Canadian Armed Forces (CAF) Food Safety and Defence System

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Contents

1.0 GENERAL

1.1 General

1. The information contained in this document applies to food safety and food defence in CAF Food Services operations. The policy, standards and procedures described in this chapter applies to Army, Navy, Air Force and Chief of Military Personnel Food Services organizations and are to be applied in all food services environments, including: Static Operations, Field Feeding, Flight Feeding and Shipboard Feeding.

1.2 Legal Requirements

1. Part 1, Section 4 of the Canadian Food and Drug Act states that one cannot provide food that is a poisonous or harmful substance or unfit for human consumption. In other words, the Canadian Armed Forces has a legal obligation to produce and serve safe food to CAF members. CAF Food Services must always execute due diligence to fulfil its legal obligation to serve safe food.

2.0 CANADIAN ARMED FORCES (CAF) FOOD SAFETY AND DEFENCE SYSTEM (FSDS)

2.1 Introduction

1. The CAF Food Safety and Defence System (FSDS), like any system, encompasses a group of functions within an organization that operate together towards a common goal. The elements of an effective system interact and support each other; they are interrelated and interconnected. As individual behaviours have the potential to affect the system, the system is not only process focused but people focused. An organization may have the best written standards and practices in place but if Food Services personnel are not executing the practices appropriately or at the right frequency the system will most likely fail. The five main elements of the CAF FSDS are Food Safety Policy, Food Safety Practices, Food Safety Training, Food Safety within Food Services Operations and Continuous Improvement. These five elements cannot function effectively in isolation, rather they must work together to improve food safety activities within the CAF, which in turn decreases the risk of foodborne disease to CAF diners.

2.1.1 The Five Elements of the CAF FSDS

2. The CAF FSDS consists of five elements (described below in general terms):

a. Food Safety Policy. Food Safety Policy is the overall food safety intentions and direction of an organization as formally expressed by top management (ISO 22000:2005). The authority for food safety policy within the CAF is SJS/Director of Food Services;

b. Food Safety Practices. Food safety practices are those operations that are conducted by CAF members/DND Food Services employees to produce safe food, thereby decreasing the risk of foodborne disease to CAF diners. Each practice has a standard that must be obtained. CAF Food Safety practices are broken down into two main components: Prerequisite Programs (PRPs), which consist of basic food safety programs that must be place before receiving, preparing, producing or serving food; and Hazard Analysis Critical Control Point (HACCP)-based programs, which decrease food safety hazards during food production and service activities. These main components are presented below and will be described in detail in the proceeding sections:

(1) Prerequisite Programs (PRPs). PRPs are basic conditions and activities that are necessary to maintain a hygienic environment throughout Food Services facilities. PRPs must be maintained to an adequate standard before food production and/or service activities can commence. Although PRPs are simple programs that set conditions for producing safe food, if their standards are not maintained the likelihood of food contamination occurring is high. The eight CAF PRPs illustrated in the table below are described in detail in Section 3.

Table 1 - Canadian Armed Forces Prerequisite Programs (CAF PRPs)

CAF PRPs
1 - Internal and External Premises
2 - Purchasing/Receiving, Storage, Packaging and Transportation
3 - Equipment and Utensils
4 - Personnel
5 - Sanitation and Housekeeping
6 - Pest Control
7 - Response to Foodborne Issues
8 - Food Defence

(2) Hazard Analysis Critical Control Point (HACCP) Based Programs. Within the CAF Food Safety System, HACCP-based Programs identify and assess hazards and risks associated with food production and service operations. The goal of HACCP-based programs is to decrease to a safe level for consumption, or eliminate entirely, food hazards (chemical, biological, physical). CAF HACCP-based programs focus on using correct food safety production and service practices and include operations such as cooking and cooling which are to be performed in accordance with food safety standards. Each production and service practice will be analyzed using the seven HACCP steps, which have been modified to meet CAF Food Services operations. The seven HACCP steps are as follows and will be further explained in Section 3;

Table 2 - The Seven Hazard Analysis Critical Control Point (HACCP) Steps

Step	HACCP Steps
1	Conduct Hazard Analysis
2	Identify Critical Control Points (CCPs)
3	Establish Critical Limits
4	Establish CCP Monitoring Requirements
5	Establish Corrective Actions
6	Establish Verification Procedures
7	Establish Record Keeping Procedures

c. Food Safety Training. Food Safety Training provides CAF/DND Food Services personnel with the knowledge and training necessary to incorporate food safety practices into their Food Services operation. There are three categories of food safety training: Basic, Intermediate and Advanced (which will be explained in detail in Section 5 of this chapter). Each level of training corresponds to the employment level of the individual:

(1) Basic Food Safety Training - Basic Food Safety Training focuses on the PRPs. All CAF/DND Food Services personnel must complete the basic level of food safety training. This training may occur at the Canadian Forces Logistics Training Centre (CFLTC), on Canadian Forces Bases, and/or at the unit level;

(2) Intermediate Food Safety Training – Intermediate Food Safety Training is provided to middle managers and is concentrated on HACCP-based training. This training occurs at CFLTC; and

(3) Advanced Food Safety Training - Advanced Food Safety Training is provided to senior Food Services leaders in order to facilitate

their assessment and management of the CAF food safety system. This training occurs at CFLTC (TBC);

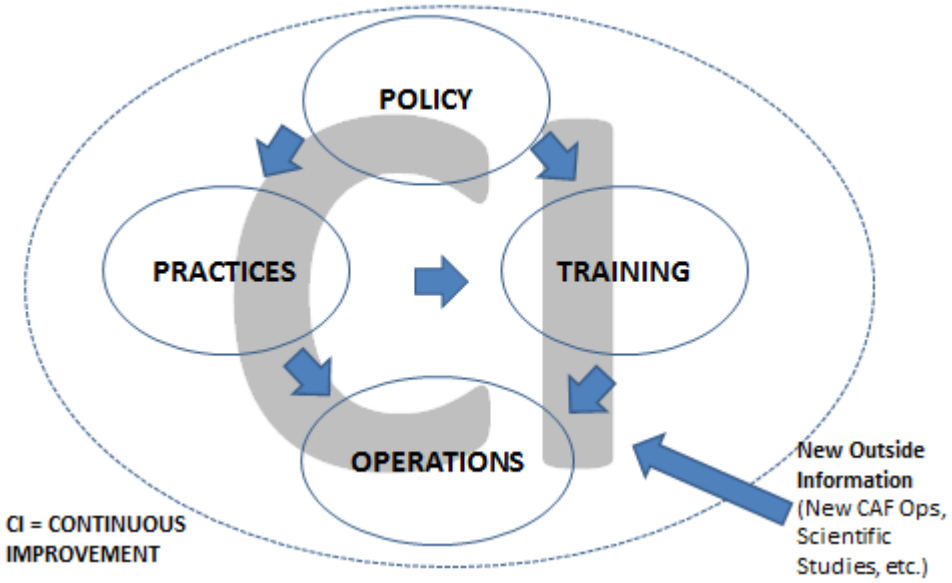
d. Food Safety in Operations. Food safety in operations occurs at both the individual and the systems level. Upon completion of food safety training, Food Services workers are expected to apply the knowledge gained to the Food Services operation. In addition, leaders at all levels must ensure that food safety programs and practices are both implemented and utilized at their facilities. It is expected that these food safety practices and standards be applied regardless of the equipment being used or the environment in which food is being produced and served; and

e. Continuous Improvement. Continuous Improvement within a system is required to constantly improve the system and prevent it from becoming outdated, obsolete and/or irrelevant. Food safety practices are developed from scientific research, therefore when new scientific discoveries are made food safety practices and training may change. In addition, the CAF FSDS must adapt to changing situations while continuing to meet the food safety needs of the CAF. The system as a whole must be periodically reviewed to ensure relevancy and effectiveness.

2.1.2 The Interrelationship of Elements of the CAF Food Safety Systems

3. The five elements of the CAF FSDS must be interrelated and support one another to create an effective system. The diagram below illustrates this interconnection.

Diagram 1 – The Interrelationship between the CAF FSDS Elements



4. The above diagram illustrates the five main interrelated elements of the CAF FSDS: Food Safety Policy, Food Safety Practices (PRPs and HACCP-based), Food Safety Training, Food Safety in Operations, and Continuous Improvement. Within this system, policy provides direction for practices and required training. Practices (with standards) will drive the type of food safety training that is delivered. Following correct food safety practices supported by training will equate to safe food being produced within Food Services operations. Continuous Improvement can be driven from inside or outside elements/pressures. Elements within the system can improve (change) the other elements of the system. For example, during Food Services operations a new food safety challenge may develop which may consequently change food safety policy, practices and/or training. Likewise, new outside information such as new types of CAF operations or scientific discoveries can change any of the elements within the system which will have an effect on the other elements. For example, through scientific studies it was determined that to reduce pathogens in beef to a safe level, the internal temperature standard may have to be adjusted higher. This would result in the amendment of food safety procedures (e.g. cooking process) which in turn would affect training requirements.

2.2 Responsibilities and Training within the CAF FSDS

2.2.1 Introduction

1. CAF Food Services function at several levels (individual, tactical, operational and strategic). It must be stressed that all individuals working within the food safety system have a responsibility to exercise due diligence when it comes to ensuring safe food is produced and served to the diner. Leaders at every level must ensure that food safety is both monitored and verified. Food safety monitoring serves to verify and validate food safety practices by using planned observations or measurements to determine if the food safety practices in place are within food safety standards. For example, verifying the internal temperature of cooked foods to ensure the recommended internal temperature to decrease or eliminate pathogens has been reached. In addition to monitoring, food safety verification involves activities like food safety checks, inspections and audits, all of which serve to ensure that the food safety system in place is working correctly. Monitoring is usually completed by front line staff/supervisors, whereas verification is typically completed by the leadership at various levels or by specially trained individuals/teams. Both monitoring and verification activities must be formally recorded (written down). Lastly, within the CAF Food Safety System, Food Services personnel must be trained in food safety to an appropriate level based on their employment.

2.2.2 Food Safety Roles, Responsibilities and Training

2. The following will provide a brief description of food safety roles, responsibilities and training required at each Food Services employment level (these will be further explained in proceeding sections).

a. Individual Food Services Personnel.

(1) Role - As stated above, all food services personnel, regardless of position or rank, must always exercise due diligence when it comes to food safety.

(2) Responsibilities - All employees must maintain basic food safety standards (e.g. PRPs) in their daily work. Food safety monitoring and verification responsibilities will depend on where and how an individual is employed in a CAF Kitchen or organization.

(3) Training - All new food service employees must receive basic food safety training when they begin employment in CAF Kitchens. Furthermore, all Food Services personnel must receive periodic basic food safety training (certified) and conduct refresher training on a yearly basis. Intermediate and advanced food safety training will be provided based on the specific employment of the individual.

b. Food Services Detachment or Base/Wing Food Services Shift.

(1) Role – In addition to paragraph 6.a. above, this level must ensure that food safety practices are being conducted to the proper standards.

(2) Responsibilities - Food Services Detachment/Shift responsibilities will include all that was described for individuals, plus monitoring and basic verification activities. All monitoring activities described in Section 3 of this document must be completed and shift checks (Level 1 Verification) must occur at the identified frequency as stated in Section 4. In addition, each work shift within a Food Services operation must have a minimum of one military cook that has a Cook Journeyman Qualification (QL 5) or one civilian cook that has the equivalent QL 5 food safety training

(3) Training - A QL 5 cook must be trained in basic food safety along with intermediate food safety training which includes monitoring and basic verification activities (Level 1 Verification).

c. Base/Wing Food Services Kitchen/Unit Food Services Section.

(1) Role – In addition to paragraphs 6. a. and 6.b. above, this level must ensure that within the kitchen (or unit) food safety practices are being conducted according to the proper standards.

(2) Responsibilities - Base/Wing Food Services Kitchen/Unit Food Services Section will include all responsibilities as outlined above for individuals and detachments, plus higher level food safety verification (Level 2 Verification) which includes more in depth inspections of facilities, equipment and practices.

(3) Training - Within the kitchen or unit there must be minimum of one military cook that has a Cook Supervisor Qualification (QL 6A) or a civilian cook that has the equivalent QL 6A food safety training. A QL 6A cook must be trained in basic food safety along with intermediate food safety training which includes monitoring and kitchen/unit verification activities (Level 2 Verification). These periodic inspections must be written and sent to higher command for review.

d. Base/Wing Food Services/Brigade Food Services.

(1) Role – In addition to paragraphs a. to c. above, this level must ensure that food safety practices are being conducted to the proper standards on a Base/Wing or within a Brigade.

(2) Responsibilities - Base/Wing/Brigade Food Services organizations will include all responsibilities that were described for individuals, detachments and sections plus a higher level of food safety audits (Verification Level 3) and will be the food safety subject matter expert in their respective locations. Verification Level 3 audits will be sent on a quarterly basis to Food Services Environmental Commands (ECs) for review. In addition, this level must provide feedback to their ECs (through Divisional Food Services for the CA) on a periodic basis in regards to current food safety practices and training to assist with continuous improvement of the CAF Food Safety System.

(3) Training – Base/Wing/ Brigade Food Services managers must complete advanced food safety training which focuses on higher level audit capabilities for Bases and operations (domestic and international), as well as assessing food suppliers and Food Services contractors.

e. Food Services Environmental Commands (ECs).

(1) Role – This level must ensure that food safety measures are being conducted to the proper standards within their environment and to act as food safety advisors for their respective commands.

(2) Responsibilities – EC Food Services must ensure that the food safety system within their commands is functioning correctly. This is accomplished through reviewing their respective Bases/Wing/Brigade quarterly food safety reports and conducting food safety audits as required (Verification Level 4). In addition, ECs serve as food safety advisors and provide food safety data and feedback to the strategic command level to monitor the system and for continuous improvement. This data includes Level 4 Verification food safety audits and suggestions to continually improve the CAF Food Safety System. Suggestions will be reviewed and considered annually at the Food Safety Senior Advisory Council meeting. The EC level will work with the strategic command level on food safety measures and practices that are specific to each environment (Field Feeding, Flight Feeding, Shipboard Feeding and Deployed Feeding).

(3) Training - Food Services representatives at the EC level must complete advanced food safety training which focuses on higher level audit capabilities for Bases and operations (domestic and international), and assess food suppliers and foods services contractors.

f. Strategic Command Level (SJS/ Director of Food Services).

(1) Role – This level provides food safety policy and procedures for all of CAF Food Services and ensures that the CAF FSDS is meeting the food safety requirements of the CAF.

(2) Responsibilities – This level promulgates food safety policy, standards and practices for CAF Food Services. Also, the Strategic Command Level conducts the highest level of verification and assessment to ensure the CAF FSDS is working correctly as it was designed. This food safety assurance could include activities such as, but not limited to, reviewing Level 4 Verification Audits conducted by the EC levels, conducting Level 4 Verification Audits and/or food safety studies. The Strategic Command Level is also responsible for Continuous Improvement of the System as whole and has the authority to change food safety policy, standards and procedures if required. These changes may be generated by continuous input from the EC level and during Food Safety Senior Advisory Council meetings. Lastly, Strategic Food Services will

assist the Canadian Forces Logistics Training Centre to develop food safety training as required;

g. Canadian Forces Logistics Training Centre (CFLTC). Role – With respect to food safety, CFLTC will develop, provide and deliver food safety training for CAF Food Services personnel. This food safety training includes Basic (PRPs), Intermediate (HACCP-based) and Advanced (Auditing) levels of instruction. The development of food safety training will be based on the food safety policy and practices promulgated by the Strategic Food Services Command Level. Note: CFLTC is not currently providing this level training as the proposed training regime will be discussed between CFLTC and D Food Svcs in the near future; and

h. CAF Health Services. Role – In relation to food safety, CAF Health Services promotes the health of CAF members by helping to combat foodborne disease. CAF Health Services provides another level of food safety assurance through Preventive Medicine Inspections of CAF/DND food premises. CAF Health Services is an advisor to and works with CAF Food Services to combat foodborne disease. CAF Health Services (Preventive Medicine Technicians) possess an equivalent of training as their civilian public health counterparts. At the Strategic Command Level, CAF Food Services and CAF Health Services should collaborate on food safety issues that arise and work together to continuously improve the CAF Food Safety System.

3.0 CANADIAN ARMED FORCES (CAF) FOOD SAFETY AND DEFENCE POLICY

3.1 Introduction

1. Food safety policy is the responsibility of the Mat J4/Director of Food Services and formally expresses the strategic level's overall intentions and direction related to CAF food safety. Below is the CAF's Food Safety Policy.

3.2 CAF Food Safety Policy

1. The Director of Food Services' mission statement identifies the importance of food safety within CAF Food Services. Food safety is paramount when it comes to the production and service of food as it affects the health of CAF members. Although Food Services leaders must drive the CAF Food Safety System, all Food Services personnel have a shared responsibility in the production of safe food. CAF Food Services personnel shall always practice due diligence to decrease the risk of foodborne disease that may cause harm to CAF diners.

Food safety culture can be defined as how and what food services workers think about food safety. CAF Food Services must ensure that the five elements[1] of the CAF FSDS are engrained in CAF food safety culture. This approach is designed to decrease the risk of foodborne disease to CAF diners. The key food safety principles for CAF Food Services are:

a. Safe Food for CAF Diners. When conducting Food Services operations, CAF Food Services at every level must ensure that food is produced and served in a manner that will not cause injury or illness. There is nothing more important than safeguarding CAF members against foodborne disease. CAF Food Services personnel must always ensure correct food safety measures are in place to combat the risk of foodborne disease. There is also a legal obligation to serve safe food;

b. Employee Involvement within the System. To promote and maintain a positive food safety culture, all Food Services personnel must be engaged daily in food safety measures thereby making them integral in the fight against foodborne disease. All personnel working in a Food Services capacity are responsible to maintain an adequate level of food safety within their workplace;

c. Leadership in Driving the System. Food safety is everyone's responsibility, but leaders must drive the food safety system. This includes setting a good example for subordinates, establishing expectations, analyzing food safety measures and resolving food safety issues. Leaders must ensure that their staff are adequately trained in food safety practices and enforce practices when required;

d. Maintenance of Food Safety Standards within Food Safety Practices. There are no grey areas when it comes to correct food practices; practices can be either completed correctly or incorrectly. Food safety standards are science-based and take into account the environment in which the food is

[1] The five elements of the CAF FSDS are Food Safety Policy, Food Safety Practices, Food Safety Training, Food Safety in Food Services Operations and Continuous Improvement.

being produced and served. Food safety practices are developed from standards. CAF Food Services operations must maintain proper food safety practices through adequate food safety training and constant support by the leadership;

e. Appropriate Level of Food Safety Training. Food safety training provides proper instruction on food safety practices which are generated from food safety standards. The appropriate level of food safety training is based on the specific employment of CAF personnel. Basic food safety training is required by all personnel working in the CAF FSDS whereas intermediate and advanced training is provided to CAF personnel as they gain more experience and are able to take on greater leadership challenges;

f. Collaborative Food Safety Communications. Communication of food safety issues within CAF Food Services is important, both to solve food safety issues as soon as possible and to provide lessons learned. Food safety knowledge must be shared to prevent similar issues from occurring in the future and to ensure that new practices are developed as required. Communication with organizations outside the CAF Food Services is also necessary. Through this communication, knowledge can be shared and key actors can aid in the development of food safety measures;

g. System Measurement. The CAF FSDS must be measured to gauge food safety performance and improve the system as a whole. Leaders at every Food Services level must be capable of assessing the effectiveness of food safety practices in order to rectify food safety issues. If there is no measurement of the system, there is no way to know if it is working correctly; and

h. Continuous Improvement. Continuous improvement must occur within a system or the system will stagnate and become ineffective. Ongoing improvement of the system can occur among the system elements or from new information acquired from outside the system. Within the system, Food Services leadership must provide feedback to higher commands on the effectiveness of food safety practices and training. From outside the system, new CAF operational parameters or scientific discoveries may also change the system.

4.0 FOOD SAFETY AND DEFENCE PRACTICES

4.1 Introduction

1. The objective of this section is to specify the food safety practices and the minimum requirements (standards) for an effective food safety management system. These standards are based on the Canadian Food Inspection Agency (CFIA) Food Safety Enhancement Program (FSEP) which was adjusted for CAF Food Services operations. Additionally, the Canadian Restaurant and Foodservices Association's (CRFA's) Food Safety Code of Practice for Canada's Foodservice Industry is a good companion publication to CAF Food Safety Practices and it is referenced on occasion within this section. However, this chapter (Chapter 7) will take precedence over the CRFA Code when there is conflicting information between the two publications. This section provides a mechanism for Food Services personnel to demonstrate their ability to control food safety hazards in order to ensure that food is safe for CAF diners. In addition, it enhances the Food Services capability to achieve and maintain food safety compliance. The CAF FSDS is based on the principles of the Hazard Analysis Critical Control Point (HACCP) system which is an internationally recognized science-based food safety system that is designed to prevent, reduce or eliminate potential biological, chemical and physical food hazards. Food Services operations at the tactical level have the greatest level of control over the product and thus can have the greatest impact on the safety of the food produced and served to CAF diners. This section specifies the requirements for an effective Food Safety System that combines the following key elements to ensure the production and service of safe food:

a. Prerequisite Programs (PRPs). PRPs are basic conditions and activities that are necessary in order to maintain a hygienic environment throughout Food Services facilities (ISO 22000:2005). PRPs must be maintained to an adequate standard before Food Services preparation, production and/or service activities can commence. The eight CAF PRPs illustrated in the table below will be described later in this section.

Table 1 - CAF PRPs

CAF PRPs
1 - Internal and External Premises
2 - Purchasing/Receiving, Storage, Packaging and Transportation
3 - Equipment and Utensils
4 – Personnel
5 - Sanitation and Housekeeping
6 - Pest Control
7 - Response to Foodborne Issues
8 - Food Defence

b. Hazard Analysis Critical Control Point (HACCP) Based Programs. HACCP-based programs identify and assess hazards and risks associated with food production and service operations. The goal of HACCP-based

programs is to ultimately decrease or eliminate food hazards (chemical, biological, physical) to a safe level for consumption. CAF HACCP-based programs focus on using correct food safety production and service practices. This includes the following food safety production and services practices which will be monitored and recorded.

Table 2 - CAF Food Safety Production and Service Practices.

