety of methods used during meat processing that are deemed to sufficiently destroy microbial contaminants.

Manufactured meat product records

- S. 36 (1) Every operator of a food premise in which meat products are manufactured shall ensure that records for manufactured meat products are created and retained on the premise at least until the first anniversary of the date on which they were made.
- (2) The records referred to in subsection (1) shall include the kinds of meat products manufactured, the names and addresses of suppliers that supplied the products used in manufacturing, the weight of the meat products, and the dates of receipt of products used in the manufacturing.

Manufactured meat identifiers

- S. 37 (1) Every manufactured meat product that is transported, handled, distributed, displayed, stored, sold, or offered for sale at a food premise shall be identified as to the meat processing plant or origin by a tag, stamp, or label affixed to the product.
- (2) Subsection (1) does not apply to a manufactured meat product stored, sold or offered for sale in a retail outlet at the plant of origin.

The meat products will contain tags, stamps or labels that identify the plant where the meat is processed. These plants are inspected under the Canadian Food Inspection Agency or Ontario Ministry of Agriculture, Food and Rural Affairs.

Game meat obtained from hunting

Review of S. 38 is recommended in full detail,

S. 38 (1) The only meat permitted at a food premise is meat that has been obtained from an animal inspected and approved for use as food in accordance with either Ontario Regulation 31/05 (Meat) made under the *Food Safety and Quality Act, 2001* or the regulations made under the *Meat Inspection Act (Canada)* and that has been stamped and labelled or otherwise identified in accordance with that regulation or that Act.

Exemptions under S. 38 include S. 38 (2), (3), (5) and (6). For example, some food premises may conduct custom-cutting, wrapping, and freezing of game meat obtained through hunting. This meat cannot be sold to the public and must be labelled “Consumer owned, not for Sale.”

Wild game meat may also be served provided certain prescribed food safety conditions are met. Some of these conditions include: ensuring the meat is handled, prepared and stored so that it does not come into contact with other food before the other food is served; notifying patrons and staff in writing each time they are served the meat; and posting the notice in a conspicuous place at the entrance of the venue. The operator must keep a list of all patrons who attend, contact information, and food donor contact information.

For additional information on these requirements and exemptions for a food premise in a meat plant licensed under *Ontario Regulation 31/05 (Meat)* and the Sioux Lookout Meno-Ya-Win Health Centre, please refer to section 38 of the Food Premises Regulation in full. It is also recommended to consult with a PHI for more information.

Milk and milk products

The FPR requirements apply to milk from cows, goats and sheep.

All milk must be pasteurized according to sections 39-42. The operator must keep a record of information that includes:

- The name and date of operation,
- The number of the pasteurizer, if more than one is in use, to which the recording device is attached.
- The temperature of the indicating thermometer at some time corresponding with a marked point in the holding period.
- The name of the milk product being pasteurized.

The record must be signed and retained for at least one year after it was made, or, for milk products with a shelf life greater than one year, until that shelf life has expired. These records must be provided to a PHI or MOH on request.

For more information on equipment cleaning and sanitizing, labelling, or repackaging of milk or milk products, see sections 44-46.

Cheese from unpasteurized milk

S. 43 Subsection 18 (2) of the Act does not apply to cheese made from unpasteurized milk if the cheese has been subjected to conditions of storage that are sufficient to destroy pathogenic bacteria and toxins and any other forms of contamination that would render the cheese unsafe to eat.

Processing facilities that manufacture, process or prepare unpasteurized cheese are exempt from the prohibition in subsection 18 (2) of the *Health Protection and Promotion Act* on selling, offering for sale, delivering or distributing a milk product processed or derived from milk that has not been pasteurized. The exemption applies only where the cheese has been subjected to conditions of storage that are sufficient to destroy pathogenic bacteria and toxins and any other forms of contamination that would render the cheese unsafe to eat.

Eggs

S 47 (1) No operator of a food premise shall store, handle, serve, process, prepare, display, distribute, sell or offer for sale ungraded or Grade “C” eggs.

(2) Despite subsection (1), the operator of a registered egg station may store and handle ungraded eggs for the purpose of grading and may sell, offer to sell and transport Grade “C” eggs to a registered processed egg station.

(3) Subsection (1) does not apply to eggs from animals other than the domestic hen if,

(a) the eggs are in clean condition, with no visible cracks, at the time they enter the food premise; and

(b) the eggs are transported and stored at a cold-holding temperature of 4° Celsius, or less.

The grading requirements for eggs within the FPR refer to domestic hens. Domestic hens are defined as: a hen of the domestic chicken belonging to the species *Gallus Domesticus*.

All other eggs from animals other than domestic hen must be in clean condition with no visible cracks at the time they enter the food premise and are transported and stored at a cold holding temperature of 4°Celsius or less.

The Egg Regulation under the *Canada Agricultural Products Act (CAPA)* defines eggs as “an egg of the domestic hen” therefore those are the only eggs that are graded. As a result, the previous *Ontario Regulation 562, Food Premises* did not allow operators to store, process or serve ungraded eggs. This prohibited operators from selling any other eggs commonly consumed, such as quail eggs. Non-hen eggs currently have no grading or inspection oversight, yet food premises routinely have non-hen eggs such as duck, quail or goose at their premises. The new FPR will address minimum basic requirements for non-hen eggs that will improve food safety.