CAF Food Safety Production and Service Practices
1. Thawing
2. Cold Holding
3. Cooking
4. Hot Holding
5. Cooling
6. Service (Cold or Hot)
7. Reheating
8. Prevention of Cross-contamination

Each production and service practice will be analyzed using the seven HACCP steps, which have been modified to meet CAF Food Services operations.

4.2 Types of Food Hazards

1. For the purposes of HACCP, hazards refer to agents in or conditions of food that can cause illness, injury or death of a person. These hazards fall into three categories:

a. **Biological Hazards (B).** Biological hazards are those caused by micro-organisms (bacteria, viruses, parasites and moulds). They are often associated with the failure of a production step (e.g., pathogen survival due to improper cooking time and temperature). Note: A further list of biological hazards can be found at Annex A.

b. **Chemical Hazards (C).** Chemical hazards include those caused by substances that:

(1) Are naturally derived from plants or animals (e.g., poisonous mushrooms);

(2) Are intentionally added to the food during the growth process or during food production. These substances are considered safe at established levels but are dangerous above these levels (e.g., sodium nitrite, pesticides);

(3) Contaminate the food accidentally (e.g., cleaning chemicals); and

(4) Cause some individuals to experience an immune system response.

c. **Physical Hazards (P).** Physical hazards include substances not normally found in food that can cause physical injury to the person consuming the food (e.g., wood slivers, glass fragments, metal shavings, bone pieces).

4.3 Main Factors or Causes of Foodborne Disease in Food Services Operations

1. The main factors or causes of foodborne disease in Food Services operations are important to recognize as they will help assist in identifying potential threats and subsequently prevent food safety issues. The table below compares four sources of information with respect to the factors involved or that cause foodborne disease in Food Services operations. The top four causes of foodborne disease are cross-contamination, lack of temperature control/ temperature abuse, poor personal hygiene practices and unsafe food supply.

Table 3 – A Comparison of the Main Factors or Causes of Foodborne Disease to Food Services Operations (top five for each source)

Guzewich, 2000	**McCabe-Seller *et al.*, 2004**	**Yiannas, 2009**	**Hutter, 2011**
1. Inadequate refrigeration	1. Improper holding	1. Improper handling	1. Cross-contamination
2. Contaminated ingredients	2. Poor personal hygiene	2. Inadequate cooking	2. Inadequate temperature control
3. Infected person	3. Cross-contamination	3. Contaminated equipment	3. Food poisoning
4. Unapproved source	4. Inadequate cooking	4. Food from unsafe source	4. Personal hygiene
5. Undercooked food	5. Unsafe food source	5. Poor personal hygiene	5. Out of date stock

2. In a study conducted by the CAF in 2013, the three main causes of food contamination were found to be cross-contamination, lack of temperature control/ temperature abuse and personal hygiene issues (e.g., failure of food services workers to wash hands). This finding is similar to the main factors or causes of foodborne disease stated above; therefore, leaders must ensure they focus on these problem areas to decrease the risk of foodborne disease.

4.4 Prerequisite Programs (PRPs)

PRP 1 - Internal and External Premises;
PRP 2 – Purchasing/Receiving, Storage, Packaging and Transportation;
PRP 3 - Equipment and Utensils;
PRP 4 - Personnel;
PRP 5 - Sanitation and Housekeeping
PRP 6 - Pest Control;
PRP 7 - Response to Foodborne Issues; and
PRP 8 - Food Defence (the prevention of intentional food contamination).

4.4 Prerequisite Programs (PRPs)

1. Prior to implementing a HACCP-based program, the CAF must ensure that adequate PRPs are in place. These PRPs will mitigate the risk of introducing food safety hazards to the product through either the work environment or operational practices. The PRP requirements outlined in this section reflect the current work environment and operational practices within CAF Food Services (Whiting, 2012). The PRP requirements listed below must be practiced to ensure that the given standard is always obtained. Verification/compliance of PRPs will be discussed in Section 5 of this chapter. There are eight CAF PRPs:

a. PRP 1 - Internal and External Premises;

b. PRP 2 – Purchasing/Receiving, Storage, Packaging and Transportation;

c. PRP 3 - Equipment and Utensils;

d. PRP 4 - Personnel;

e. PRP 5 Sanitation and Housekeeping

f. PRP 6 - Pest Control;

g. PRP 7 - Response to Foodborne Issues; and

h. PRP 8 - Food Defence (the prevention of intentional food contamination).

The above PRPs are further divided into sub-sections in the following Table.

Table 4 – PRPs for CAF Food Services Operations

Programs	Sub-Programs
PRP 1 – Internal and External Premises	PRP 1.1 – External Premises PRP 1.2 - Building (or Dining Facility) PRP 1.3 - Lighting PRP 1.4 - Ventilation PRP 1.5 - Waste and Inedible Food Waste Disposal PRP 1.6 - Sanitary Facilities PRP 1.7 - Water/Ice/Steam Quality PRP 1.8 - Plumbing and Sewage
PRP 2 - Purchasing/Receiving, Storage, Packaging and Transportation	PRP 2.1 - Purchasing/Receiving PRP 2.2 – Storage PRP 2.3 – Packaging PRP 2.4 – Transportation/ Distribution
PRP 3 – Equipment and Utensils	PRP 3.1 – Equipment PRP 3.2 – Utensils

PRP 4 - Personnel	PRP 4.1 – Illness and Injury PRP 4.2 – Personal Hygiene PRP 4.3 – Visitors
PRP 5 Sanitation and Housekeeping	PRP 5.1 – Equipment Cleaning and Sanitizing PRP 5.2 – Utensil/Container Cleaning and Sanitizing PRP 5.3 – Internal and External Cleaning and Sanitizing
PRP 6 - Pest Control	PRP 6.1 – Pest Control Program
PRP 7 - Response to Foodborne Issues	PRP 7.1 – Food Recall from Supplier PRP 7.2 – Response to Suspected Foodborne Incident
PRP 8 – Food Defence	PRP 8.1 – Food Defence – Low Threat PRP 8.2 – Food Defence – High Threat

2. Each prerequisite program is divided into sub-sections, standards, monitoring requirements, corrective actions and record keeping that must be achieved:

a. **Program** - e.g., PRP 2 Purchasing/Receiving, Storage, Packaging and Transportation;

b. **Sub-Programs** - e.g., PRP 2.1 – Purchasing/Receiving;

c. **Standard** - e.g. PRP 2.1.2 - Upon receiving food from supplier Food Services operations must: Assess incoming ingredients, products and materials at receiving to ensure that their conditions are satisfactory and that the purchasing specifications have been met; and

d. **Monitoring/Corrective Actions/Record Keeping** (if applicable) - e.g., PRP 2.1.1.3. Temperature of Food Received. Receiving staff will measure each pallet of food with a calibrated temperature thermometer or calibrated temperature gun to ensure delivery temperatures are: Refrigerated Food: 4°C (40°F) or lower; and Frozen Food: -18°C (0°F) or lower. If temperature does not meet the standard, do not accept food from supplier, inform supervisor and document the reason for return of supplies. Record results (temperatures). Record results as per Annex B.

Note 1: Each PRP/sub-PRP also explains the importance of each standard, outlining why each one should be maintained.

Note 2: Monitoring/Corrective Actions/Record Keeping were assessed for specific PRPs as per Annex N and will later be explained in this section.

PRP 1 - Internal and External Premises

This PRP is broken down into the following sub-PRPs:

PRP 1.1 – External Premises;
PRP 1.2 - Building (or feeding facility);
PRP 1.3 - Lighting;
PRP 1.4 –Ventilation;
PRP 1.5 - Waste and Inedible Food Waste Disposal;
PRP 1.6 - Sanitary Facilities;
PRP 1.7 - Water/Ice/Steam Quality; and
PRP 1.8 - Plumbing and Sewage.

PRP 1.1 – External Premises

Importance

Sources of food hazards outside a building or Food Services operation (e.g., excessive dust, pest infestation, airborne microbial and chemical contaminants, grease bins and garbage containers) can lead to food contamination occurring in an establishment.

Standards

PRP 1.1.1 - Building facilities are located away from or protected against potential sources of external contaminants such as excessive dust, odours, and pest infestation that may compromise the safety of food (CFRA, 2013).

PRP 1.1.2 - Surroundings/roadways are free of debris and refuse, adequately drained and maintained to minimize environmental hazards.

PRP 1.2 - Building (or feeding facility)

Importance

Appropriate maintenance of the foundation/walls of a building and the physical perimeter outside of a dining facility can reduce the potential for contamination between the outside environment and the internal food production and service areas. Proper organization of areas inside the building or dining facility will reduce potential cross-contamination issues.

Standards

Outside Walls/Perimeter of Building (or Dining Facility/area)

PRP 1.2.1 - Roof, air intakes, foundation, walls, doors and windows must be constructed and maintained in a manner which guards against leakage and entry of contaminants and pests.

Inside Building or Dining Facility

PRP 1.2.2 – The interior of a building or dining facility must be designed:

a. To effectively separate incompatible operations, for example, in a feeding facility, the packaging or serving of cooked/ready-to eat products should be performed separately from the cutting of raw meat (poultry, beef, etc);

b. To provide hygienic operations by means of a regulated flow from point of entry of the premises to the final product or service of food;

c. To effectively prevent cross-contamination due to employee traffic pattern, food product flow and equipment;

d. To ensure living quarters and areas where live animals are held remain separated from and do not open directly into food preparation and production areas;

e. To ensure incoming materials (e.g., food, non-food, and packaging) are received in an area separate from food production areas;

f. To ensure washrooms, lunchrooms and change rooms are separated from and do not open directly into Food Services preparation or production areas;

g. To ensure separate and adequate facilities are provided for the storage of waste and inedible products, cleaning/sanitizing equipment and cleaning/sanitizing chemicals;

h. To ensure drainage and sewage systems are equipped with functional traps and vents;

i. To ensure floors permit liquids to drain to trapped outlets; and

j. To ensure floors, walls, doors, windows, ceilings, overheads and other structures in rooms or areas where food is produced, stored, packaged, received or shipped are cleanable, prevent contamination, prohibit deterioration, are suitable for the activities in each area and are free of any noxious gases.

Note 1: Food Services operations contemplating building construction or major renovations must advise SJS/ D Food Svcs 4 - Facilities and Equipment who will ensure that the requirements outlined in these PRPs are taken into consideration.

Note: 2: A consult with CAF Health Services (Preventive Medicine) is also advised prior to any construction or renovations to ensure that existing Health Regulations will be adhered to.

PRP 1.3 Lighting

Importance

Inadequate lighting levels may deter proper inspection of food (colour) and impede adequate cleaning of facilities and equipment. It may also prevent an employee from identifying the potential for or presence of biological, chemical or physical contamination. In addition physical hazards can occur if a light bulb or light fixture breaks over exposed food, ingredients, packaging materials, or food contact surfaces.

Standards

PRP 1.3.1 - Lighting is appropriate such that food colour is not altered and that production and inspection activities can be effectively conducted.

PRP 1.3.2. - Light bulbs and fixtures located in areas where there is exposed food or packaging materials are either shielded or shatterproof to ensure food and food contact surfaces are protected from broken glass.

PRP 1.4 Ventilation

Importance

Adequate ventilation minimizes the potential for airborne contamination of food. The flow of contaminated air through an establishment can be a source of bacterial contaminants within food production areas. The correct location of air intakes, the correct size of filters, appropriate filter maintenance (e.g., filter changes) and the use of food grade gases all contribute to the prevention of airborne contamination.

Standards

PRP 1.4.1 - Filters are cleaned or replaced when required.

PRP 1.4.2 - Ventilation systems must be constructed and maintained in a manner that ensures that air does not flow from the most contaminated areas to the least contaminated areas.

PRP 1.4.3 - Where required, ambient air, compressed air or gases utilized in processing equipment that contact either food products or food packaging are appropriately sourced and treated to minimize contamination of product and packaging.

PRP 1.5 Waste and Inedible Food Waste Disposal

Importance

Clearly identified containers and utensils used for waste and inedible materials will prevent cross-contamination of edible food. Effective procedures will prevent the accumulation of waste, inedible or food waste products and the potential contamination of food handling areas. It will also minimize the attraction of pests and prevent objectionable odour, utensil misuse, and the cross-contamination of edible products.

Standards

PRP 1.5.1 - Food Services operations must have in place:

a. An identification system for utensils and containers used for the collection and holding of waste and inedible/food waste materials;

b. An established frequency of removal of inedible/food waste products during operations;

c. If applicable, established procedures for storage of waste and inedible/food waste products;

d. An established frequency of removal of inedible/food waste products from the establishment; and

e. Procedures for maintenance of waste and inedible/food waste equipment (equipment must be leak proof and where appropriate, covered).

PRP 1.6 Sanitary Facilities

Importance

Adequate washrooms, change rooms and lunchroom facilities, in accordance with building codes, will ensure that an appropriate degree of both staff and diner personal hygiene is maintained to protect the safety of food. In addition, since personnel are a major source of contaminants, there must be enough hand-washing stations located in areas that are easy to access. These sanitizing stations are used to control the potential for cross-contamination from operational equipment and employees. Hand-washing stations and sanitizing equipment must

be properly cleaned and maintained to ensure they do not become a source of contamination.

Standards

Employee Facilities

PRP 1.6.1 - Washrooms have hot and cold potable running water, soap dispensers, liquid soap, sanitary hand drying equipment and supplies as well as cleanable waste receptacles.

PRP 1.6.2 - Hand washing notices are posted in appropriate areas.

PRP 1.6.3 – Washrooms, lunch rooms and change rooms are maintained in a manner to prevent contamination.

Handwashing Stations

PRP 1.6.4 - Food Services operations must contain an adequate number of conveniently located hand-washing stations with trapped waste pipes leading to drains. Hand-washing stations must be properly maintained and supplied with hot and cold potable running water, soap dispensers, soap, sanitary hand drying equipment (e.g., air dryer or paper towel) and cleanable waste receptacles.

PRP 1.6.5 - Hand-washing notices and procedures are posted in appropriate areas.

PRP 1.7 Water/Ice/Steam Quality

Importance

Water, ice and steam can be a source of biological or chemical contamination. Since water, ice and steam can be used for a variety of purposes, it is important that water sampling and testing to confirm potability (i.e., bacteriological quality) is performed at regular intervals. An adequate supply of potable water, with appropriate facilities and/or equipment for storage, use and distribution to prevent contamination is mandatory in a food premise, and will assist in ensuring the safety of the food.

Standards

PRP 1.7.1 - Food Services must ensure that water and ice meet the potability requirements of the appropriate regulatory authority. The local medical unit must be consulted regarding the frequency of water testing

and Food Services staff must ensure this testing takes place at the required intervals by medical personnel (i.e., Preventive Medicine Technicians) or an authorized contractor in consultation with medical services.

PRP 1.7.2 - Where required, hoses and faucets or other similar sources of possible contamination are designed to prevent back-flow.

PRP 1.7.3 - Where filters must be used they are to be kept in good working order and maintained in a sanitary manner.

PRP 1.7.4 - The volume, temperature and pressure of the potable water/steam are adequate for all operational and cleanup demands.

PRP 1.7.5 - Where it is necessary to store water or ice, storage facilities are adequately designed, constructed, and maintained to prevent contamination.

PRP 1.8 Plumbing and Sewage

Importance

As a plumbing system both brings potable water used in food production and service into a facility, and removes sewage and wastewater from a facility it is a potential area for cross-contamination. Plumbing lines have to be maintained and separated to avoid cross-contamination.

Standards

Plumbing

PRP 1.8.1 - A plumbing system must have:

a. Where required, hoses, taps or other similar sources of possible contamination must be designed to prevent back-flow; and

b. Backflow prevention devices;

(1) Must be maintained regularly and be accessible;

(2) Must be designed to handle liquid volume requirements of Food Services operations; and

(3) Must not be exposed near food preparation and service areas (CFRA, 2013).

Sewage

PRP 1.8.2 - A sewage system must:

a. Prevent back-up of raw sewage. If back-up of raw sewage does occur, the affected area(s) must be closed until the issue is fixed and the area is adequately cleaned and sanitized; and

b. Prevent cross-contamination:

(1) Between human waste and production drainage wastes in the establishments;

(2) Between water lines and non-potable water supply systems; and

(3) Such that non-potable re-circulated/reused/recycled water has a separate distribution system which is readily identifiable in the facility;

c. Ensure that the sewage and the waste effluent systems do not pass directly over or through production areas unless they are controlled to prevent contamination;

d. Grease traps must be cleaned and flushed regularly (CFRA, 2013).

PRP 2 – Purchasing/Receiving, Storage, Packaging and Transportation

This PRP consists of four sub-PRPs:

PRP 2.1 Purchasing/Receiving;
PRP 2.2 Storage;
PRP 2.3 Packaging; and
PRP 2.4 Transportation/Distribution.

PRP 2.1 Purchasing/Receiving

Importance

Prevention of food, ingredient and packaging material contamination begins with the control of incoming food and materials. Inadequate controls can result in product contamination, inefficient production or adulteration of the product.

Standards

3 Food Services operations must have documented purchasing procedures in place to ensure that:

a. Ingredients are ordered from suppliers/sources as per existing procurement direction (review the procurement direction in Chapter 2 of the Food Services Manual via this link: http://admmat.mil.ca/cosmat/lbi/DFoodSvcs/Documents/Chapter2_e.pdf and; Food Quality Specifications (FQSs) (available at link: :http://admmat.mil.ca/cosmat/lbi/dfoodsvcs/en/food_specifications_e.asp.; and

b. The required information on ingredients is maintained on file (e.g., specifications, letters of guarantee, certificate of analysis);

4 Upon receiving food from suppliers, Food Services operations must:

a. Assess incoming ingredients, products and materials to ensure that their conditions are satisfactory and that the purchasing specifications have been met; and

b. Ensure returned, defective or suspect products are clearly identified and isolated in a designated storage area, pending assessment to determine the appropriate disposition.

Monitoring/Corrective Actions/Record Keeping

PRP 2.1.1.1 - Visual Monitoring of Receiving Area. Before receiving any food visually check receiving area and equipment for cleanliness - free of any hazards, this includes (but is not limited to) dirt, food, cleaning supplies. If sanitation deficiencies are observed, ensure area and/or

equipment are cleaned prior to food deliveries. Record results as per Annex B;

PRP 2.1.1.2 - Visual Monitoring of Delivery Vehicle. Before receiving any food receiving staff will visually check the food supplier's vehicle storage areas and delivery equipment for cleanliness - free of any hazards, this includes (but is not limited to) dirt, food, cleaning supplies. If delivery vehicle and/or delivery equipment is not sanitary and as a result may have caused contamination to food, do not accept delivery from supplier, inform supervisor and document the reason for return of supplies. Record results as per Annex B;

PRP 2.1.1.3 - Temperature of Food Received. Receiving staff will assess each pallet of food with calibrated temperature thermometer or calibrated temperature gun to ensure delivery temperatures are: Refrigerated Food: 4°C (40°F) or lower; and Frozen Food: -18°C (0°F) or lower. If measured temperature does not reach the standard, do not accept food from supplier, inform supervisor and document the reason for return of supplies. Record results (temperatures as per Annex B); and

PRP 2.1.1.4 - Visual Monitoring of Food. When food is received, Receiving staff will visually check that all food is not damaged or expired, and that the food has not been tampered with. If food is damaged or expired, do not accept food from supplier, inform supervisor and document the reason for return of supplies. If food has been tampered with inform supervisor immediately who must call security elements (Military Police). Record all results as per Annex B;

PRP 2.2 Storage

Importance

5 Storing of foods in an appropriately controlled environment will reduce the potential for contamination and slow the deterioration of foods. The protection of ingredients, food containers and packaging materials during storage will prevent contamination from microorganisms, chemicals and foreign material (e.g., dust, insects, wood chips). Ingredients and finished products that are not properly rotated can reach their expiry date, thereby

increasing the risk for the consumer. In relation to chemicals, if chemicals are stored securely and separately from food items, packaging materials and food contact surfaces, contamination involving spillage, accidental use or leakage will be minimized.

Standards

PRP 2.2.1 - Temperatures of storage areas, processing areas, refrigeration units/coolers and freezers must meet the following requirements:

a. Refrigerated Food. All refrigerated food must be received and stored in a room/area that is 4°C (40°F) or less. Other requirements are as follows:

(1) One hanging thermometer shall be placed in the front by the door and one at the back of the fridge;

(2) Fridges must never be overloaded and food items must be stored six inches off the ground;

(3) Wire type shelves should be used as they allow for proper airflow. Never line shelving with packaging material as it may prevent proper airflow;

(4) All food must be wrapped properly or kept in closed containers which should be clearly marked with dates and contents; and

(5) Meat/fish/poultry/pork products must be stored away from vegetables, fruit and ready-to-eat products. The order of storing meat-like products from top to bottom is the following:

(a) Fish;

(b) Whole cuts of pork;

(c) Whole cuts of beef;

(d) Ground beef or pork; and

(e) Poultry.

(6) Regular cleaning of fridges, during which food items are transferred to another refrigeration unit; and

(7) Always use first in/first out (FIFO) method (CFRA, 2013).

Note: Posters depicting appropriate refrigerator storage of food can be found at the following link:
www.crfa.ca/resources/nfstp/posters.asp

b. Frozen Foods - All frozen food must be stored in a room/area that is -18°C (0°F) or less. Other requirements are as follows:

(1) Always use the FIFO method;

(2) Defrost and clean freezer regularly. During cleaning ensure that food items are transferred to another freezer unit (CRFA, 2013)**;** and

Note: Posters depicting appropriate freezer storage of food items can be found at the following link:
www.crfa.ca/resources/nfstp/posters.asp.

c. Dry Food. Food items that do not require refrigerated or frozen storage must in kept in a clean, ventilated room(s) with adequate lighting. Humidity must be controlled to deter spoilage. Other requirements are as follows:

(1) Dry storage rooms should be maintained at an ambient temperature of between 10°C (50°F) and 21°C (70°F) with a relative humidity between 50% and 55%;

(2) Food should be kept away from direct sunlight;

(3) Food should be stored at a minimum of 15 cm (6 inches) from the ground;

(4) Food should be kept in its original packaging as much as possible. When this is not possible, food should be wrapped or stored in an air tight container to reduce spoilage and prevent pest access (e.g. insects and rodents) from contaminating food. Labels with dates must be included; and

(5) Dry storage areas are regularly cleaned by moving food to other areas during the process (CFRA, 2013);

Note: Posters to facilitate the appropriate dry storage of food can be found at the following link: www.crfa.ca/resources/nfstp/posters.asp.

Monitoring/Corrective Actions/Record Keeping

PRP 2.2.1.1 - Storage Temperatures.
Refrigerator and freezer charts must be completed during every shift. If it is determined that refrigerator or freezer units are not maintaining the required temperature standards, an assessment must be made to determine if the food has entered the temperature danger zone (above 4°C (40°F)). If food has entered the temperature danger zone, hold food for disposal in a separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex C.

PRP 2.2.1.2 – Visual Monitoring of Storage Areas.
The cleanliness of refrigerator and freezer units and dry storage areas must be assessed during every shift. If these areas are identified as unsanitary, or if there has been a possible cross-contamination event, an additional assessment should occur. If it is determined that food items may have been contaminated, the following should occur: hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Rectify the possible contamination issues by cleaning the affected area and/or eliminating the possible cross-contamination issue. Record all results as per Annex C;

3 Ingredients, finished products and packaging materials are handled and stored in a manner which will prevent damage, deterioration and contamination.

In relation to chemical storage

4 Non-food chemicals are received and stored in a dry, adequately ventilated area which is designed such that there is no possibility for cross-contamination of food, packaging materials or food contact surfaces.

5 When required for ongoing use in food handling areas, non-food chemicals are stored in a manner that prevents the contamination of food, food contact surfaces or packaging material.

6 Non-food chemicals are mixed in clean, correctly WHMIS labelled containers (in accordance with WHMIS requirements) and dispensed and handled only by authorized and properly trained personnel.

PRP 2.3 Packaging

Importance

6 Packaging of food for dispersed or catering activities must protect against cross-contamination by keeping out food hazards. In addition, the packaging itself must be made of a material that will not contaminate food.

Standard

PRP 2.3.1 - Packaging must protect against intentional or unintentional contamination and deterioration prior to leaving a Food Services operation. Only use packaging material (food grade) that is fit for its intended use.

PRP 2.4 Transportation/Distribution

Importance

Food carrying vehicles or containers that are not properly constructed, maintained or cleaned can lead to a number of hazards including physical, chemical and microbiological contaminations. Transporting food products and loads of non-compatible materials in one vehicle or container can lead to contamination of the food. When loads are not properly handled, loaded and unloaded, contamination can occur from a variety of sources.

Standards

PRP 2.4.1 - Carriers used for the transport of food must be designed, constructed, maintained and kept clean to prevent contamination, damage and deterioration of the food product. They must be also equipped, where applicable, to maintain food products in a refrigerated or frozen state.

PRP 2.4.2 – Carriers that usually transport materials or substances that might contaminate food products (e.g. petroleum) must not be used.

PRP 2.4.3 - Carriers must be loaded, arranged and unloaded in a manner that prevents outside contaminants from entering the establishment. Also, Food Services operations must prevent damage and contamination of the finished product, ingredients and incoming materials that come in contact with the product or are used in preparing the product.

PRP 2.4.4 - During transport, all food is to be covered in appropriate containers as required. With the exception of those hazardous materials identified in PRP 2.4.2, where conveyers and/or containers have been used for transporting anything other than food, there must be effective cleaning/disinfecting between loads to avoid the risk of contamination. High-risk foods (e.g., raw poultry) must be kept separate from other food items to reduce the potential for cross-contamination.

PRP 2.2.5. Food that is being transported must be kept out of the temperature danger zone (4°C (40°F) to 60°C (140°F)). Cold food that is being transported must be kept at 4°C (40°F) or lower, and hot food must be kept at 60°C (140°F) higher. Food that is being transported must be consumed within two hours from time of departure from the Food Services operation to time of service. The two exceptions to this rule are: boxed lunches – may be held under refrigeration for up to four hours; and hayboxes – may be held for up to four hours if charged.

Monitoring/Corrective Actions/Record Keeping

PRP 2.4.1.1 Transporting Time and Temperature.
If food that is being transported is not consumed in the allowable time, hold food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Annex D must be filled out for each type of food that is distributed from CAF Kitchens. Half of the Annex is kept by the kitchen distribution staff and half goes with the food that is being transported.

PRP 2.4.1.2 Visual Monitoring of Transportation Vehicle.
Kitchen distribution staff must inspect the vehicle (or transportation method) that will be transporting food. The storage area of the vehicle must be clean and free of contaminants. If there is a risk of food contamination during transport due to possible contamination from a transportation vehicle, kitchen distribution staff should not allow the food to be transported. Annex D must be filled out for each type of food that is distributed from CAF Kitchens. Half of the Annex is kept by the kitchen distribution staff and half goes with the food that is being transported.

PRP 3 - Equipment and Utensils

This PRP consists of two sub-PRPs:

PRP 3.1 Equipment; and
PRP 3.2 Utensils

PRP 3.1 Equipment

Importance

In relation to Equipment Design

Well-constructed and maintained major and minor equipment will minimize the potential for biological, chemical and physical hazards. Pits, cracks and crevices can provide areas for residues to accumulate and facilitate the growth of microorganisms. Poor installation of equipment can also result in parts or areas that cannot be properly cleaned, sanitized and inspected. Equipment that cannot be adequately inspected can result in hazards not being detected. Therefore, equipment must be purchased, installed and maintained so that the sanitation program will be able to provide a clean environment to produce and serve safe food.

Note: Major equipment is attached to the building facility or kitchen, whereas minor equipment such as pots and pans are not.

In relation to Equipment Maintenance and Calibration

An effective equipment maintenance program both ensures that equipment consistently performs as intended and prevents contamination of food, ingredients or packaging materials. Controlling devices (such as temperature probes) must be accurate because they are used to monitor critical processes which impact food safety.

Standards

PRP 3.1.1 – Major equipment is designed, constructed and installed to ensure that:

a. It meets Department of National Defence regulatory requirements;

b. It is capable of delivering the requirements of the sanitation program;

c. It is accessible for cleaning, sanitizing, maintenance and inspection and is easily disassembled for those purposes;

d. Contamination of the product and food contact surfaces is prevented during operations;

e. It permits proper drainage and where appropriate, it is connected directly to drains; and

f. It is smooth, non-corrosive, non-absorbent, non-toxic and free from pitting, cracks and crevices (food contact surfaces).

PRP 3.1.2 – To minimize risk of contamination from minor equipment such as pots and pans:

a. Do not cook or store food for long periods of time in aluminum cookware;

b. Do not use badly scratched or uncoated copper cookware to cook or store food;

c. Do not store foods that are highly acidic, such as stewed rhubarb or stewed tomatoes, in stainless steel or aluminum containers;

d. Do not use plastic bowls or wrap in the microwave unless they are labelled as microwave safe;

e. Avoid visibly damaged, stained or unpleasant smelling plastics and containers. Never heat or store food in plastic containers that were not intended for food; and

f. Do not use silicone cookware at temperatures above 220°C (428°F) as it will melt if exposed to high temperatures. Use caution when removing hot foods from flexible silicone cookware, as the food may slide.

PRP 3.1.3 - Food Services operations must implement a documented Preventative Equipment Maintenance Program which includes:

a. A list of equipment that may impact on food safety requiring regular maintenance;

b. A preventative maintenance schedule or frequency of preventative maintenance activities;

c. The maintenance procedures to perform each preventative maintenance task; and

d. Using the Canadian Forces Food Services Equipment Inventory and Maintenance Database in both static and operational environments to track equipment inventory and maintenance throughout its life cycle. This program must be downloaded on a computer. The Canadian Forces Food Services Equipment Inventory and Maintenance Database can be found at the following link: http://admmat.mil.ca/cosmat/lbi/DFoodSvcs/en/cf_food_svcs_equipment_facilities_e.asp

Note: Maintenance procedures are based on the equipment manufacturer's manual or equivalent, or operating conditions that could affect the condition of the equipment.

PRP 3.1.4 - Food Services operations must implement a documented Equipment Calibration Program which includes:

a. A list of equipment monitoring (like temperature probes) and controlling devices that require regular calibration;

b. A calibration schedule or frequency of calibration activities;

c. The calibration procedures to perform for each calibration task; and

d. Records demonstrating that the calibration tasks have been completed.

Note 1: The calibration procedures are based on the equipment manufacturer's manual or equivalent.

Note 2: A monthly calibration log template for hand thermometers is found at Annex E along with calibration instructions.

PRP 3.2 Utensils

Importance

Utensils can be a source of physical hazards that could contaminate food; therefore they must be designed to prevent wear and tear and be cleanable.

Standards

PRP 3.2.1 - Utensils must be constructed of non-toxic materials, must not present a foreign material hazard that could contaminate the food, must be easy to clean and sanitize, and be dishwasher safe.

PRP 4 - Personnel

Note: Food safety training of personnel will be discussed in Section 6 of this Chapter.

This PRP consists of three sub-PRPs:

4.1. Illness and Injury;
4.2. Personal Hygiene; and
4.2. Visitors.

PRP 4.1 Illness and Injuries

Importance

Food handlers infected with a communicable disease (e.g., influenza, salmonella, hepatitis A) can unintentionally contaminate food items being produced or served. This contamination of food items can subsequently transmit disease to CAF diners.

Standards

4.1.1 - Personnel Health Status

a. Food Services personnel must advise management when known to be suffering from a disease that is likely to be transmitted through food;

b. No person is permitted to work in a food handling area when he or she is known to be suffering from or is a carrier of a disease likely to be transmitted through food;

c. Food Services managers have both the right and an obligation to remove food handlers from their work area if they show signs of illness and/or injury that may contaminate food (for civilian workers, their specific collective agreement should be reviewed before taking action); and

d. Employees with open cuts or wounds must not handle food or food contact surfaces unless the injury is completely protected by a secure waterproof covering and will not contaminate the food.

PRP 4.2 Personal Hygiene

Importance

Food Services employees play a major role in the production and service of safe food. The lack of personal hygiene is a major concern in Food Services as there is the potential of workers directly contaminating food. Developing and enforcing a food handler hygiene program will reduce potential hazards and minimize contamination risks.

Standards

PRP 4.2.1 Food Services operations must have a documented Food Handler Hygiene Program that is briefed to all Food Services personnel which includes, but is not limited to:

a. The correct hand washing/sanitizing method;

b. Correct use of clean protective clothing, hair coverings, gloves, footwear. Protective clothing used in Food Services operations must not be worn to or from work;

c. Prohibited practices at the establishment such as wearing jewellery, except alliances rings (example – wedding rings) and medical alert bracelets, during work and no communication devices in production and service areas;

d. Correct use of utensils and equipment;

e. Storage of personal effects to prevent cross-contamination;

f. Where required, restricted access to areas of the facilities by specific employees to prevent cross-contamination (example – flight feeding areas);

g. When required, procedures to prevent contamination due to the process flow, employee flow, product flow, equipment or incompatible operations; and

h. When required, procedures to prevent cross-contamination during production. For example: Glass control and breakage procedures, procedures to follow when a product falls on the floor or when a product is exposed to dripping condensation.

Note: A template example of a Food Handler Hygiene Program can be found at Annex F.

PRP 4.2.2 – Hand washing must occur:

a. Immediately before handling food, ingredients, packaging materials and/or touching food contact surfaces;

b. After using the toilet;

c. After coughing; sneezing; blowing or wiping the nose; touching ears, nose, eyes, mouth, hair, the face, or infected cuts, boils or pimples;

d. After each absence from the work station for breaks and eating;

e. After handling incompatible food products, raw materials, potentially hazardous materials such as garbage or cleaning chemicals or touching non–food contact surfaces such as light or control switches;

f. After picking up objects off the floor;

g. After smoking;

h. After handling money;

i. Any other time hands become soiled or contaminated (OMAFRA, 2004); and

j. When the Food Services Management deems it necessary

Note 1: The proper method for handwashing can be found as per Annex F.

Note 2: A poster depicting effective handwashing can be found at the following link: www.crfa.ca/resources/nfstp/posters.asp.

PRP 4.3 Visitors

Importance

Employees, visitors or contractors who do not follow the establishment's Food Services rules may contaminate food.

Standard

PRP 4.3.1 - Hygienic practices for visitors and contractors must be relayed and enforced. Visitors and contractors must be made aware of all restricted access areas as applicable. All visitors must first report to the designated Food Services supervisor or manager before entering the operational areas of the kitchen. The Food Services supervisor or manager should then explain the pertinent food safety rules to all visitors.

PRP 5 - Sanitation (includes cleaning)

This PRP consists of three sub-PRPs:

5.1 Equipment Cleaning and Sanitizing;
5.2 Utensil/Container/Cutting Board Cleaning and Sanitizing; and

Sanitation

Importance

Cleaning and sanitizing of food premises is carried out to remove food debris, dirt and grease from all surfaces and equipment to ensure that food safety is not compromised. It is imperative that high standards of cleaning are maintained for the following reasons:

a. To reduce the risk of foodborne hazards (which could contain harmful bacteria) by removing food residues;

b. To deny pests harbourage and food;

c. To reduce the risk of foreign objects physically contaminating food;

d. To promote hygiene awareness among Food Services personnel;

e. To potentially eliminate risks of injury to Food Services personnel;

f. To ensure proper chemical concentrations and/or proper chemical applications or rinsing procedures are in place to reduce the potential for chemical contamination of food items; and

g. To deter chemical or biological contamination caused by cross-contamination from cleaning activities during operations.

PRP 5.1 Equipment and Building (Food Services operation) Cleaning and Sanitizing

Importance

A cleaning schedule for the facility, including both the equipment and the building infrastructure (external and internal), must be implemented to ensure that Food Services staff knows when, where and how to clean areas to reduce the risk of food contamination.

Standards

4.8.1. – A cleaning program is important in ensuring that high standards of cleanliness in all food areas are achieved and maintained. This can be achieved by adhering to a written cleaning schedule. Food preparation surfaces and equipment must be regularly cleaned while in use and must include:

a. Instructions for cleaning specific areas or pieces of equipment which includes the following information relative to the task:

(1) Job description;

(2) Cleaning materials and chemicals to be used (in accordance with manufacturer's instruction); and

(3) Safety precautions.

b. The cleaning schedule is to state how often a specific area or piece of equipment is to be cleaned and who is responsible for checking that all cleaning tasks have been completed to a satisfactory standard. General information concerning the cleaning of food equipment, surfaces and the material structures, including a list of cleaning equipment and agents used in food areas/kitchens/galleys/mess can be found at Annex G.

c. Food Services Managers are to implement a cleaning schedule that relates to all food areas within their department. A schedule detailing the frequency of routine cleaning tasks must be produced for each facility. The cleaning schedule is to be contained within Food Services Standing Operating Procedures and communicated to all personnel (e.g. by displaying the schedule on a notice board). A matrix showing the frequency, details of the task, type of cleaning required and a signature block is considered the most useful layout and should be readily available for Food Services workers to follow and sign off. A signature block should also be included for a supervisory check.

PRP 5.1.2 - Deep Cleaning of Food Services and Protective Equipment. All galleys/kitchens and associated areas are to be deep cleaned. Food Services managers are to ensure that deep cleaning contracts are adequate to meet the tasks required. Examples of equipment requiring deep cleaning contracts includes: fire suppression systems, fridge/freezer cooling systems, air filter systems, etc. The frequency of cleaning will be dependent upon the pace of operations and the relevant equipment's Operation and Maintenance (O&M) manual, and is determined by the Food Services Manager with input from Base CE/PWGSC as necessary.

PRP 5.2 Utensil/Container/Cutting Board Cleaning and Sanitizing

Importance

Utensils (including personal utensils, e.g., knife, fork and spoon, serving utensils, knives and slicers, etc. used in production), and containers (including plates, bowls, serving dishes, pots and pans) must be cleaned and sanitized to prevent cross-contamination.

Standards

PRP 5.2.1 - Utensils and containers must be cleaned and sanitized after each use, either via a dishwasher or the three sink method (See Annex H). It is suggested that all utensils and containers be cleaned and sanitized using an industrial dishwasher if available. Also, prep knives and cutting boards should be put through a dishwasher as these items have a greater chance of contaminating large amounts of food. Lastly, slicers must be thoroughly cleaned-in-place as per manufacturer's instructions after each use.

PRP 5.2.2 - Single use utensils and containers must be disposed of after initial use, reuse is strictly prohibited.

Note: Additional information on cleaning and sanitizing can be found in the Food Safety Code of Practice for Canada's Foodservices Industry

PRP 6 - Pest Control

PRP 6.1 Pest Control Program

Importance

Pests (e.g., insects, rodents and birds) can contaminate food, ingredients, packaging materials and food contact surfaces. Pests in or around an establishment can lead to contamination from direct contact, droppings, larvae and dead insects or animals.

Standards

PRP 6.1.1 - Food Services operations must have a documented Pest Control Program in place which includes, but is not limited to:

a. Where applicable, the name of the pest control company or the name of the person contracted for the pest control program;

b. The name of the person at the establishment assigned responsibility for pest control;

c. A schedule or frequency of pest control activities;

d. If pest control is not provided by a contractor or other agency, pest control procedures for the exterior and interior of the establishment must include:

(1) The pest control activities to be performed;

(2) The chemicals required for the effective implementation of the pest control program;

(3) The methods for proper handling and application of pest control chemicals;

(4) The type and location of pest control devices;

(5) Corrective actions to be taken for non-compliant situations observed during pest control activities; and

(6) Records to be kept.

PRP 6.1.2 - Food that is contaminated by pests must be disposed of. Preventive Medicine must be alerted to any contamination of food by pests, and approve disposal when required.

PRP 7 - Response to Foodborne Issues

Response to Foodborne Issues

Importance

How and when a Food Services operation responds to a food recall situation or a suspected foodborne incident may ultimately determine the extent of the foodborne outbreak/situation. Having timely knowledge of a food recall or information from a person who suspects they contracted a foodborne disease allows Food Services operations to decrease the scope and negative impact of food contamination.

PRP 7.1 Food Recall from Supplier

Importance

Having access to federal/provincial recall information (e.g., CFIA Food Recall subscription) allows Food Services operations to rapidly verify if food has been recalled, thereby allowing for the removal of the product through one of the following mechanisms: disposal, holding for investigation, or return to the supplier

Standards

PRP 7.1.1 - All staff in receiving must subscribe to recalls from the Canadian Food Inspection Agency (CFIA). To obtain the necessary email recall notifications from CFIA apply online at: http://www.inspection.gc.ca/english/util/listserv/listsube.shtml?foodrecalls_rappelsaliments
In addition, Base/Wing Food Services Officers, Deputy Food Services and Kitchen/Galley Managers should receive CFIA Recall updates and ensure staff take the necessary actions when a recall occurs. Upon receipt of a recall, receiving personnel (or others in the chain of command if receiving personnel are not available) must:

a. Investigate if food supply has been affected by the recall. This requires receiving individuals to check all storage areas and recent food orders;

b. If recalled food is found in any area in the kitchen (storage production, prep, and service areas) it must be immediately removed and held for investigation, returned to the supplier or disposed of as directed;

c. If recalled food is not disposed of, it must be held in a separate area away from the production/service or storage areas to avoid cross-contamination. The recalled items must

be covered and labelled: RECALLED FOOD – NOT FOR USE;

d. Determine whether any of the affected food has been used in dispersed and flight meals, and advise applicable units immediately; and

e. Write a report immediately of any recalled product that was found stating its type, amount, lot number and location. This report must be sent to the Food Services Manager, Kitchen Manager and others as required.

PRP 7.2 Response to Suspected Foodborne Incident

Importance

Although most personnel cannot diagnose foodborne disease, if one diner suspects a foodborne disease due to dining at a CAF Food Services location the person must be taken seriously. Attention by Food Services in this matter is important to address a diner's concerns and to help determine if there has been a foodborne incident.

Standards

PRP 7.2.1 - The kitchen/galley manager must record the suspected foodborne complaint(s) from the diner(s). The following details must be recorded:

a. Name, Rank, Initials, Unit, Address and Phone Number of person;

b. What food item(s) the person(s) suspects that made them ill;

b. Why the person(s) suspects that food from the CAF location made them sick;

c. When they consumed the suspect food (s) and started feeling ill; and

d. Any symptoms of illness.

The manager/supervisor must then advise the diner to go to the closest medical facility. The kitchen manager should send the above information to the closest CAF Medical Services Unit. The kitchen manager should inform their Chain of Command about the suspected incident and the closest CAF Medical Services Unit. Lastly, the kitchen/production manager should periodically follow up with the CAF Medical Services to see if new information is available in relation to the suspected foodborne complaint.

PRP 8 - Food Defence

PRP 8.1 Food Defence Measures Based on Threat Levels

Food Defence

Explanation of Food Defence - Food Defence involves the precautions taken to prevent intentional contamination of food or the food supply by individuals, groups or organizations that want to cause harm to the CAF. It differs from general food safety in that food safety relates to the unintentional contamination of food. Although food defence is a separate concept, food defence measures need to be incorporated into the CAF FSDS to ensure they are practiced by CAF Food Services personnel.

Importance

Intentional contamination of food can have a devastating effect on CAF human resources. It erodes morale and confidence in the Food Safety System, but more importantly it can cause loss of life and/or a reduction in force readiness and mission capability. Food defence measures must be in place to ensure that intentional harm to the Food Safety System does not occur. Food defence measures are based on current low and high threat level situations.

Components of Food Defence

There are four different areas that a Food Services organization must focus upon to ensure adequate food defence measures are in place. These are:

a. Food Supply – This includes the origin of food (example - food suppliers) used in Food Services operations. This also includes receiving of food during resupply activities;

b. Personnel – Personnel that work directly in the Food Services operations (Food Services staff) must be trustworthy to ensure that they will not intentionally contaminate food. Therefore, proper security clearances must be obtained to work in a Food Services operation including contracted Food Services personnel;

c. Physical Security – There must be adequate physical security within Food Services buildings and Food Services areas so that unfriendly individuals or groups are not able to gain access. Areas that are not constantly observed must be secured; and

d. Visitors – Visitors include individuals who do not work directly for the Food Services operations, such as other Base/Unit personnel, contractors, etc. Extra measures must be established to ensure adequate security levels are obtained or the requisite supervision is established.

PRP 8.1 Food Defence Measures Based on Threat Levels

CAF has two food defence levels based on the threat:

PRP 8.1.1 Food Defence Level 2 – Low Threat.