Note: Most of the provisions of the *Safe Food for Canadians Act* are scheduled to come into force in January, 2019. When this occurs the *Meat Inspection Act* and the *Canada Agricultural Products Act* will be repealed.

11. Glossary

Corrosion-resistant material: Any material that maintains its original surface characteristics after, (a) repeated exposure to food, soil, moisture or heat, or (b) exposure to any substance used in cleansing and sanitizing.

Critical Control Point (CCP): A point, step or procedure at which control can be applied and a food safety hazard can be prevented, eliminated, or reduced to acceptable levels.

Domestic hen: A hen of the domestic chicken belonging to the species *Gallus Domesticus*.

Eggs: Raw eggs in the shell.

Enteric: Relating to, or affecting the intestines

Equipment: Any appliance, apparatus or device that is or may be used in the operation or maintenance of a food premise, including vending machines, but does not include utensils or multi-service articles.

Farmers’ market food vendor: The operator of a stall or other food premise that is located at a central location at which a group of persons who operate stalls or other food premises meets to sell or offer for sale to consumers products that include, without being restricted to, farm products, baked goods and preserved foods, and at which the majority of the persons operating the stalls or other food premises are producers of farm products who are primarily selling or offering for sale their own products.

Farm products: Products that are grown, raised or produced on a farm and intended for use as food and include, without being restricted to, fruits and vegetables, mushrooms, meat and meat products, dairy products, honey products, maple products, fish, grains and seeds and grain and seed products.

Food contact surface: The surface of counters, equipment and utensils with which food may normally come into contact.

Food Handler: Any person who is employed in a food premise and handles or comes into contact with any utensil or with food during its preparation, processing, packaging, service, storage or transportation.

Food handler training: Food safety training provided by a local board of health, agency of a board of health or through a program that the Ministry of Health and Long-Term Care has recognized as being equivalent to the standards established by the Ministry of Health and Long-Term Care.

Food premise: A premises where food or milk is manufactured, processed, prepared, stored, handled, displayed, distributed, transported, sold or offered for sale, but does not include a room actually used as a dwelling in a private residence (HPPA).

Food premise owner/ operator: The person who has the legal obligation for food safety in the food premise, such as the owner or the owner's agent. The operator can also be a food handler.

Food service premise: Any food premise where meals or meal portions are prepared for immediate consumption or sold or served in a form that will permit immediate consumption on the premises or elsewhere.

Hand washing station: A hand basin with hot and cold running water that is located in close proximity to a soap dispenser and either a mechanical hand dryer or a single-service towel dispenser.

Hazard Analysis Critical Control Point (HACCP): A system used throughout the food industry to enhance food safety. The system looks at hazardous food, identifies the greatest risk factors and makes the necessary changes to reduce or eliminate the risk. HACCP also monitors overall food handling.

Low-risk food: Food that is not potentially hazardous food.

Manufactured meat product: Food that is the product of a process, that contains meat as an ingredient and that is customarily eaten without further cooking, and includes meat that is processed by salting, pickling, fermenting, canning, drying or smoking or otherwise applying heat or to which edible fats, cereals, seasonings or sugar have been added.

Mobile food premises: A trailer, cart, or vehicle-mounted food premise or other itinerant food premise which is capable of being readily moved and in which food is prepared and offered for sale to the public.

Multi-service article: Any container or utensil that is intended for repeated use in the service or sale of food.

Outbreak: An incident in which two or more persons experience similar illness after a common source exposure.

pH: pH is a measure of the degree of acidity or alkalinity of a solution. Values between 0 and 7 indicate acidity and values between 7 and 14 indicate alkalinity, where 7 is

considered neutral. Generally, potentially hazardous food items with a pH less than 4.6 is preventative in microbial growth.

Public Health Inspector (PHI): PHIs are qualified professionals who have obtained a degree from a specialized public health program and have the Certificate in Public Health Inspection (Canada) granted by the Canadian Institute of Public Health Inspectors and hired by a local board of health.

Potentially hazardous food: Food in a form or state that is capable of supporting the growth of infectious or toxigenic micro-organisms and which requires time and temperature control to limit such growth.

Sanitizing: Treatment designed to reduce the level of microorganisms to a level that will not compromise the safety of food products, and “sanitize” has a corresponding meaning.

Serving: Includes self-service.

Single-service article: Any container or eating utensil that is to be used only once in the service or sale of food.

Single-service towel: A towel that is to be used only once before being discarded or laundered for reuse.

Utensil: Includes kitchenware, tableware, glasses, cutlery or other similar items used in the handling, preparing, processing, packaging, displaying, serving, dispensing, storing, containing or consuming of food.

Water activity (Aw): Water Activity (Aw) is the ratio of water vapour pressure of a food product to the vapour pressure of pure water at the same temperature and pressure. Generally, food products with an Aw of less than 0.85 are considered shelf stable.

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