(When there is no known or potential threat to Food Services, CAF Food Services operations will adopt Food Defence Level Two).

Standards

PRP 8.1.1 Food Defence Level 2 – Low Threat.
A Food Services operation, at a minimum, must always have the following food defence measures in place:

a. Food Supply – In Canada, food suppliers should provide assurances that they have adequate food defence measures in place. When receiving deliveries from food suppliers, Food Services operations must observe all unloading activities. This means watching the food supplier during the entire delivery process. In addition, receiving personnel must inspect all food deliveries for any signs of tampering or adulteration of food. If tampering or adulteration is suspected, military security elements (Military Police) must be alerted immediately;

b. Personnel – All personnel working in Food Services operations must have a minimum of an Enhanced Reliability check performed. If they do not have this security clearance they cannot work in Food Services operations;

c. Physical Security – A Physical Security Survey of all Food Services locations must be requested from local Military Police. They will be able to provide specific security measures that should be put in place. At a minimum, doors to the production areas of the Food Services operations should always be locked to prevent access by individuals that do not work for the Food Services operation. Controlled access to the production areas must be maintained. In addition, all storage areas should be under constant observation. When constant observation is not obtainable, storage areas must be locked. There must be

controlled access for diners to the serving and seating areas. Dining room hours should dictate when the doors (access for diners) are open; outside of dining room hours, these doors should be locked. During dining room hours, diners must show a valid ration card or military/civilian identification to Food Services staff before entering the service and seating areas; and

d. Visitors – All visitors, when entering the Food Services operational areas, must first report to a Food Services manager/supervisor. All visitors must have adequate security clearance to travel into or work within the Food Services operational areas or must be escorted and observed by Food Services staff for the duration of their visit.

PRP 8.1.2 Food Defence Level 1 – High Threat.

When there has been an incident or heightened awareness to potential threats, following discussing with the Chain of Command and CAF security elements (Military Police, Intelligence, Base Defence Force, etc.), Food Services operations must adopt Food Defence Level 1.

Standards

PRP 8.2.1 – The first action during high threat situations is to discuss the issue with the Chain of Command and speak with local security elements. A food defence plan should be agreed upon by all of the above parties and put in place as soon as possible. Technical Guide 188 - The US Army Food and Water Vulnerability Assessment Guide from the US Army Center for Health Promotion and Preventive Medicine should be considered when developing a Food Defence Plan. This is a NATO controlled document (NATO Restricted); therefore, its content will not be discussed in this manual. This manual can be obtained from SJS/D Food Svcs 3 upon request.

4.5 HACCP Based Programs (HBPs)

4.6 HACCP Based Programs (HBPs)

7. HACCP Based Programs (HBPs). After employing adequate Prerequisite Programs (PRPs), HACCP Based Programs (HBPs) will further decrease the risk of food hazards during productions, and service activities. Like PRPs, these activities will be verified (checked, inspected, audited), but also monitored. HBPs will be monitored by frontline workers who will conduct tests to ensure that the food safety practices that have been put in place are working correctly. An example of monitoring is taking and recording scheduled temperature checks of food after the cooking process to ensure that food hazards are eliminated or reduced to safe levels for consumption. Focusing on practices instead of assessing recipes in detail will save time as there are several different recipes within the National Standardized Cycle Menu. In addition, using HBPs provides for more flexibility as ingredients and recipes change constantly. Lastly, HBPs focus on preventing two of the main causes of foodborne disease in Food Services operations: cross-contamination and temperature abuse. The seven HACCP steps are provided in the below table.

Table 5 - The Seven Hazard Analysis Critical Control Point (HACCP) Steps

Step	HACCP Steps
1	Conduct Hazard Analysis
2	Identify Critical Control Points (CCPs)
3	Establish Critical Limits
4	Establish CCP Monitoring Requirements
5	Establish Corrective Actions
6	Establish Verification Procedures
7	Establish Record Keeping Procedures

A brief description of each step is as follows:

a. Step 1 - Conduct Hazard Analysis. Identifying any food hazards (biological, chemical, physical) that must be prevented, eliminated or reduced to acceptable levels;

b. Step 2 - Identify Critical Control Points (CCPs). Identifying the critical control points at the step or steps at which control is essential to prevent or to reduce it to acceptable levels. CCPs are critical points in the process where a specific hazard must be controlled on the basis that no further process will adequately eradicate that hazard;

c. Step 3 - Establish Critical Limits. Establishing critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards;

d. Step 4 - Establish CCP Monitoring Requirements. Establishing and implementing effective monitoring procedures at critical control points;

e. Step 5 - Establish Corrective Actions. Establishing corrective actions when monitoring indicates that a critical control point is not under control;

f. Step 6 - Establish Verification Procedures. Establishing procedures, which shall be carried out regularly, to verify that the measures are working effectively; and

g. Step 7 - Establish Record Keeping Procedures. Establish documentation and records commensurate with the nature and size of the food premise to demonstrate the effective application of the measures.

4.5.1 Benefits of Implementing and Maintaining a HACCP-Based Program

8. The benefits of employing a HACCP-based system in relation to the CAF are that it:

a. Ensures a commitment from leaders to formally support food safety measures from receiving of food to disposal;

b. Allows frontline workers to take ownership of the safety of the food they produce and serve;

c. Increases diner confidence in the safety of the food being served;

d. Aligns food safety practices with NATO partners and other allies;

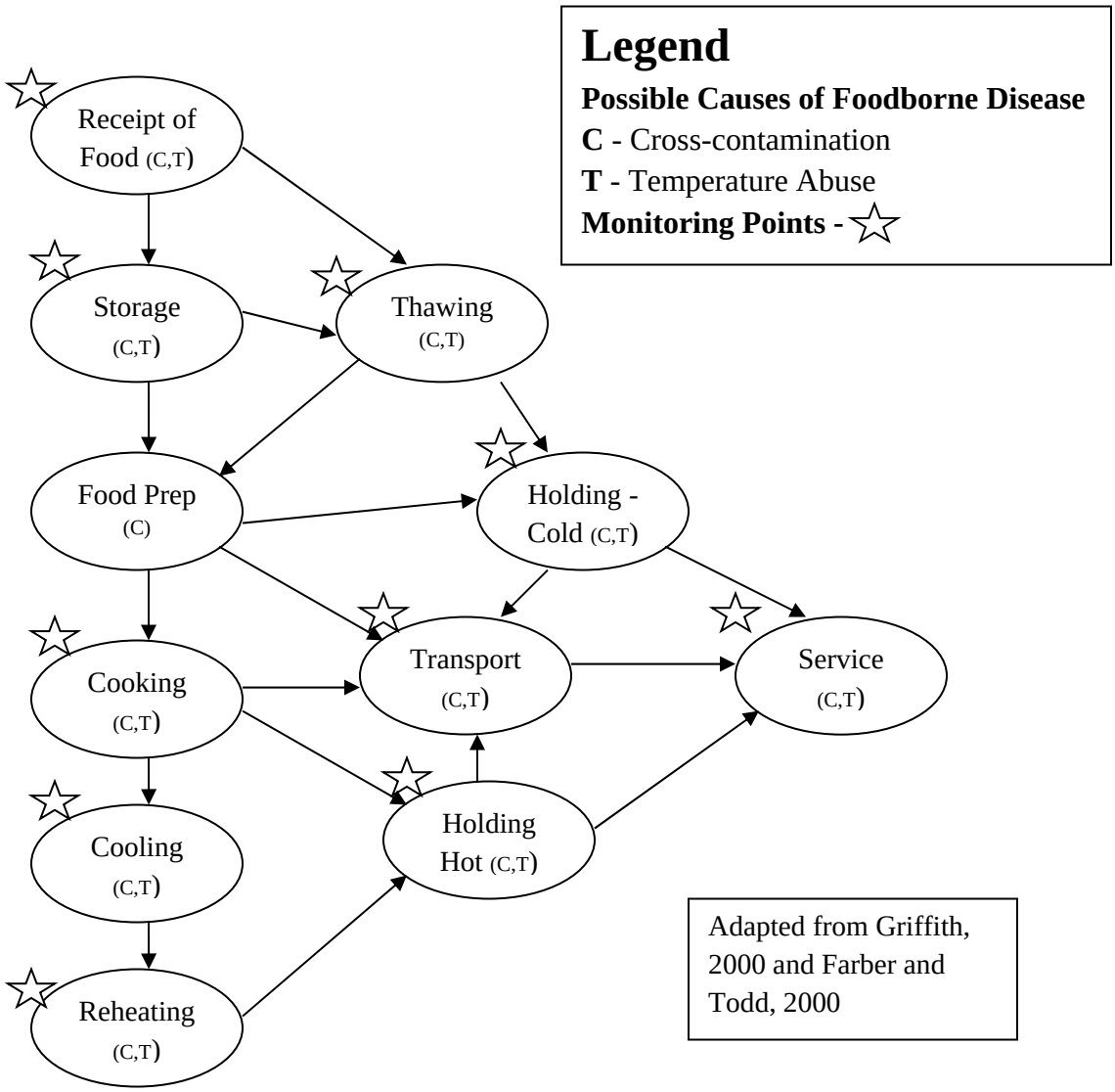
e. Improves food quality and reduces waste; and

f. Decreases the risk of foodborne disease, thus protecting and maintaining fighting capabilities.

9. HACCP Steps in the Food Services Operations. Once adequate PRPs are in place, Food Services operations are ready to receive food as a hygienic and sanitary environment has been achieved. The first step (see next diagram below) is to receive food and materials from a food supplier. When food is received it must be checked that it has been accepted at the proper temperatures, that the food is in a proper state (and packaged correctly) and that the food supplier's delivery mechanism (most likely a truck) is clean. From receiving to the storage of food there is also a danger of cross-contamination between different types of foods (e.g. meat and vegetables). On occasion, food must be thawed prior to preparation; therefore one of the proper methods of thawing must be

used. Before cooking, food may be directly served or may require pre-preparation activities where cross-contamination issues could occur. During and after cooking activities, Food Services personnel must ensure that food is adequately cooked to kill or decrease to acceptable levels the amount of pathogens to a level safe for consumption. After food is cooked, it could be directly served, held before service or cooled and later reheated. If food is served directly to the customer it must be held at a certain temperature to inhibit pathogen growth. Likewise, food that is served cold must be held at or below a certain temperature. This includes the transportation of food, which requires that hot foods are kept hot and cold foods are kept cold. If food has to then be cooled, it must be done so by using an appropriate cooling method to deter pathogen growth. If food has to be reheated it has to be done in such a manner that pathogen growth is kept at a minimum. The following diagram illustrates the possible areas where food hazards can occur or where hazards can increase to unacceptable levels for consumption.

Diagram 1 – Flow of Food in Food Services Operations and Potential Hazards



10. Canadian Armed Forces HBPs. In addition to PRPs, CAF Food Services must focus their food safety efforts to eliminate, deter or reduce the potential risk of foodborne disease in the above steps. When looking at the above diagram, monitoring points can be determined. These monitoring points can be converted to specific HBPs for which the CAF must focus upon. The 8 CAF HPBs are illustrated in the below table. Note: some of the monitoring points are covered by PRPs.

4.6 HBPs

4.7 HBP's

Table 6. CAF HBPs

CAF Food Safety Production and Service Practices
1. Thawing
2. Cold Holding
3. Cooking
4. Hot Holding
5. Cooling
6. Service (Cold or Hot)
7. Reheating
8. Prevention of Cross-contamination

Note: Prevention of Cross-contamination (HBP 8) can occur in any of the process steps in the Diagram above. Therefore, a food safety tool has been developed to monitor Cross-contamination HBP 8 and will be explained at the end of this section.

1. Seven HACCP Steps in relation to CAF HBP. The above Table highlights where a food service operation must focus their efforts with respect to HBPs. There are seven HACCP steps followed in food manufacturing. These have been modified for CAF Food Services operations and are indicated in the Table 7 below.

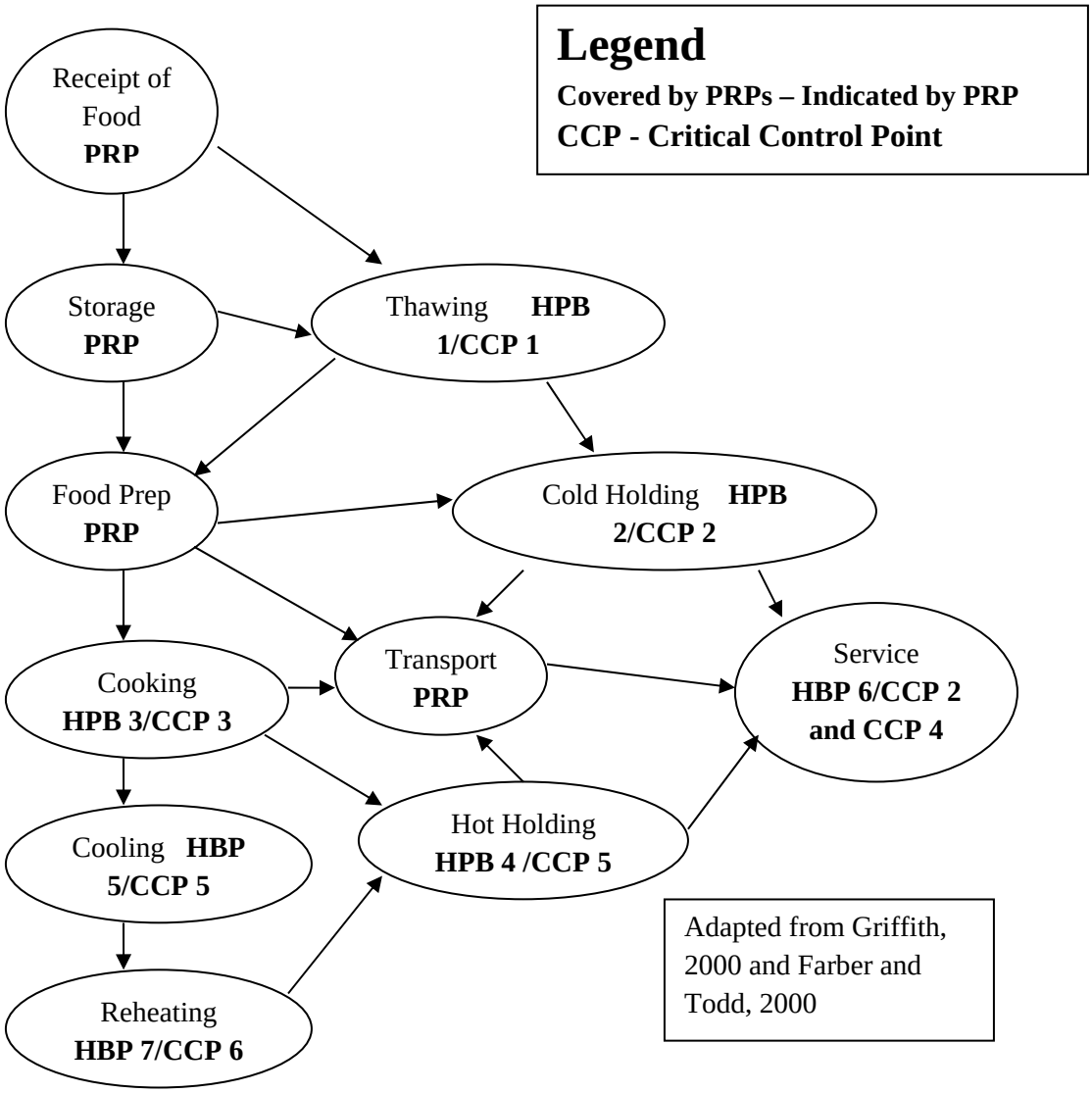
Table 7. Modified HACCP Step for the CAF Food Safety System

Step	HACCP Steps	HACCP Based Steps for the CAF Food Safety System
1	Conduct Hazard Analysis	Be aware of the factors that cause foodborne disease (cross-contamination, temperature abuse, personnel issues, etc.) for specific Food Services processes. Assess specific hazards for each HACCP Based Program (HBP).
2	Identify Critical Control Points (CCPs)	CPPs are identified for each HBP as applicable (for example whole cuts of beef must be cooked to a minimum of 70°C to decrease pathogens to safe levels for consumption).
3	Establish Critical Limits	Critical Limits are established for each HBP such as temperature checks (for example whole cuts of beef must be cooked to a minimum of 70°C or above).
4	Establish CCP Monitoring Requirements	Monitoring could consist of temperature checks and checking for cross-contamination infractions. When, where, and how monitoring occurs will be established for each HBP.
5	Establish Corrective Actions	Corrective actions are developed for each monitoring standard (for example, if a temperature check is conducted and whole cut of beef is below 70°C, put back in oven until proper temperature is reached).
6	Establish Verification Procedures	Verification takes the form of inspections/audits (which would include observing staff) to ensure the monitoring of HBP is working correctly as per the designated standard.

7	Establish Record Keeping Procedures	Paper records of results and corrective actions could be kept for HBP monitoring and verification.

2. HACCP Analysis of each CAF HBP. The above modified HACCP-based seven steps must be used to determine hazards and the required practices and standards that must be achieved for each process step. As per Diagram 2, an analysis determined that some of the process steps can be addressed through PRPs with the remaining being addressed through HBPs. This detailed HACCP-based analysis can be found in Annex S. From this analysis the importance of each HBP with their Critical Control Points (CCPs) will be explained along with the standard (s) that must be achieved. This includes the monitoring and the record keeping for each HBP. HBP verification (food safety checks, inspections and audits) will be further explained in Section 5 of this chapter.

Diagram 2 – Process Steps either Covered by PRPs or HBPs



3. CAF HBPs. Below are the eight HBPs that are explained in detail (the HACCP analysis conducted for each HBP can be found in Annex S). Below, each HBP includes an explanation of the importance of why it must be completed. Secondly, the standard(s) that must be obtained (i.e., monitoring, corrective actions and record keeping) are also provided. Like PRPs, the HBPs will have similar numbering systems as they are divided into Programs and Standards (Monitoring/Corrective Actions/ Record Keeping) that must be achieved:

a. **Program** - e.g., **HBP 2 - Cold Holding;**

b. **Standards (Monitoring/Corrective Actions/Record Keeping). –** E.g. **HBP 2.1 - Critical Control Point 2 - Cold Holding Temperature**. Using a hand thermometer Food Services Staff must monitor cold food being held to ensure that it is kept at 4°C (40°F) or lower and that it is held for no longer than two hours. If food being held goes above 4°C (40°F) or is held longer than two hours, hold food for disposal in separate location until authorized disposal is available (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE Record all results as per Annex I.

Note: Verification of each HBP will be explained in Section 5 of this chapter.

HBP 1 - Thawing

When thawing food, attention must be given to the thawing method that is being utilized. Contamination when thawing can occur through contact with surrounding environment, Food Services staff or from other food. In addition, proper thawing methods ensure that food is thawed so that it does not increase microbial growth to an unsafe level. When thawing, food handlers must ensure that food is kept out of the temperature danger zone and covered to prevent contamination.

Standards (Monitoring/Corrective Actions/Record Keeping)

The four approved methods of thawing food are:

1. Thawing in a Refrigerator at 4°C (40°F) or lower (this is the best method);

2. Thawing under Cold Water – Product being thawed must be completely submerged in potable water that is moving (cold running water);

3. Thawing as a Part of the Cooking Process – Product being thawed must be cooked so that it reaches the proper internal temperature (See HBP 5 – Cooking); and

4. Thawing using a Microwave – When food is thawed using this method it must be cooked immediately to the correct internal temperature (See HBP 5 – Cooking).

HBP 1.1 – Critical Control Point 1 – Thawing Temperature. During the thawing process the food that being thawed must not go above 4°C (40°F) at any time. The shift supervisor will take temperatures with a hand thermometer while food is being thawed. If the food goes above 4°C (40°F) hold food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as Annex N.

HPB 1.2 – Visual Monitoring of Thawing Processes. The shift supervisor will visually monitor thawing operations to ensure that one of the approved methods of thawing is being used, and that the food being thawed is covered and free of contaminants. If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex N.

HBP 2 - Cold Holding

Importance

Cold food must be held out of the temperature danger zone to inhibit growth of pathogens. In addition, prevention measures must be in place to avoid cross-contamination from other types of food, the environment, and personnel (food handlers and diners).

Standards (Monitoring/Corrective Actions/Record Keeping)

HBP 2.1 - Critical Control Point 2 - Cold Holding Temperature. Using a hand thermometer Food Services Staff must monitor cold food being held to ensure that it is kept at 4°C (40°F) or lower and it is held no longer than two hours. If food that is being held goes above 4°C (40°F) or is held longer than two hours, hold food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE.. Record all results as per Annex I.

HBP 2.2 - Visual Monitoring of Holding Processes. Food Services staffs must visually ensure that food is being held at a cold temperature so that there is no possibility of cross-contamination via other types of food, the environment and personnel (food handlers and diners). If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex I.

HBP 3 – Cooking

Importance

Food that is being cooked has to reach the proper internal temperatures to destroy or reduce harmful pathogens to safe levels for consumption. In addition, during the cooking process staff must ensure that cross-contamination from other types of food, the environment or from other food handlers does not occur.

Standards (Monitoring/Corrective Actions/Record Keeping)

HPB 3.1 – Critical Control Point 3 – Cooking Temperature. Using a hand thermometer, Food Services staff must measure internal temperatures for every batch of food that is being cooked. The following internal temperatures must be reached[2]:

a. Poultry;
   i. Poultry pieces: 74°C (165°F)
   ii. Whole poultry: 85°C (185°F)
   iii. Ground poultry: 74°C (165°F)

b. Mixed Food (casseroles, meals with gravy, eggs, mayonnaise, milk): 74°C (165°F) or higher;

c. Whole Cuts (Beef, Lamb, Pork) and Fish: 70°C (158°F) or higher;

d. Ground meats and meat mixtures (Beef, Pork, Fish): 71°C (160°F) or higher;

e. Eggs: 63°C (145°F) or higher.

After measuring, if the correct internal temperatures are not reached, continue cooking until correct internal temperature is obtained. Record all results as per Annex J.

HPB 3.2 - Visual Monitoring of Cooking Processes. Food Services staff must visually check food being cooked to ensure that there is no possibility of cross-contamination from other types of food, the environment and personnel (food handlers and diners). If food has been contaminated, hold contaminated food for

[2] These are the CFIA recommended internal temperatures at time of writing. As these temperatures may change with new scientific evidence or technology, food service workers are encouraged to remain current with the recommended Government of Canada (e.g., CFIA) internal food temperatures.

disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex J.

Note: Cooking posters will be developed in the future.

HBP 4 - Hot Holding

Importance

Hot food must be held out of the temperature danger zone to inhibit growth of pathogens. In addition, preventive measures must be in place to avoid cross-contamination from other types of food, the environment and personnel (food handlers and diners).

Standards (Monitoring/Corrective Actions/Record Keeping)

HBP 4.1 - Critical Control Point 4 - Hot Holding Temperature. Using a hand thermometer, Food Services staff must verify the temperature of hot food that is being held to ensure that it is kept over 60°C (140°F) and that it is held for no longer than two hours. If food that is being held goes below 60°C (140°F) or is held longer than two hours, hold food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex K.

HBP 4.2 - Visual Monitoring of Holding Processes (hot, cold, room temperature). Food Services staffs must visually check the hot food being held so that there is no possibility of cross-contamination from other types of food, the environment and personnel (food handlers and diners). If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex K.

HBP 5 – Cooling

Importance

If cooling procedures are completed correctly, pathogen growth will be reduced to a safe level and food will be safe for consumption. There are two factors that must be considered when conducting cooling activities: Temperature and Time. Food being cooled must reach the proper temperature within a set time to inhibit pathogen growth. Lastly, during the cooling process, staff must ensure that cross-contamination from other types of food, the environment or from other food handlers does not occur.

Standards (Monitoring/Corrective Actions/Record Keeping)

HPB 5.1 – Critical Control Point 5 – Cooling Temperature and Time. During the cooling process and using a hand thermometer, Food Services staff must measure internal temperatures for all food that is being cooled. The following temperatures must be obtained in the specified time:

a. Food must be cooled from 60°C (140°F) to 20°C (68°F) within two hours; and

b. Cooled from 20°C (68°F) to 4°C (40°F) within four hours.

If food that is being cooled goes above the proper cooling temperatures and/or it takes longer than the specified time, hold food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex L.

HPB 5.2 - Visual Monitoring of Cooling Processes. Food Services staff must visually ensure the food that is being cooled there is no possibility of cross-contamination from other types of food, the environment and personnel (food handlers and diners). If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex L.

HBP 6 – Service

Importance

When food is served it must be kept at the proper holding temperature and out of the temperature danger zone to inhibit the growth of pathogens. In addition, preventive measures must be in place to avoid cross-contamination from other types of food, the environment and personnel (food handlers and diners). Because of the nature of serving food, there is a higher possibility of diner contamination during this phase; this is particularly the case during buffet service. Extra vigilance is required when serving food to ensure that diners do not cross-contaminate the food.

Standards (Monitoring/Corrective Actions/Record Keeping)

HBP 6.1 Critical Control Point 6. - Holding (Cold, Hot) Temperatures - Food handlers serving food must take and record food temperatures when food has been put on the line or in the buffet area. Food served or being served must be measured with a thermometer at least twice during serving hours. If food has entered the temperature danger zone (between 4°C (40°F) and 60°C (140°F), hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex I (Cold Holding – CCP 2) and Annex K (Hot Holding – CCP 4).

HBP 6.2 Visual Monitoring of Serving Processes. Shift supervisor must check service operations at least twice each meal hour to ensure that food is being refreshed as required and there are no cross-contamination issues occurring. If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE and Shift IC must record any deviations in Annex N.

HBP 7 – Reheating

When reheating, especially when using leftovers, processes must be in place to ensure that food is reheated to an internal temperature such that microorganisms do not increase to unsafe levels for consumption. In addition, like other HBPs, during the reheating process staff must ensure that cross-contamination from other types of food, the environment or from food handlers does not occur.

Standards (Monitoring/Corrective Actions/Record Keeping)

Note: If leftover food will be stored for future service, it must first be cooled (see HBP 6 - Cooling) then stored at the proper temperature (see HBP 2 – Storage).

HBP 7.1 Critical Control Point 7 – Reheating Temperature. After reheating, food handlers must use a hand thermometer to measure internal temperatures for every batch of food that is being reheated. For reheated foods, an internal temperature of 74°C (165°F) or higher must be reached within two hours of taking the food from storage. After measuring, if the correct internal temperatures are not reached, continue cooking until the correct internal temperature is obtained. Record all results as per Annex J.

HBP 7.2 Visual Monitoring of Leftover/Reheating. Leftover food that is reused must be consumed within 24 hours. Therefore, leftovers must be labelled according to when they were first used. When using leftovers, Shift Supervisors and Food Services staff must visually check that the leftover food is used within 24 hours (from original use) and that there has been no contamination of leftovers during the cooling, storing and reheating processes. If leftover food has been contaminated or has not been used within 24 hours (from original use), hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Record all results as per Annex J.

HBP 8 - Prevention of Cross-contamination

Importance

Cross-contamination of food from physical, chemical and biological food hazards can occur within HBPs 1-7. Visual monitoring checks have been put in place to be conducted within each of these HBP. However, there is still a requirement to make an overall assessment of the kitchen or Food Services operation for potential cross-contamination by food hazards.

Standard (Monitoring/Corrective Actions/Record Keeping)

HBP 8.1 Food Services managers, supervisors and staff must assess each of their kitchens or Food Services operations for cross-contamination risk areas. This assessment must be conducted when opening a new kitchen and/or feeding operation and should be re-assessed on a monthly basis. Any of the assessed cross-contamination issues within each kitchen should be mitigated with preventive measures. Examples of some prevention measures are:

a. Separate raw from finished or ready to eat (RTE) products;

b. Use structural segregation - physical barriers, walls or separate buildings;

c. Use access controls and include requirements to change into required work wear;

d. Establish traffic patterns or equipment segregation - people, materials, equipment and tools (including use of dedicated tools). Initial assessments should be conducted of all kitchens and Food Services operations as per Annex M. After each assessment, mitigation prevention strategies must be put in place. Each month kitchen facilities or Food Services operations should be reassessed for cross-contamination issues and Annex M updated.

5.0 FOOD SAFETY AND DEFENCE VERIFICATION

5.1 Introduction

5.1 Introduction.

1. Verification includes actions such as checks, inspections and audits that ensure that the FSDS in place is working properly. Therefore, verification confirms that the food safety policies, procedures and standards are being followed and practiced by Food Services workers from the receiving of food to disposal. There is a compliance aspect to verification activities; however, verification should be used as vehicle for improvement in food safety and not as a punitive measure. Using multiple levels of verification both ensures the leadership, at all levels, is involved in the food safety system and demonstrates due diligence. It also confirms management's commitment to food safety and continuous improvement. Everyone in Food Services is responsible to improve and maintain food safety, diners demand it, but it is the Food Services leadership that drives the food safety system. Therefore, verification activities at every leadership level must occur.

Note: Annex R summarizes who and when Food Services personnel or other organizations need to complete monitoring and verification activities.

2. **Levels of Verification.** There are five levels of food safety verification within CAF Food Services. Along with Preventive Medicine Inspections from CAF Health Services (which provides another level of food safety assurances), verification activities by Food Services personnel or outside agencies are required at various frequencies to ensure the food safety system is working correctly. The five levels of Verification (along with Preventive Medicine Inspections and the auditing of Food Supplier/Manufacturer) are as follows:

a. Level 1 Verification – Food Safety Checks. Food safety checks are to be conducted by the shift supervisor and must be completed once a day (if shifts overlap both supervisors should conduct the check together). These quick checks will verify that most Prerequisite Programs and monitoring activities are working correctly during a shift. An example of one of these checks is the examination of all storage areas to ensure that there are no cross-contamination or temperature abuse issues occurring. Any problems or deviations that have been discovered will be recorded and corrected as soon as possible. Kitchen supervisors will examine all completed Food Safety Checklists generated by the shift managers (which are signed and dated) on a daily basis. The Level 1 Verification checklist and instructions can be found at Annex N.

b. Level 2 Verification – Food Safety Inspections. Internal food safety inspections are conducted by Kitchen Managers (or second in command) at Bases/Unit locations on monthly basis. These are detailed inspections that not only examine facilities and equipment, but also sanitation levels and food safety practices. All PRPs will be inspected along with

monitoring records. The Sanitation PRP will be verified by visual observation, but also quantitatively by using Adenosine Triphosphate-Bioluminescence (ATP-B) which takes samples from surfaces to help determine overall cleanliness of Food Services locations. During food safety inspections, food safety practices such as handwashing and monitoring activities are observed. Any problems or deviations that have been discovered during food safety inspections will be recorded and corrected as soon as possible. Food Service Officers and Deputy Food Services Officers will examine all completed Food Safety Inspections generated by the kitchen manager (which are signed and dated) on monthly basis. The Level 2 Verification checklist and instructions can be found at Annex O;

c. Level 3 Verification – Base/Unit Food Safety Audits. Base/Unit food safety internal audits are conducted by the Base Food Services Officers and Deputy Food Services Officers on a quarterly basis (four times per year). These audits include both an inspection of facilities and equipment and a review of the Food Services records. The Base/Unit Food Safety Audit will also observe food safety practices that are performed by kitchen staff to ensure that not only are food safety standards known, but also that they are practiced. Any problems or deviations discovered during these food safety audits will be recorded and corrected as soon as possible. Level 3 Verification reports will be sent to the respected Food Services Environmental Command Representative which will examine all completed Base/Unit Food Safety Audits (which are signed and dated). The Level 3 Verification audits and instructions can be found at Annex P;

d. Level 4 Verification – Environmental Command/Strategic Food Safety Audits. Food Services Environmental Command (ECs) L1s or Strategic Food Services Level audits will be conducted every 1-2 years on Bases/Large Units. These will be higher level audits that will examine PRPs and HACCP-Based Programs (HBPs) to ensure that that food safety practices are being completed to the necessary standard. The Sanitation PRP will be verified quantitatively by using Adenosine Triphosphate-Bioluminescence (ATP-B) and assessing samples from food contact surfaces to assess the overall cleanliness for Food Services locations. Any critical or major problems or deviations (ones that will cause food contamination) that have been discovered during food safety audits will be addressed with the specific Base/Unit Food Services Officers. When Level 4 Verification Audits are complete a presentation to present the results of the verification will be provided to Base/Unit OPIs which include the Food Services leadership and key Base/Unit personnel as required. A formal signed audit report will be provided to the respective L1 Food Services representatives if the Strategic level is conducting the inspection. There will be a requirement for the EC Food Services representative to investigate and report back to the strategic level with critical compliance

issues found. Level 4 Audits will also assist the Strategic level to determine if new or amended food safety procedures are required within the CAF Food Safety System. The Level 4 Verification checklist and instructions can be found at Annex Q;

e. Level 5 Verification – Third Party Auditors. Third Party Auditors are organizations that are external to DND that may help in determine if the CAF FSDS is working effectively. Third Party Auditors can provide an unbiased examination of CAF food safety practices. Level 5 Audits could be conducted at Bases/Units but also can be directed towards other CAF audit levels. Audits by Third Parties should be conducted every five years to help determine if the food safety system is working adequately to meet the food safety needs of the CAF. These audit reports will be sent to the Strategic Food Services Level for review and to continually help improve the CAF Food Safety System;

f. Preventive Medicine (PMed)/Food Premises Inspections. PMed/Food Premises Inspections for Base/Unit Food Services location should be conducted on monthly basis by CAF Health Services personnel. Note: in the future, CAF Health Services will move towards a 'risk based' approach to determine the frequency of PMed/Food Premises Inspections. Base/Unit Food Services supervisors and managers should take the opportunity to relay their food safety concerns during these inspections and utilize PMed/Food Premises Inspections as a way to improve the food safety system. A collaborative approach should be taken. All PMed Food Premise Inspection reports must be reviewed by Base/Unit Services Officers and Deputies and a written response of actions that were taken must be returned back to Health Services Unit who conducted the inspection. This formal response should be sent though Base/Unit leadership so that they are aware of current food safety issues and assist with needed resources to correct noted food safety issues; and

g. Food Supplier/Manufacturer Audits. On international or domestic operations food safety audits of suppliers/manufactures must be conducted based on the Theatre risk assessments. This audit's checklist can be found in AMedP 4.5 of NATO STANAG 2556. Currently, CAF Food Services does not have the capability to conduct these types of inspections. CAF Health Services (e.g., PMed Techs) can assist through either on-site inspections or assessments, or, through liaison with Health Services NATO allies operating in theatre.

The following is a summary of the various verification levels.

Table 1 – CAF Food Services Food Safety Verification Levels

Conducted By	Type of Audit	Method	Frequency	Reviewed By
Shift Supervisor	Level 1 Verification – Food Safety Checks (Internal First Party)	Quick Checks (inspection)	Every Shift	Kitchen Supervisors
Kitchen Supervisor	Level 2 Verification – Food Safety Inspections (Internal First Party)	Full Inspection and ATP-B	Once per month	Base Food Services Managers
Base Food Services Managers	Level 3 Verification – Food Safety Audits (Internal First Party)	Full Audit	Every three months	Environmental Commanders or Strategic Level
Environmental Command or Strategic Level	Level 4 Verification – External Food Safety Audits (External Second Party)	Full Audit and ATP-B	Every one to two years	Third Party Auditors
Organizations outside DND	Level 5 Verification – External Third Party	Food Safety System Audit	Every five years	Strategic Level

3. **Assessment of Compliance.** For Level 1 Verification - Food Safety Checks and Level 2 Verification – Food Safety Inspections noted issues will be documented along with the action taken to correct any food safety issues. For Level Verification 3 – Base/Unit Food Safety, and Level 4 Verification – Command Strategic Audits, food safety problems or non-conformities noted by the auditor will be divided into three categories: critical, major, and observations. These are explained below.

a. Critical (C). A critical compliance issue is a condition, practice, step or procedure that if in noncompliance, presents a biological, chemical or physical hazard that can cause food to be unsafe for consumption. An

example of a critical compliance issue in relation to practices may be a Food Services worker not washing their hands or using improper thawing methods. Examples of critical findings regarding infrastructure include, but are not limited to, loss of electricity for an extended period of time, loss of potable water, or severe contamination of Food Services production and storage facilities by raw sewage or other similar contaminants. In addition, omitting a food safety practice such as the receiving staff not being aware of a food recall could also be classified as a critical compliance issue. When an issue is deemed critical, contamination of food is likely as major errors in the food safety system were detected. Critical issues must be addressed immediately;

b. Major (M). A major compliance issue is a condition, practice, step or procedure which does not present an imminent food safety concern, yet can affect the safety or usability of the products. For example, a food safety sub-program for one area is not being implemented. A major compliance issue regarding infrastructure presents a moderate risk for physical safety and food safety, and over time may elevate to a higher risk level. Examples include deterioration of physical structures that may facilitate pest entry or physical hazards to food, inoperable refrigeration units that result in foods being improperly stored or over-packed in the few units that are operating properly. When an issue is deemed major, food contamination is possible as errors in the food safety system were detected. Major issues should be addressed as soon as possible;

c. Observations (O). Observations document non-conformities that are not Critical or Major. Examples include: a food safety program for one area is partially implemented, but is fully implemented in other areas; one out of three refrigeration units had a broken thermometer but the refrigerator was found to be operating at the proper temperature; one employee was observed not wearing a hair restraint. An observation may represent a single occurrence that was corrected and is generally not an indicator of a chronic or systemic problem. When multiple observations are made regarding the same non-conformance, the finding is documented as a Major Critical Compliance Issue.

d. Satisfactory (S). A mark in the “S” column indicates the item was inspected and no non-conformances were found regarding infrastructure or food safety practices.

4. **Food Safety Records.** All food safety records (monitoring and verification records) must be retained by the respective Base/Unit for not less than two years.

6.0 FOOD SAFETY AND DEFENCE TRAINING

6.1 Introduction.

Personnel involved within the food supply, production and service chain, regardless of their rank or if they are military or civilian Food Services workers must undertake food safety training in order to ensure a minimum competency to decrease the risk of food contamination. The level of training must relate to the actual job of the individual and the type of food they handle. The training requirement must therefore be based upon assessed risk. Consequently, all food handlers and others working in Food Services must obtain a minimal acceptable level of training. Food safety training is required by all food handlers commensurate with their position within a Food Services operation.

6.2 Levels of Food Safety Training.

There are three level of Food Safety Training: Basic, Intermediate and Advanced Food Safety Training. Basic Food Safety Training (Level 1) provides training for entry level food handlers, which includes new civilian Food Services workers, apprentice cooks and new Food Services officers. All food handlers, including new Food Services managers, must have a basic knowledge of food safety. Basic Food Safety training also includes yearly refresher training, and for military personnel, basic food monitoring activities will be provided, in addition to basic food safety programs. Intermediate Food Safety Training (Level 2) includes the supervision of food safety monitoring and verification activities for both military cooks and new Food Services officers. Lastly, Advanced Food Safety Training (Level 3) encompasses higher level food audit capabilities of CAF Food Services operations and contracted Food Services operations (Note: Still need to be developed). A summary of Training Levels are provided below.

a. Level 1 – Basic Food Safety Training. This basic level of training for food handlers is provided to all new food handlers and new Food Services Officers. Basic Food Safety Training is divided into sub-levels which includes basic training for all food handlers, yearly refresher training and additional training for new military Food Services personnel.

(1) Level 1a – Basic. This basic level must be obtained by all food handlers (military and civilians) and includes new Food Services Officers. This training should be provided through train-the-trainer programs or through E-learning at a Base or Unit. All new civilian food handlers will complete this basic food safety training before they start working within Food Services operations, whereas military cooks will receive their basic food safety training initially at the Canadian Forces Logistics Training Centre (CFLTC) during their QL 3 – Cook Apprentice. New Food Services Officers will receive this basic training on their initial Food Service Officers Course as part of their AIHN qualification. Lastly, Basic Food Safety will be formally certified (tested) and re-certification must happen at least every five years for all military and civilian food handlers. Level 1a – Basic Food Safety Training must teach the following topics:

(a) Food Safety Hazards;

(b) Major and Minor Equipment Design;

(c) Control of Hazards Following the Flow of Food;

(d) Sanitation;

(e) Pest Control;

(f) Personal Hygiene Rules and Requirements; and

(g) Visitor Issues.

(2) Level 1b - Refresher Food Safety Training. Refresher training is intended to remind food handlers of the critical food safety practices and procedures and is meant to maintain food safety knowledge between basic food safety training certification. All food handlers will complete yearly certified refresher training at their Bases or Units via an E-learning web based program. Additionally weekly food safety talks by kitchen personnel to staff will also help in maintaining food safety knowledge.

(3) Level 1c – Enhanced Basic Food Safety Training. This training will be taught to military cooks during their initial QL 3 Apprentice Cook Course. This training includes Level 1a Basic Food Safety Training plus food safety monitoring such as taking and recording temperatures. Food safety monitoring points will be taught and practiced by cooks during their QL 3 Apprentice Cook course, opportunities for practice and skill development will continue throughout the course. For new Food Services Officers, during their initial Food Services Officer Course, monitoring points will be demonstrated by CFLTC staff so they will have some background knowledge of proper monitoring techniques. The following monitoring points will be taught during Level 1c – Enhanced Basic Food Safety Training:

(a) Receipt of Food;

(b) Storage;

(c) Thawing;

(d) Cold Holding;

(e) Cooking;

(f) Hot Holding;

(g) Cooling; and

(h) Reheating.

b. Level 2 Intermediate Food Safety Training. Intermediate food safety training encompasses both the supervision of food safety monitoring and

food safety verification activities. For cooks, higher levels of verification are introduced commensurate of their training qualifications levels. Food Services Officers are trained in intermediate food safety during their initial Food Services Officer Course with more of an emphasis on verification activities. Level 2 Intermediate Food Safety training is conducted at CFLTC and includes the following sub levels:

(1) Level 2a - Intermediate Food Safety Training. This training includes a more detailed instruction in foodborne disease including causes and prevention. Instruction and supervision, monitoring of activities and Level 1 Verification – Food Safety Checks are taught during this training. For cooks this training is conducted during the QL 5 Cook Journeyman Course. On the Food Services Officer Course, officers review the Level 1Verification activities with more of an emphasis on the causes and prevention of foodborne disease;

(2) Level 2b – Intermediate Food Safety Training. This training focuses on Level 2 Verification – Food Safety Inspection activities, which includes not only the inspection of facilities and equipment, but observation and assessment of food safety practices along with quantitative assessment of sanitation efforts using ATP-B Testing. For cooks this training is conducted during the QL 6A Supervisor Course and for the officers during the Food Services Officers Course.

(3) Level 2c – Intermediate Food Safety Training. This training focuses on the Level 3 Verification – Base/Unit Food Safety Audits. For cooks this training is conducted during the QL7 Supervisor's Course and during the Food Services Officers Course for officers. Higher assessment is required based on probability of contamination of food. This training will culminate in a briefing to higher commanders (a role play activity).

c. Level 3 Advanced Food Safety Training (Note: Still need to be developed). Advanced Food Safety Training encompasses higher level food audit capabilities of CAF Food Services operations and contracted Food Services operations. In addition to this, food safety audits of food suppliers and manufactures will be introduced (the scope of this possible capability needs to be further assessed by CAF Food Services and CAF Health Services). Advanced Food Safety Training is completed by senior Food Services officers and senior cooks who will be part of the Food Services environmental command teams, strategic food safety auditor teams or theatre Food Services command teams who must assess food safety compliance of Bases/Wings, Brigades, Theatre operations and/or contracted food or Food Services operations.

A summary of training levels is provided below to facilitate the comparison between rank (or position) and training level.

Table 1 – Food Safety Training Requirement at Various Ranks/Positions

Training Level	**Level 1 Basic**			**Level 2 Intermediate**			**Level 3 Advanced**
Sub Level	1a	1b	1c	2a	2b	2c	3
Related Practices Required for Training	PRPs 1-7	PRPs 1-7	PRPs 1-7 HBP 1-7	PRPs 1-7 HBP 1-7 Level 1 Verification	PRPs 1-8 HBP 1-8 Level 2 Verification	PRPs 1-8 HBP 1-8 Level 3 Verification	PRPs 1-8 HBP 1-8 Level 4 Verification
Civilian Food Services Workers							
FOS 2s	X	X	Note 1	-	-	-	-
FOS 3s	X	X	Note 1	Note 1	-	-	-
FOS 5s	X	X	Note 1	Note 1	-	-	-
Military Cooks							
QL 3	X	X	X	-	-	-	-
QL 5	X	X	X	X	-	-	-
QL 6A	X	X	X	X	X	-	-
QL 7	X	X	X	X	X	X	
MWOs/CWOs	X	X	X	X	X	X	X
Strategic or Theatre Food Safety Auditors	X	X	X	X	X	X	X
Food Services Contract Assessors	X	X	X	X	X	X	X
Food Services Officers							
Newly Trained Food Services Officers	X	X	Note 2	Note 3	Note 4	X	-
Environmental Command Food Services	X	X	Note 2	Note 3	Note 4	X	X

Officers							
Deployed Food Services Officers	X	X	Note 2	Note 3	Note 4	X	X
Food Services Contract Assessors	X	X	Note 2	Note 3	Note 4	X	X

Note 1: Civilian food handlers will require on the job training from Base/Unit military supervisors based on position within the Food Services operation.
Note 2: Food Services Officers are required to know the safety monitoring process but will not be conducting food safety monitoring.
Note 3: Food Services Officers are required to know the Level 1 Verification process, but will not be conducting Level 1Verification during their training.
Note 4: Food Services Officers are required to know the Level 2 Verification process and will conduct Level 2 Verification activities during their Food Service Officer Course. However, once employed on Bases as qualified Food Services Officers they will only review and comment on Level 2 Verifications.

7.0 Continuous Improvement (CI)

7.1 Introduction

Continuous improvement (CI) or continual improvement in relation to food safety can be described as improvements in the food safety system either by slow or rapid, small or large changes. CI can take many forms such as reducing food safety infractions, improving food safety training or getting frontline staff involved in the food safety system. Perfection within any system may be impossible to obtain, however improvements in the food safety system, large or small will reduce the potential for the contamination of food, which may in turn prevent a diner from becoming ill. Also, because the food safety system is a system, when one of its elements improves, the other elements of the food system will also improve. For instance, better food safety training will improve the food safety practices of frontline workers. Each Food Services organization must try to continually improve its Food Safety system, or like any system it will stagnate and become ineffective. The next section provides some ways to continually improve the CAF Food Safety System. Note: This is not an exhaustive list and Food Services organizations are encouraged to create new and innovative ways of improving the CAF FSDS for their own specific organization and also the system as a whole.

7.2 CI Strategies

CI Strategies or ideas for improving the food safety system are not only a leadership endeavour. All personnel that work in the system can contribute. Below are some strategies to encourage CI from frontline food handlers to the strategic level and everyone in between.

a. CI for Frontline Food Handlers. Due to the nature of the business, food safety in Food Services is influenced greatly by the daily actions of frontline workers, be it civilian Food Services workers or military cooks. Some of the ways that frontline workers can improve the food safety system are as follows:

(1) Ensure Proper Training. Frontline workers must ensure they have the proper level of food safety training within the Food Services operation. If frontline workers are not properly trained, they should inform their supervisor as soon as possible so they can receive the proper training for their positions within the Food Services operation;

(2) Be a Food Safety Monitor. Food Safety monitoring, such as taking temperatures, ensures the food safety practices that have been put in place are working correctly. Some monitoring activities are exclusive to certain frontline positions; however, the prevention of cross-contamination by vigilant food handlers is just as important. All Food Services personnel should act as monitors and take action when necessary to avoid food contamination;

(3) Assist in the Verification Process. Although one thinks of verification (food safety checks, inspections and audits) as a

leadership responsibility, frontline workers can assist in verification activities. When conducting verification, supervisors should bring along frontline workers to assist in the process. Frontline workers can help by taking measurements or making observations. There is also mentoring activity that is ongoing between supervisor and frontline workers. The frontline worker can learn from the supervisor, and the supervisors can learn from the frontline worker as they directly produce and serve meals;

(4) Talk about Food Safety. Frontline workers can also be teachers, not only on the floor but during meetings. Food safety discussions can be formal or informal, e.g., similar to the "Five minute safety talk" provided by foodhandlers to food handlers during staff meetings. Subjects can be specific to the Food Services operation or to food safety in general, the end result being that good food safety practices will have been emphasized.

(5) Become a Member of a Food Safety Committee. A monthly food safety committee could be formed and co-chaired by both military and civilian members of the Food Services team. Food Safety committees can meet once a month to discuss current food safety issues, monthly food safety inspection reports and possible ideas for improving food safety. The goal of such a committee is not to highlight problems to lay blame, but to work collaboratively to solve food safety issues and improve the food safety system as a whole. The Food Safety Committee results should be recorded as minutes and held on file in the kitchen. Important components to record include the food safety problem or issue, ideas to improve the system, including how the problem can be solved, and what resources are needed to implement the change or new idea.

b. CI for Food Services Supervisors. Food Services supervisors play an important role in the CI process as they relay frontline issues to the Food Services management. Supervisors, especially ones that are in production or service functions, know the daily workings of the operation. Some ways that supervisors can improve the food safety system are as follows:

(1) Proper Food Safety Training. Supervisors must ensure that they have the necessary food safety training for their position and the people they supervise. It is the supervisor's responsibility to let management know of any gaps in food safety training and the resources needed to fill the gap;

(2) Verification as a CI Tool. Food safety checks, inspections and audits help ensure compliance, but more importantly are used as tools for improvement. Verification activities should not be used as

a punitive mechanism but an opportunity for learning. Verification results should be shared and discussed with staff. Supervisors could also be part of Base/Unit Food Safety Audits by assisting management during these audits. This way, the supervisors can provide both the rationale for, and potential solutions to, noted infractions;

(3) Food Safety Leaders. A supervisor at a Base or large Unit could be designated as the Base/Unit Food Safety Supervisor as a secondary duty. This person could listen to feedback from frontline workers and supervisors in relation to food safety issues. He/she would ensure the Food Safety Committee is created, that regular committee meetings are held, and that food safety talks are conducted. In addition, the Base/Unit Food Safety Supervisor can conduct monthly Food Safety Inspections and act as the food safety training coordinator for Base or Unit personnel. Lastly, Base/Unit Food Safety Supervisors have a direct line to Food Safety Management (for food safety issues);

c. CI for Food Safety Managers. Food Services Managers are the main change agents to improve the CAF FSDS as most of the time they can allocate the needed resources to the problem areas. Managers must always obtain input from supervisors and frontline workers when food safety problems or potential problems are identified. Some of the ways managers can improve the food safety system are as follows:

(1) Listen. One of the best attributes of good leaders is to listen. Although managers may not be directly involved in daily Food Services operations, it is imperative they listen to their supervisors and frontline workers when food safety issues are identified. This includes reading and responding to correspondence from the Food Safety Committee, and gaining feedback at staff meetings or face to face on the floor. Many times the best workable solution to food safety problems comes from frontline workers and supervisors;

(2) Verification as a CI Tool. Just like supervisors, managers can use their audits as a positive change agent to improve food safety within their Base or Unit. Managers can use recorded observations to encourage correct food safety practices, and can also provide evidence to acquire needed resources. Like all levels, when environmental or strategic food safety audits are conducted management should accompany the audit team to learn from the process and explain potential reasons for any compliance issues; and

(3) Provide Input to Better the System. Food Safety Managers should be firstly focused on improving food safety within in their own operation. However, they can also improve the CAF FSDS by providing feedback to their environmental command Food Services level. If Food Services managers have a valid concern, environmental command should relay on the issue to the strategic command level for consideration. This may result in improvements to the food safety system at the CAF/DND level.

d. CI for the Food Services Environmental Command (EC) Levels. EC Food Services Officers must relay valid food safety issues and ideas from the Base/Unit Level to the Strategic Level. In addition, when conducting verification activities at Bases and Units, the audit should be used as a learning opportunity for all involved along with checking for food safety compliance issues. EC Level Food Services Teams should provide input to the Strategic Level on food safety concerns and practises specific to their environmental feeding regimes (field, seaboard and flight feeding) to assist changing procedures when necessary.

e. CI of the Strategic Food Services Level. At the strategic level, the main responsibility is to produce, promulgate and maintain food safety policy, standards and procedures. Since the CAF Food Safety Systems is a system, the strategic Food Services level must gain input from the environments to improve the system. Without this consultation, the food safety system will not be effective. The strategic level must also incorporate food safety verification activities to ensure compliance, while also determining if the system is working correctly and as it was designed. There are two other activities the strategic level must fulfill:

(1) Translate Feedback into Change. Each year the Strategic Level must solicit the Environmental Commands for any valid problems with the current CAF FSDS prior to a Food Services Senior Advisory Council (FSSAC). Good suggestions for improving the system would also be welcomed. This input can be generated at the environmental level, but should also come from the Base or Unit level through their respective environmental commands. During the FSSAC, problems or new ideas to improve the CAF FSDS will be discussed and changes to food safety standards and/or procedures may follow. If a change is warranted the strategic level will draft the revised standard and/or procedure and circulate it to the environmental level for final feedback. Promulgation of the changed standard and/or procedure may then occur; and

(2) Maintain the System. Sometimes it is worthwhile for someone outside the system to analyse the system. Personnel who are part of the system may think alike, therefore may not see any problems

with the system. Therefore the CAF FSDS should be analysed by an applicable Third Party Auditor (an organization outside the DND) with a goal of providing strategic level feedback on the effectiveness of the established system.

Annexes

Annex A
Common Foodborne Diseases

PATHOGENIC MICRO-ORGANISMS			
PATHOGEN	***Salmonella enterica.* spp.**	***Shigella* spp.**	***Campylobacter* spp.**
DISEASE	Salmonellosis	Shigellosis	Campylobacteriosis
INCUBATION PERIOD	6 to 72 hours	12 to 36 hours	2 to 5 days
DURATION OF ILLNESS	1-2 days (may last longer)	3 to 14 days	7 to 10 days (relapses common)
SYMPTOMS	Abdominal pain, nausea, vomiting, fever, diarrhea	Diarrhea (sometimes bloody), abdominal pain, fever, vomiting, chills, lassitude, dehydration	Diarrhea (watery or bloody), fever, nausea, abdominal pain, headache, muscle pain
SOURCE	Domestic and wild animals, humans (intestinal tract) – especially as carriers	Humans (intestinal tract), flies	Domestic and wild animals (intestinal tract)
FOODS INVOLVED	Poultry and poultry salads, meat and meat products, fish, shrimp, sliced melons, sliced tomatoes, milk, shell eggs, egg custards and sauces, and other protein foods	Salads (potato, tuna, shrimp, chicken, macaroni), lettuce, raw vegetables, milk, and dairy products, poultry, moist and mixed foods.	Unpasteurized milk and dairy products, poultry, pork, beef, lamb, non-chlorinated water
PREVENTION	Avoid cross-contamination, refrigerate food, thoroughly cook poultry to at least 85° C (185° F), rapidly cool cooked meats and meat products, avoid contamination from food handlers by practicing good personal hygiene	Avoid cross-contamination, avoid fecal contamination from food handlers by practicing good personal hygiene, use sanitary food and water sources, control flies and rapidly cool foods	Thoroughly cook food to minimum safe internal temperatures, avoid cross-contamination.

PATHOGENIC MICRO-ORGANISMS			
PATHOGEN	***Escherichia coli O26-O103-O111-O145-O157***	***Listeria monocytogenes***	***Yersinia enterocolitica***
DISEASE	EHEC infection	Listeriosis	Yersinosis
INCUBATION PERIOD	2 to 9 days	2 to 30 days	3 to 5 days
DURATION OF ILLNESS	8 days	Indefinite, depends on treatment; high fatality rate in immuno-compromised individuals	Weeks
SYMPTOMS	Diarrhea (watery, could become bloody), severe abdominal cramps and pain, vomiting, occasional low-grade fever	Nausea, vomiting, diarrhea, headache, persistent fever, chills, backache, meningitis, abortion.	Abdominal pain, nausea, vomiting, moderate fever, mild diarrhea and increased risk for reactive arthritis
SOURCE	Animals, particularly cattle, humans (intestinal tract)	Soil, water, mud, humans, domestic and wild animals, fowl, damp environments	Swine
FOODS INVOLVED	Raw or undercooked ground beef, imported cheeses, unpasteurized milk, roast beef, dry salami, apple cider, commercial mayonnaise	Unpasteurized milk and cheese, ice cream, raw vegetables, poultry and meats, seafood, and prepared, chilled, RTE foods	Pork meat and feces contaminated drinking water.
PREVENTION	Thoroughly cook ground meat to at least 74°C (165° F), avoid cross-contamination from food handlers by practicing good personal hygiene	Use only pasteurized milk/dairy products, cook foods to proper internal temperatures; avoid cross-contamination, clean and sanitize surfaces; avoid pooling water	Thoroughly cook pork meat to at least 74°C (165°F) avoid cross-contamination of other food while handling raw meat from swine.

PATHOGENIC MICRO-ORGANISMS			
PATHOGEN	***Vibrio parahemolyticus***	***Vibrio cholerae***	***Clostridium perfringens***
DISEASE	*Vibrio parahemolyticus* gastroententeritis	Cholera	*Clostridium perfringens* gastroenteritis
INCUBATION PERIOD	8 to 24 hours	2 to 5 days	8 to 24 hours
DURATION OF ILLNESS	3 to 5 days	4 to 6 days	48 hours (may last 1 – 2 weeks)
SYMPTOMS	Abdominal pain nausea, vomiting, headache mild fever, mild self-limiting diarrhea	Abdominal pain, acute diarrhea, severe dehydration and symptoms caused by dehydration. Without treatment a mortality of 60%.	Abdominal pain, diarrhea, dehydration
SOURCE	Seafood, crustaceans and filter-feeders	Humans (intestinal tract),	Humans (intestinal tract), animals, soil
FOODS INVOLVED	Raw and insufficient heated seafood or cross-contamination from these products.	Feces contaminated drinking water, contamination by foodhandlers and seafood (crustaceans, filter-feeders)	Cooked meat, meat products, poultry, gravy, beans that have been cooled slowly
PREVENTION	Sufficient heat treatment of seafood or avoid cross-contamination	Avoid fecal contamination, health surveillance of food handlers, practicing good personal hygiene, thoroughly cook foods to a minimum safe internal temperature, use chlorinated water	Use careful time and temperature control in cooling, hold hot foods at 60°C (140°F) and reheating cooked meat, poultry and bean dishes and products to 74°C (165°F) for at least 15 seconds within two hours

PATHOGENIC MICRO-ORGANISMS			
PATHOGEN	***Clostridium botulinum***	***Bacillus cereus***	***Staphylococcus aureus***
DISEASE	Botulism intoxication	*Bacillus cereus* gastroenteritis/ intoxication	*Staphylococcus* intoxication
INCUBATION PERIOD	18 to 36 hours (may vary from 4 hours to 8 days)	½ to 6 hours (emetic type); 6 to 15 hours (diarrheal type)	½ to 6 hours
DURATION OF ILLNESS	Several days – a year	Less than 24 hours (emetic); 24 hour (diarrheal)	2 to 3 days
SYMPTOMS	Lassitude, weakness, vertigo, double vision, difficulty speaking and swallowing, constipation	Nausea and vomiting, occasional abdominal cramps and/or diarrhea, abdominal cramps, pain, nausea (diarrheal)	Nausea, vomiting, abdominal cramps, in more severe cases, headache, muscle cramping, changes in blood pressure and pulse rate
SOURCE	Soil, water	Soil and dust	Humans (skin, hair, nose, throat, infected sores), animals
FOODS INVOLVED	Improperly processed canned low acid foods, garlic-in-oil products, grilled sautéed onions in butter sauce, leftover baked potatoes, stews, meat/poultry loaves	Rice products, starchy foods (potato, pasta, and cheese products), sauces, puddings, soups, casseroles, pastries, salads (emetic); meats, milk, vegetables, fish (diarrheal)	Ham and other meats, poultry, warmed-over foods, egg products, milk and dairy products, custards, potato salads, cream-filled pastries, protein products
PREVENTION	Do not use home-canned products, use careful time and temperature control for sous vide items and all large bulky foods, purchase garlic and oil mixtures in small quantities for immediate use and keep refrigerated, cook sautéed onions on request, rapidly cool leftovers	Use careful time and temperature control and quick-chilling methods to cool foods, hold hot foods at 60 °C (140 °F) or higher; reheat leftovers to 74 °C (165 °F) for at least 15 seconds within two hours	Avoid cross-contamination from bare hands, practice good personal hygiene, exclude food handlers with skin infections from food preparation, properly refrigerate food, rapidly cool prepared food

PATHOGENIC MICRO-ORGANISMS			
PATHOGEN	***Norwalk and Norwalk-like viral agents***	***Hepatitis A/E virus***	***Puumala/ Hanta virus***
DISEASE	Norwalk Virus Gastroenteritis	Viral hepatitis	Hemorrhagic fever with renal syndrome
INCUBATION PERIOD	24 to 48 hours	2 to 6 weeks	2 to 4 weeks
DURATION OF ILLNESS	24 to 60 hours	Weeks- months	Weeks- months
SYMPTOMS	Nausea, vomiting, diarrhea, abdominal pain, headache, low grade fever	Nausea, vomiting, abdominal pain, headache, low fever, icterus.	Nausea, vomiting, diarrhea, headache, persistent fever, chills and renal failure.
SOURCE	Humans (intestinal tract)	Humans (intestinal tract)	Rodents
FOODS INVOLVED	Raw shellfish, raw vegetables, salads, water contaminated from human feces	Indirect fecal oral route or raw food, water contaminated from human feces	Food, water contaminated with excretes from rodents
PREVENTION	Obtain shellfish from approved, certified sources, avoid fecal contamination from food handlers by practicing good personal hygiene, thoroughly cook foods to a minimum safe internal temperature, use chlorinated water	Avoid fecal contamination, health surveillance of food handlers, practicing good personal hygiene, thoroughly cook foods to a minimum safe internal temperature, use chlorinated water	Pest control, sufficient field hygiene, use chlorinated water

Annex B
Food premise receiving record

Food Premise Receiving Record							
Food Premise:							
Receiving Area clean and free of hazard (Y/N)	**Supplier**	**Condition of Delivery Vehicle Acceptable (Y/N)**	**Food Item(s) on Pallet**	**Visual Check of Food (Acceptable Y/N)**	**Temp of food items received (°C)**	**Corrective Actions**	**Initials**
Yes	Sysco Foods	Yes – clean	Fresh produce	Yes – all appears in good condition	4 °C	None required	JS
Yes	Burnbrae Farms	Yes – clean	Eggs	Looks good	4 °C	None required	JS
Yes	Mapleleaf Foods	No – potential cross-contamination issues	Meat and meat products	No – raw meat in contact with ready-to-eat products	4 °C	Shipment rejected. Driver has contacted Supplier; a new shipment will be delivered later today.	JS
Delivery Standards							
Refrigerated food: 4°C (40°F) or less **Frozen food:** -18°C (0°F) or less	**Visual Inspection** • Food items / packaging in good condition • No expired products • No evidence of pest infestation • No evidence of tampering		**Date:** 2 Feb 15	**Signature:** J Smith			

Annex C
Monthly Refrigeration / Freezer Log

Food Premise			Year	Month			Refrigerator/Freezer		
AM				Mid-Day			PM		
Date	Time	Temp	Initials	Time	Temp	Initials	Time	Temp	Initials

Standards - Refrigerators: 4°C (40°F) or less; Freezers: - 18°C (0°F) or less

Annex D
Dispersed feeding record*

Food Description[(a)]	Temp/Time When food departs food premise[(b)]	Temp/Time At Feeding Location[(c)]	Additional Comments
Baked Beans	70 °C / 0630h	65 °C / 0730h	Recipient advised re time/temp standards
Hash Browns	68 °C / 0630h	62 °C / 0730h	As above

DISPERSED FEEDING RECORD*

Unit/Galley/Mess/Kitchen:____Petawawa_____ Date:_2 Feb 15_____

Shift NCO Signature:_____J Smith_____ Recipient Signature[(d)]: B.Brown
Name: J Smith Name: B. Brown

Completion notes for column:

(a) Enter dish e.g. stew or packed meal.

(b) Enter time and temperature when either hot food is placed into insulated container or cold food leaves a refrigerated environment.

(c) Enter time and temperature if products are temperature probed at the feeding location. If products are not temperature probed at the feeding location, consumption is to be within 4 hrs (cold food) or 2 hrs (hot food) of the time in column. Cold food is to be consumed within 4 hrs of temperature rising above 4^{o}C. Hot food is to be consumed within 2 hrs of the temperature dropping below 60^{o}C.

(d) Recipient signs to confirm receipt of food items and acknowledgement of consumption requirements as indicated in columns (b) and (c).

***Form is to be produced in duplicate: 1 x copy to be retained with Food Safety Records and 1 x copy to be retained with recipient of food**.

Annex E
Thermometer Calibration Log

Thermometer Calibration Log

Instructions: Foodservice employees will record the calibration temperature and corrective action taken, if applicable, on the Thermometer Calibration Log each a time thermometer is calibrated. The foodservice manager will verify that foodservice employees are using and calibrating thermometers properly by making visual observations of employee activities during all hours of operation. The foodservice manager will review and initial the log daily. Maintain this log for a minimum of 1 year**. Calibration instructions can be found on rear of form]**

Date	Thermometer Being Calibrated	Calibration Method	Temperature Reading	Corrective Action	Initials	Manager Initials/Date
2 Feb 15	Stem thermometer	Ice Method	0 °C	None Required	JS	MW / 2 Feb 15
7 Feb 15	Stem thermometer	Ice Method	4 °C	Adjustment wrench used to adjust thermometer to 0 °C	JS	MW / 7 Feb 15

Thermometer Calibration Instructions

Thermometer Calibration 0 C° (32 F°) Method (Ice Method)

1. Fill a glass with crushed ice then water. Mix until slurry consistency is reached.
2. Put tip of thermometer into slurry without touching the side or bottom of the glass. Wait at least 30 seconds and take reading.
3. Keeping the tip of the thermometer in the slurry, if reading is not 0 C° (32 F°) adjust thermometer with adjustment tool or wrench until it reads 0 C° (32 F°). For electronic powered thermometers, hit reset button to 0 C° (32 F°) (CRFA, 2013).

Thermometer Calibration 100 C° (212 F°) Method (Boiling Water Method)*

1. Fill glass with boiling water and insert tip of thermometer without touching the side or bottom of the glass. Wait at least 30 seconds and take reading.
2. Keeping the tip of the thermometer in the boiling water, if the reading is not 100 C° (212 F°) adjust thermometer with adjustment tool or wrench until it reads 100 C° (212 F°). For electronic powered thermometers, hit reset button to adjust to 100 C° (212 F°).
3. *Note: This method should only be used if ice is not available as it may be less accurate due to different atmospheric pressures.

Annex F Food Handler Orientation Briefing

Food Handler Orientation Briefing		
Provided to:	Provided by:	
Date:	Food Premise:	
Topic*	**Food Handler and Supervisor are to initial applicable column to identify if topic was covered during briefing. If no, provide rationale as to why not.**	
	Yes	**No**
When and how to wash hands – to include demo		
Proper clothing		
Wearing of jewellery		
Hair coverings		
Use of gloves and oven mitts		
Prohibited practices		
Correct use of utensils and equipment		
Storage of personal effects		
Restricted access to areas of the facilities by specific employees		
Glass control and breakage procedures		
Procedures to follow when product falls on the floor		

Required Signatures after Briefing

I,_____, (*signature of person who received briefing*) received the above

briefing from _____(*briefer's signature*) on _____(date).

One copy is provided to the person who received briefing and the original must be kept on file.

***Note: Supplemental Topic briefing notes can be found in Appendix 1 to Annex F.**

Appendix 1 to Annex F

Food Handler Orientation Briefing

Supplemental Briefing Notes

Purpose: The purpose of these Supplemental Briefing Notes is to expand upon the topics covered in the Food Handler Orientation Briefing (Annex F). While not all Food Service Operations will have the same personnel orientation requirements, it is anticipated that the information contained within this Appendix, is broad enough to allow each operation to tailor this briefing to their own unique operational requirements.

Notes:

1. Handwashing Procedures

Handwashing must occur:

a) Immediately before handling food, ingredients, packaging materials and/or touching food contact surfaces;

b) After using the toilet;

c) After coughing; sneezing; blowing or wiping the nose; touching ears, nose, eyes, mouth, hair, the face, or infected cuts, boils or pimples;

d) After each absence from the work station for breaks and eating;

e) After handling incompatible food products, raw materials, potentially hazardous materials such as garbage or cleaning chemicals or touching non–food contact surfaces such as light or control switches;

f) After picking up objects off the floor;

g) Any other time hands become soiled or contaminated;

h) After smoking;

i) After handling money; and

j) When the Food Services Management deems it necessary (OMAFRA, 2006).

2. Handwashing Technique

The person giving the briefing will demonstrate the correct handwashing technique (as per below). The person receiving the briefing will then demonstrate the proper handwashing technique. The briefer will ensure the new person can correctly demonstrate the proper handwashing technique. The correct handwashing technique is summarized as follows:

a) Remove hand jewellery;

b) Roll up sleeves far enough so that wrists are exposed and sleeves do not get wet during washing;

c) Wet hands and wrists under warm water (38ºC to 43ºC);

d) Apply 3–5 ml of liquid soap;

e) Lather soap and scrub hands well, palm to palm. Scrub in between and around fingers. Scrub back of each hand with palm of other hand. Scrub fingertips of each hand in opposite palm. Scrub each hand clasped in opposite hand. Scrub each wrist clasped in opposite hand. Alternately, use a fingernail brush to produce lather on fingertips, hands and arms. In either instance, scrubbing must last for a minimum of 20 seconds;

f) Rinse hands and wrists thoroughly under warm running water of sufficient volume to wash off the dirt that may have been loosened by handwashing;

g) Dry hands well with a single-use paper towel; and

h) To avoid recontamination, turn off water tap using the paper towel (if taps are not hands free). Never dry hands on clothes or aprons (OMAFRA, 2006).

3. Proper Clothing

When working in Food Services operations clothing/uniforms must be clean. Changing of aprons must occur when moving from one area of the Food Services operation to the other (example moving from cooking area to salad prep area). Clothes that are worn when travelling to and from work must not be worn when working in Food Services operations, this includes outer garment such as sweaters. Shoes must be clean and only worn in Food Services operations. Aprons must be removed before entering washrooms and lunchrooms/break areas.

4. Jewellery

Wearing jewellery, except alliances rings (example wedding rings) and medical alert bracelets, is strictly prohibited when working in Food Services operations.

5. Hair coverings

Hair must be covered at all times. A disposable white paper hat or black pillbox style chef hat must be worn that covers all hair or hairnet must be worn to cover all hair. Long hair should be tied up. Beards must be covered by netting.

6. Use of gloves and oven mitts

When disposable gloves are used they must be changed as when handwashing activities are required. Hands must be clean before using oven mitts. Disposable gloves should not be used with oven mitts.

7. Prohibited practices

The following practices are strictly prohibited within the Food Services operation:

a) Personal communication devices in preparation, production or service areas unless operationally required;

b) Smoking;

c) Wearing false nails or nail polish;

d) Spitting; and

e) Horseplay.

8. Correct use of utensils and equipment

When handling utensils ensure that utensils are only grasped from the handle and not from any part that will come in contact with food. For equipment, equipment should not touch areas that are used in the production and service of food (contact with food).

9. Storage of personal effects

All personal effects, including footwear and clothing worn to and from work, must be stored away from the production, service and seating areas.

10. Restricted access to areas of the facilities by specific employees

Example – you are not allowed in the flight feeding area.

11. Glass control and breakage procedures

Ingredients and products that have glass packages must be kept to a minimum. If glass breaks all operations must stop in the affected area until all glass fragments are properly cleaned and disposed. Any food that has been contaminated by the breakage of glass must be thrown.

12. When a product falls on the floor

When a product falls on the floor anywhere in the Food Services operation it must be thrown out.

Annex G
Facility Cleaning And Sanitizing Guide

FACILITY CLEANING AND SANITIZING GUIDE

Area / Equipment	After each use	Daily	Weekly	Periodically	Cleaning Agent	Cleaning Routine
Ceiling / Overheads	X			X	Detergent	Wash with hot water and detergent, rinse.
Cooking Range		X			Detergent + Proprietary Cleaner	Clean as you go, at end of day wash surfaces with hot water and detergent, rinse, use proprietary cleaner as necessary
Doors				X	Detergent	Wash with hot water and detergent, rinse.
Crockery / Utensils	X				Detergent	Clean in dishwasher or three sink method using hot water and detergent, rinse.
Floor / Deck		X			Detergent	Clean all spills immediately. At end of day, sweep and wash with hot water and detergent, rinse.
Food Mixer	X				Detergent	Clean with hot water and detergent, rinse.
Gravity Feed Slicer	X				Detergent + Sanitizer	Wash with hot water and detergent. Rinse with hot water, follow up with sanitizer
Kitchen / Galley / Utensils	X				Detergent	Clean in dishwasher or three sink method using hot water and detergent

Area / Equipment	After each use	Daily	Weekly	Periodically	Cleaning Agent	Cleaning Routine
Microwave Oven		X			Detergent	Clean all spills immediately. Wash with hot water and detergent, rinse.
Oven			X		Detergent + Oven Cleaner	Wash with hot water and detergent, rinse. Follow up with proprietary cleaner on all surfaces
Pots and Pans	X				Detergent	Clean in dishwasher or three sink method using hot water and detergent, rinse.
Vegetable Prep Machine	X				Detergent	Clean with hot water and detergent, rinse.
Refrigerator / Freezer units		X			Detergent + Sanitizer	Clean as you go, at end of each day wash all surfaces with hot water and detergent. Rinse with clean hot water and apply sanitizer
Sinks	X	X			Detergent + Sanitizer	Clean as you go, at end of each day scour and wash with hot water and detergent, rinse. Where sinks are used for food, equipment, and hand washing, they must be cleaned and disinfected between uses
Storage / Display Units			X		Detergent + Sanitizer	Clean all spills immediately. Wash with hot water and detergent. If used for both cooked and uncooked food, wash with hot water and detergent, rinse and apply sanitizer
Walls / Bulkhead – behind work surfaces		X			Detergent + Sanitizer	Clean as you go. Before preparing ready-to-eat food and at the end of each day, wash all surfaces with hot water and detergent, rinse with hot water and apply sanitizer

Area / Equipment	After each use	Daily	Weekly	Periodically	Cleaning Agent	Cleaning Routine
Walls / Bulkhead – high and low level			X		Detergent	Wash with hot water and detergent, rinse.
Waste Compactor			X		Detergent	Clean with hot water and detergent, rinse.
Waste Containers	X				Detergent	Clean with hot water and detergent, rinse.
Waste Disposal Unit			X		Detergent	Clean with hot water and detergent, rinse.
Windows				X	Detergent	Clean with hot water and detergent, rinse.
Wiping Cloths	X				Sterilizing Solution	Preferably use disposable cloths. If not, change cloths frequently, when not in used, clothes should be kept in a sanitizing solution. Boil or soak in sterilizing solutions at end of each day
Work Surfaces	X	X			Detergent + Sanitizer	Clean as you go. Before preparing ready-to-eat food and at the end of each day, wash all surfaces with hot water and detergent, rinse with clean hot water and apply sanitizer
Dining Tables	X				Detergent	Clean with hot water and detergent and clean with wiping cloths

Supplemental Notes:

- All food spills must be removed and areas cleaned and sanitized in a timely fashion. Do not let food spills accumulate.
- When sanitizers are used, ensure that the necessary contact period is achieved.
- Cleaning of Ceiling / Overheads may be contracted out.
- Periodically means ‘as necessary’.
- JOSH Risk Assessments must be conducted prior to use of substances that are classified as toxic, harmful, corrosive, irritant, or very toxic. Prior to use, staff must be trained in the safe use of cleaning chemicals, any personal protective equipment required, and effective cleaning procedures

Annex H
Three Sink Dishwashing Method

1. **Scrape**
2. **Wash** - Detergent and Water: 45° C
3. **Rinse** - Clean Water: 45° C
4. **Sanitize*** - Hot Water or Chemical Solution
5. **Air Dry**

Sanitizer*	Concentration	Minimum Contact Time	Temperature
Hot Water	N/A	2 minutes	77° C
Chlorine Solution	100 ppm	2 minutes	45° C
Quaternary Ammonium Solution	200 ppm	2 minutes	As specified by manufacturer
Iodine Solution	25 ppm	2 minutes	45° C

Annex I
Cold Holding Temperature Log

Cold Holding Temperature Log							
Product Name **Start-up Temp and Time**	**Date**	**Time**	**Temp**	**Initials**	**Product Location**	**Corrective Action**	**Supervisor's Review (Initial)**
Chicken Salad *6 °C at 0900h*	*2 Feb 15*	*10:30* AM	4 °C	JS	Sandwich refrigerator on cook line	AM Temp Good. Afternoon temp too high. Adjusted thermostat. Checked product after 1 hour, temp ok.	MW
		2:30 PM	7 °C	JS			
		AM					
		PM					
		AM					
		PM					
		AM					
		PM					
		AM					
		PM					
Accepted cold holding temperature is 4 °C (40°F) or below							

Annex J
Cooking/Reheating Temperature Record

COOKING/REHEATING TEMPERATURE RECORD						
Base/Unit Name:			Location:			
Instructions: Record product name, time, internal temperature/time, and any corrective action taken. The food service manager will verify that food service employees have taken the required cooking temperatures by visually monitoring food service employees and preparation procedures during the shift and reviewing, initialing, and dating this log daily. **Maintain this log for a minimum of 1 year.**						
Date and Time		**FOOD ITEM**	**Internal Temp / Time**	**Corrective Action**	**Initials**	**Verified By / Date**
2 Feb	1130h	Lamb Chops	71 °C / 1145h	None required. Meets temp standard	JS	MW – 2 Feb 15
2 Feb	1140h	Beef Casserole	72 °C / 1150h	Continue reheating until meets temp std of 74 °C	JS	MW – 2 Feb 15
Minimum core temperature for different food types: **Poultry Pieces and Ground Poultry**: 74°C (165°F) **Whole Poultry**: 85°C (185°F) **Mixed Food** (casseroles, meals with gravy, mayonnaise, milk): 74°C (165°F) or higher **Whole Cuts** (Beef, Lamb, Pork) and Fish: 70°C (158°F) or higher **Ground Meats** (Beef, Pork) **and Fish**: 71°C (158°F) or higher **Eggs** - 63°C (145°F) or higher **Reheating of Leftovers:** 74°C (165°F) or higher						

Annex K
Hot Holding Temperature Log

Hot Holding Temperature Log							
Product Name **Start-up Temp and Time**	**Date**	**Time***	**Temp**	**Initials**	**Product Location**	**Corrective Action**	**Supervisor's Review (Initial)**
Chili Beans *58 °C at 0930h*	*2 Feb 15*	*10:30* AM	74 °C	JS	Steam table at wait station	Start-up temp of 52° C too low. Reheated chili to 74°C as required.	
		2:30 PM	65 °C	JS			
		AM					
		PM					
		AM					
		PM					
		AM					
		PM					
		AM					
		PM					
Accepted hot holding temperature is 60 °C or greater. Reheated food items must reach internal temp of 74 °C for 15 seconds.							

***It is only necessary to assess hot holding temperature twice if the product remains in hot holding for a prolonged period (as indicated in example).**

Annex L
Daily Cooling Log

Daily Cooling Log								
Date	**Food Item**	**Method of Chilling** [e.g., blast chiller, ice bath]	**Time / Food Temperature***				**Corrective Action*** [If item doesn't meet time / temp standards]	**Initials**
			Time cooling began	Temp	Temp after 2 hours	Temp after 4 hours		
2 Feb 15	Roast Beef	Ice Bath	1330h	68 °C	20 °C	4 °C	None required	JS
2 Feb 15	Chili	Blast Chiller	1400h	66 °C	22 °C*	4 °C	*Product transferred into shallow pans. After 10 minutes internal temp was 19 °C	JS

***Food items must be cooled from 60 °C (140°F) to 20°C (68°F) within two hours and from 20°C (68°F) to 4°C (40°F) within four hours.**

Annex M
Assessment of Potential Cross-contamination Issues
Instructions

Develop the following for each kitchen (Food Services operation):

1. Using a kitchen floor plan, construct a flow diagram of flow of food from receiving to service or distribution;

2. On the flow diagram, label where each process / step takes place;

3. Circle areas where cross-contamination may occur; and

4. Assess strategies to minimize likely contamination areas that have been identified such as:

    a. Separation of raw from finished or ready to eat (RTE) products;

    b. Use of structural segregation - physical barriers, walls or separate buildings;

    c. Use of access controls, including requirements to change into necessary work wear; and

    d. Establish traffic patterns or equipment segregation - people, materials, equipment and tools (including use of dedicated tools).

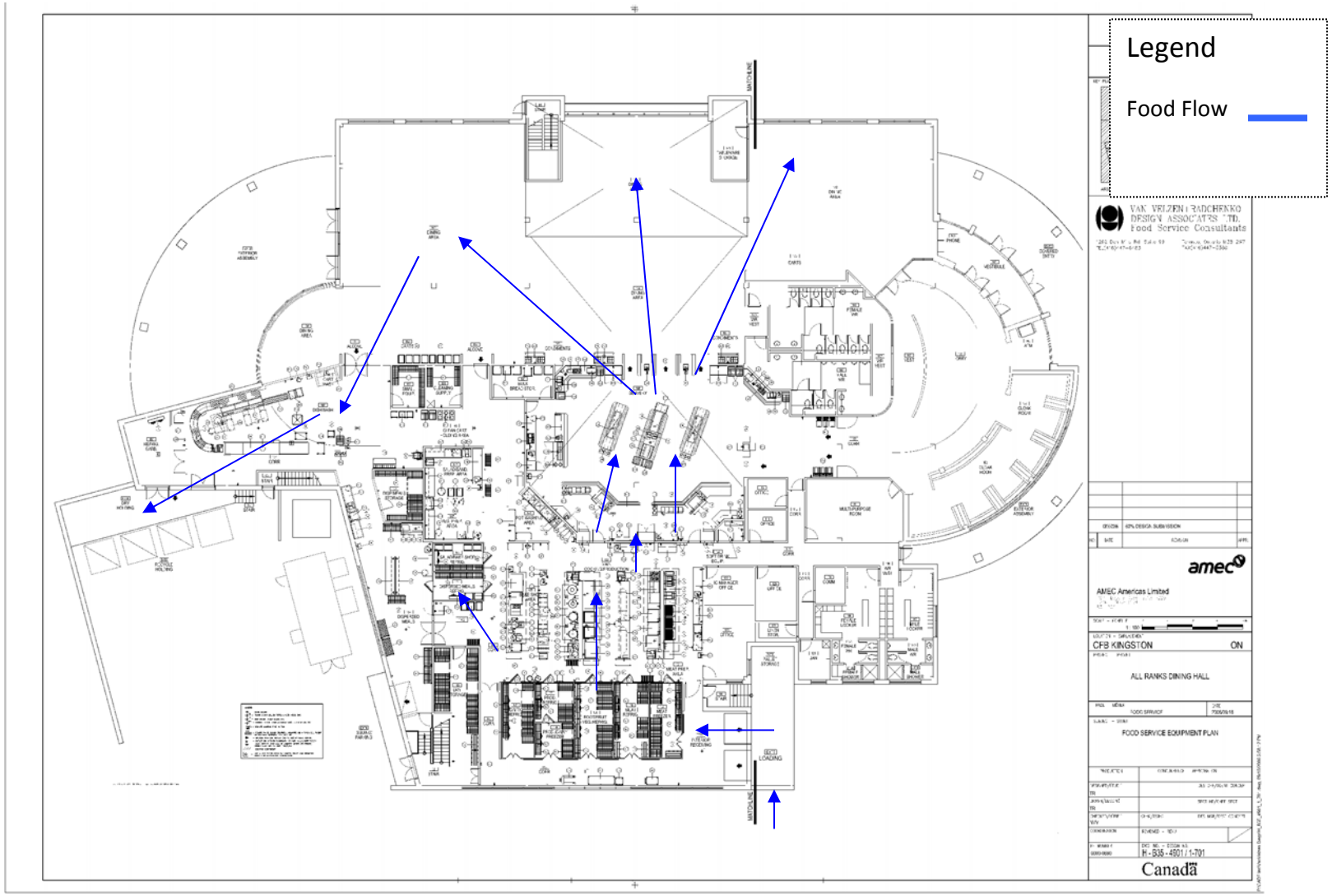
5. Reassess flow diagram on a monthly basis.

NOTE: when determining potential for cross-contamination issues, assessor must use floor plan and applicable staff to conduct assessment within the kitchen or Food Services operation. Each area must be visited during the assessment.

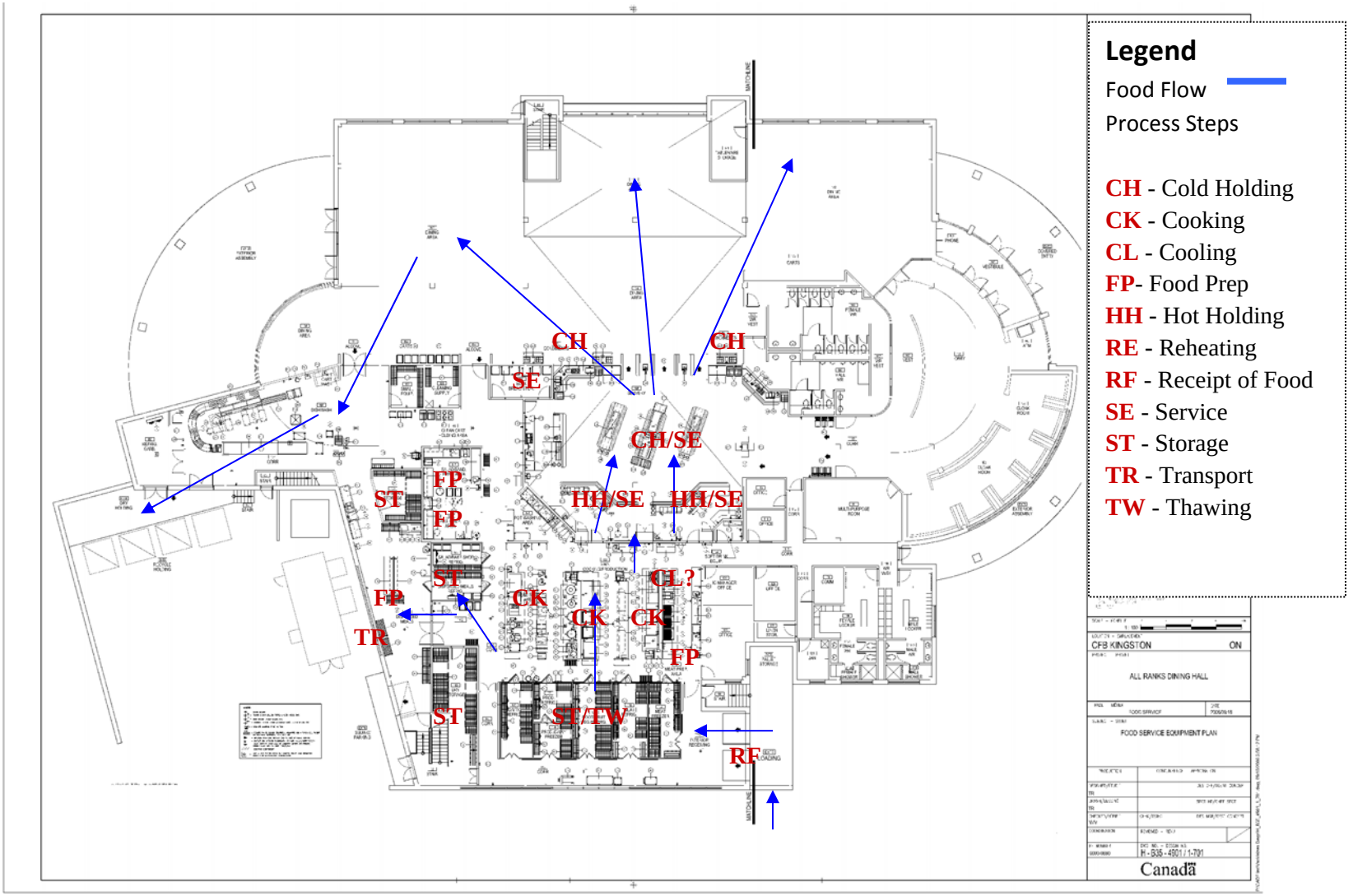
An example of Assessment of Potential Cross-contamination Issues is illustrated on the next few pages.

Example of Assessment of Potential Cross-contamination Issues

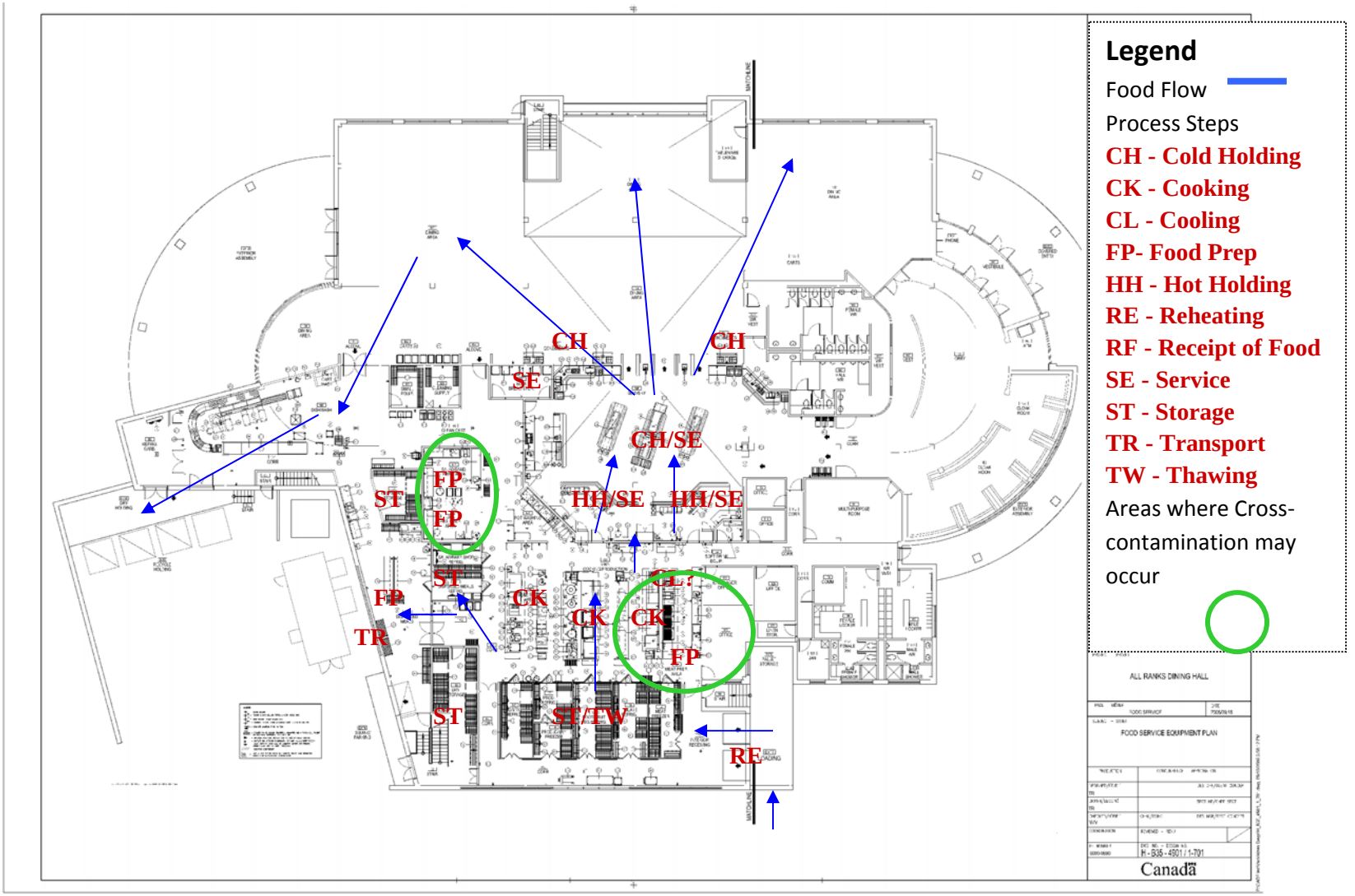
Step 1 - Construct a flow diagram to show flow of food from receiving to service or distribution.



Step 2 - Over the flow diagram, label where each process step is taking place.



Step 3 - Circle areas where cross-contamination may occur.



Step 4 - Assess strategies to minimize likely contamination areas that have been identified.

Assessment – Overall, process areas are separated adequately and flow of food generally moves in one direction. In reviewing the assessment of the floorplan, there are two areas where cross-contamination may occur. The two potential problem areas requiring mitigation are as follows:

1. Potential Problem - Meat prep area and cooking area are situated very close to each other. As insertion of a barrier is not possible, strategies to prevent cross-contamination include ensuring that both human traffic and food always flow from the meat prep area to the cooking area and not in reverse.

2. Potential Problem – Vegetable prep and salad prep areas are located in the same room. Strategies to prevent cross-contamination include the physical separation of the two operations. If a physical barrier is not possible, have staff work in either vegetable prep or salad area, but not in both.

Annex N
Level 1 Verification - Food Safety Check

Name and Rank of Shift Supervisor_____ Time of Shift_____ Date_____

Items to Check During Shift	Issue? (Y/N)	If Yes, Identify Issue(s)	Corrective Action Taken
Conduct a thorough walk around of the Food Premise			
Are all areas clean? [PRP 5] • Utensils and Food Services equipment [PRP 5.1, 5.2] • Lighting (clean and adequate) [PRP 1.3] • Waste receptacles [PRP 1.5] • Staff change rooms and all washrooms [PRP 1.6]			
Verify building security practices			
Verify the following: • All entries to the Food Services operation are locked or under observation [PRP 8.1] • All storage areas are locked or under observation [PRP 8.1] • Non-Food Services workers (e.g. visitors) have the required auth to enter operational areas [PRP 4.3]			
Verify all Storage areas (Refrigerators/Freezer/Dry Storage Areas)			
Are all storage areas: • Maintained at the appropriate temperature? [PRP 2.2] • Clean and well-maintained? [PRP 2.2] • Stocked in a manner that prevents cross-contamination? [PRP 2.2]			
Observe personnel within the Food Premise			
Are all Food Services workers: • Washing their hands when required? [PRP 4.2] • In compliance with uniform requirements? [PRP 4.2] • In compliance with hair requirements? [PRP 4.2]			

Items to Check During Shift	Issue? (Y/N)	If Yes, Identify Issue(s)	Corrective Action Taken
Verify Monitoring Activities (Thawing, Hot/Cold Holding, Cooking, Cooling, Reheating, Service)			
Visually observe that the following temperature verifications and record keeping occurred: • Appropriate thawing methods being used? [HPB 1] • Cooking temperatures monitored – verify records for completeness [HPB 3] • Cooling temperatures monitored – verify records for completeness [HPB 5] • Hot/Cold holding procedures monitored – verify records for completeness [HPB 2, HPB 4] • Reheating procedures ensured that internal temperature of 74°C was reached – verify records for completeness [HPB 7] • During meal times: service area was clean and temperature verifications were performed – verify records for completeness [HPB 6]			
Additional Observations			

Signature of Shift Supervisor _____Date_____

Review Comments from Kitchen Second in Command or Unit Second in Command

Signature Kitchen Second in Command or Unit Second in Command_____Date_____

Instructions for completion of Level 1 Verification form can be found at Appendix 1 to Annex N

Appendix 1 to Annex N

Supplementary Instructions for Level 1 Verification – Food Safety Check form.

1. This form must be filled out by the shift supervisor once a day (if shifts overlap both supervisors should conduct the check together).

2. Upon completion, the form must be reviewed by the kitchen manager or his/her designate.

Key Columns:

Items to Check During Shift (1)	Issue? (Y/N) (2)	If Yes, Identify Issue(s) (3)	Corrective Action Taken (4)

Instructions for completion

(1) This column identifies the areas of assessment for the shift supervisor and the related PRP or HPB, thereby facilitating ready access to the relevant reference.

(2) In this column the shift supervisor will indicate if a food safety issue is present in the area of assessment through indicating *Yes* or *No*

(3) If the shift supervisor has indicated in column 2 that a food safety issue is present, in this column, s/he will provide specific information regarding the issue, For example, *thermometer inside refrigeration unit #2 indicates the internal temperature of the refrigerator is 9 °C.*

(4) In this column the shift supervisor will indicate what s/he did to mitigate the issue identified in column 3. For example, *service call placed to have refrigeration unit fixed, in the interim, food items in refrigeration unit #2 have been moved to refrigeration unit #3.*

(5) In the block labelled *Additional Observations*, the shift supervisor will identify any other food safety issues or concerns and what actions were taken to mitigate these issues / concerns. Once complete, s/he will sign and date form, thereby indicating review and concurrence with the contents.

(6) In the block labelled *Review Comments*, the Kitchen or Unit second in command will add any additional comments / concerns. Once complete, s/he will sign and date form, thereby indicating review and concurrence with the contents.

Annex O
Level 2 Verification - Food Safety Inspections

Level 2 Verification Monthly Activities (3-parts)

Note: *Supplementary instructions can be found in Appendix 1 to this Annex*

PART 1 - Inspection of Prerequisite Programs

PART 2 - Observation of Monitoring and Personnel Hygiene Activities

PART 3 - Sanitation Measurement (using ATP-B)

PART 1 - INSPECTION OF PREREQUISITE PROGRAMS AND RECORDS

Name and Rank of Kitchen Manager or Second in Command_____Date_____

Inspection Areas	PRP Ref	Food Safety Issue(s)? (Y/N)	If Yes, Identify Issue(s)	Corrective Action Taken / Required
PRP 1 – Internal and External Premises				
1.1 External Premises	PRP 1.1			
a. Perform an external walk around of feeding facility to identify any external hazards that may potentially contaminate the interior of the food service operation				
b. Visually assess exterior walls of facility. Can rodents or pests gain entry?	PRP 1.2.1			

Inspection Areas	PRP Ref	Food Safety Issue(s)? (Y/N)	If Yes, Identify Issue(s)	Corrective Action Taken / Required
1.2 Internal Premises	PRP 1.2.2.a.			
a. Does the interior of the facility have dedicated areas for different operations [e.g. meat prep area separate from veggie prep area]?				
a. Confirm that food and personnel traffic flow patterns will not facilitate cross-contamination of food items.	PRP 1.2.2. b., c.			
b. Ensure that the production area is separate from non-food areas [e.g. accommodation areas or livestock holding areas]	PRP 1.2.2.d.			
c. Verify that food is received in a separate area [e.g. away from production / service areas]	PRP 1.2.2.e.			
d. Ensure that washrooms and change rooms are separated from production and service areas	PRP 1.2.2.f.			
e. Verify that waste (garbage) is appropriately stored [e.g. will not facilitate cross-contamination of food]	PRP 1.2.2.g.			
f. Confirm that there is adequate floor drainage to remove pooled water from Food Services areas.	PRP 1.2.2.h.			
g. Verify that ceiling and walls are clean and in good repair	PRP 1.2.2.i.			
Inspection Areas	**PRP**	**Food Safety**	**If Yes, Identify Issue(s)**	**Corrective Action Taken /**

	Ref	Issue(s)? (Y/N)		Required
1.3 Lighting				
a. Confirm that lighting levels are adequate for work and the inspection of food.	PRP 1.3.1			
b. Ensure that all overhead lighting is clean and covered to prevent breakage	PRP 1.3.2			
1.4 Ventilation	PRPs 1.4.1 1.4.2			
a. Visually assess air filters for cleanliness				
b. Ask staff if they have any air quality concerns [with respect to food services operational areas]	1.4.3			
1.5 Garbage and Waste Disposal				
a. Verify that easily identifiable and specific containers and utensils are used in garbage/ waste disposal	PRP 1.5.1.a			
b. Confirm frequency and adequacy of scheduled waste removal services throughout facility	PRP 1.5.1.b., d.			
c. Ensure the facility has written garbage/waste procedures	PRP 1.5.1.c.			
d. Assess maintenance of garbage/waste equipment.	PRP 1.5.1.e.			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**

Inspection Areas	PRP Ref	Food Safety Issue(s)? (Y/N)	If Yes, Identify Issue(s)	Corrective Action Taken / Required
1.6 Sanitary Facilities				
a. Verify that all washrooms are clean and adequately stocked	PRP 1.6.1			
b. Ensure that hand washing notices are posted [to include hand washing directions]	PRP 1.6.2			
c. Confirm that all washrooms, lunchroom and change rooms are clean and well maintained	PRP 1.6.3			
1.7 Water/Ice/Steam Quality				
a. Ensure that water testing occurs at the appropriate frequency [liaise with PMed to determine frequency]	P.RP 1.7.1			
b. Verify that hoses and taps throughout the facility prevent backflow [faucets should have backflow prevention devices installed, to prevent back siphonage hoses should not be left attached to the faucet and in the sink]	PRP 1.7.2			
c. Confirm that if used, water filters are changed and maintained properly	PRP 1.7.3			
d. Verify water pressure / temperature is adequate for cleaning	PRP 1.7.4			
e. Confirm that water and ice storage areas are clean and not a potential source of cross-contamination	PRP 1.7.5			

1.8 Plumbing and Sewage				
a. Plumbing hoses and taps are preventing backflow	PRP 1.8.1.			
b. Identify if a sewage system backed-up occurred since the last inspection. If yes, were the affected areas closed until thorough cleaning and sanitizing occurred?	PRP 1.8.1.a.			
c. Visually assess if the sewage system is designed to prevent cross-contamination between sewage and production waste and potable water [e.g. lines do not cross]	PRP 1.8.1.b.,c.			
d. Confirm that grease traps are cleaned and flushed regularly	PRP 1.8.1.b.			
PRP 2 Purchasing/Receiving, Storage, Packaging and Transportation				
2.1 Purchase/Receiving				
a. Confirm that ingredients are ordered from approved suppliers/sources as per Chap 2, FSM	PRP2.1.1			
b. Verify that food orders are maintained on file	PRP 2.12			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**

2.2 Storage of Food and non-food				
a. Inspect all storage units to ensure they are clean and free of contaminates	PRP 2.2			
b. Inspect all refrigerators ensuring the following: • Adequate number of thermometers are present • Fridges are not overloaded • Food is well ventilated • Food is wrapped and dated as required • Food is correctly stored as per type and no cross-contamination issues are observed • Fridges are cleaned regularly • First in First out method is being used • Fridge charts are filled out during each shift	PRP 2.2.1.a. PRP 2.2.1.1 PRP 2.2.1.2			
c. Inspect all freezers ensuring the following: • First in First out method is being used • Freezers are defrosted and cleaned regularly • Freezer charts are filled out during each shift • Note any additional issues	PRP 2.2.1.b PRP 2.2.1.1-2			
d. Inspect all dry storage areas ensuring the following: • Humidity is not within recommended range. • Food is not exposed to direct sunlight • Food is stored off the ground (minimum 15 cm) • Food items are kept in original packaging • Dry Storage areas are clean • Regular cleaning occurs	PRP 2.2.1.c			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
2.3 Chemical Storage				

a. Confirm that chemicals are stored in dry, well ventilated areas, with no possibility of contaminating food items	PRPs 2.2.3, 2.2.4			
b. Verify that mixing of chemicals is only conducted by authorized and properly trained personnel	PRP 2.2.5			
2.4 Packaging				
a. All packaging material must be of food grade quality and be used to prevent the contamination of food	PRP 2.3.1			
2.5 Transportation/Distribution				
a. Food distribution areas must be clean with no cross-contamination issues present	PRP 2.4			
PRP 3 - Equipment and Utensils				
3.1 Major equipment				
a. Ensure all major Food Services equipment is cleanable, easy to inspect, does not contaminate food, and permits proper drainage. Note any major equipment issues	PRP 3.1.1 a.-f.			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
3.2 Minor Equipment				
a. Ensure minor equipment is not a source of cross-contamination for food. Possible signs of	PRP 3.1.2 a.-g.			

minor equipment problems include damaged, scratched or discoloured equipment. Note any minor equipment issues				
3.3 Preventive Maintenance	PRP 3.1.3 a.- c.			
a. Ensure there is a list of Food Services equipment with a preventive maintenance schedule indicating when and how maintenance tasks must be conducted				
b. Ensure that the Canadian Forces Food Services Equipment and Maintenance Database is being used correctly	PRP 3.1.4.c.			
3.4 Equipment Calibration	PRP 3.1.4.a.-d.			
a. Ensure that there is Master list of monitoring devices [such as temperature probes]				
b. Verify that calibration records for all measuring devices are completed regularly and correctly				
3.5 Utensils	PRP 3.2.1			
a. Ensure utensils are clean and do not cross contaminate food [assess for presences of tears, scratches or discolouration]				
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
PRP 4 – Personnel				
4.1 Personal Hygiene				

a. Ensure that all food service personnel have received the Food Handler Hygiene Brief [Annex F]	PRP 4.2.1 Annex F			
PRP 5 – Sanitation				
5.1 Cleaning and Sanitizing				
a. Visually inspect all Food Services areas and major/minor equipment for cleanliness.	PRP 5.1			
5.2. Cleaning Schedule				
a. Ensure there is a Facility Cleaning Schedule in place and in use [to include specific job task, cleaning materials, safety precautions and frequency of cleaning] [Annex G]	PRP 5.1.1 a.-b.			
5.3 Deep Cleaning				
a. Inspect areas requiring deep cleaning and/or servicing by contractors/Base CE [e.g. fire suppression systems, fridge/freezer cooling systems, air filter systems]. Is regular cleaning and servicing occurring?	PRP 5.1.2			
5.4 Utensils/Containers/Cutting Boards				
a. Visual inspect all utensils. Confirm items are cleaned and sanitized either via 3-sink method or industrial dishwasher	PRP5.2.1, 5.2.2 Annex G			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
PRP 6 – Pest Control				
6.1 Pest Control Program				

a. Perform a walkthrough of the Food Services operation; are there any indications of a pest/rodent infestation?	PRP 6.1.1			
b. Visually assess food items for signs of pest contamination	PRP 6.1.2			
a. Review pest control operator records for the facility. Is there any indication of pest issues? If yes, is the action taken clearly identified?	PRP 6.1.1 d.(6)			
PRP 7 - Response to Foodborne Issues				
7.1 Food Recalls.				
a. Confirm that all personnel in receiving and the kitchen manager subscribe to the Recall Notifications from CFIA	PRP 7.1.1			
b. If there has been recalled food since the last inspection, were the appropriate procedures followed and was there a report produced?	PRP 7.1.2			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
7.2. Response to Suspected Foodborne Illness incidents				
a. Review records of complaints from diners. Do the records document all the pertinent information and the action that was taken?	PRP 7.2.1			
PRP 8 – Food Defence				

8.1 Food Supply	PRP 8.1 a.			
a. Confirm that all food items are received from an approved supplier				
b. Confirm whether there have been any incidents where food was [or may have been] tampered with?				
8.2 Personnel	PRP 8.1 b.			
a. Verify that all workers in the Food Services operation have an enhanced reliability check				
8.3 Physical Security	PRP 8.1 c.			
a. Verify that a Physical Security Survey has been conducted for the Food Services operation				
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
b. Confirm that access to the kitchen is adequately controlled [e.g. doors locked to diners/visitors outside of meal hours, storage areas locked or constantly observed, exterior doors (e.g. back doors for staff) locked and access controlled]	PRP 8.1 c.			
8.4 Visitors				

a. Verify facility 'Visitor procedure' [e.g. when visitors enter the kitchen, do they report to a kitchen supervisor first? Do visitors have the proper security clearance? If not, are they supervised by Food Services personnel for the duration of their visit?]	PRP 8.1 d.			
Additional Observations from Kitchen Manager or Second in Command:				

Signature of Kitchen Manager or Second in Command_____ Date:_____

Additional Comments by Base/Unit Food Services Officer or Brigade Chief Cook:

Signature of Base/Unit Food Services Officer or Brigade Chief Cook_____ Date:_____

PART 2 – OBSERVATION OF MONITORING AND PERSONNEL HYGIENE ACTIVITIES

The intent of Part 2 of this inspection process is twofold: to verify that the Monitoring Records are being filled out correctly; and to observe Food Services staff during their work routine to assess compliance with both monitoring and personal hygiene practices (e.g. hand washing).

Note: *Supplementary instructions can be found in Appendix 1 to this Annex*

Review Level 1 Verification - Food Safety Check Records. Review five random samples of Level 1 Verification – Food Safety Check reports (Annex N) completed during the last month. Identify below the five top issues noted in the records reviewed.
1. Issue:

2. Issue:
3. Issue:
4. Issue:
5. Issue:

Inspection Areas	PRP / HPB Ref	Issue? (Y/N)	If Yes, Identify Issue(s)	Corrective Action Taken
Personnel Hygiene Practices - Observe Hygiene Practices				
Observe Personnel Hygiene Practices: Observe staff in all Food Services operational areas (production, food prep, receiving and service areas) and verify the following:				
a. Staff appeared healthy with no visible injuries	PRP 4.1.1			
b. Staff washed their hands correctly and when required	PRP 4.2.1 a.			
c. Staff wore cleaning clothing and no prohibited jewellery	PRP 4.2.1 b. and c.			

d. Staff handled utensils and equipment in a manner that prevents cross-contamination.	PRP 4.2.1 d.			
e. Personal effects (e.g. cell phones) were stored away from work areas	PRP 4.2.1 e.			
f. When required, personnel were restricted from specific areas (e.g. flight feeding)	PRP 4.2.1 f.			
g. Both food and personnel flow in the kitchen were adequate to prevent cross-contamination	PRP 4.2.1 g.			
h. Visitors reported to the designated supervisor before entering operational areas	PRP 4.3.1			
i. Authorized visitors followed the facility food safety rules when in operational areas	PRP 4.3.1			
Receiving of Food - Observe monitoring practices in Food Receiving Area				
Records: Review five random samples of Receiving Records (Annex B) completed during the last month. Ensure records for receiving food from suppliers are complete and correct.	PRP 2.1.1.1 to 2.1.1.1.4, Annex B			
Inspection Areas	**PRP Ref**	**Food Safety Issue(s)? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
Observe Receiving Activities: Observe food being received during a delivery* and verify the following: *Note: The delivery(ies) being observed should include temperature sensitive food (refrigerated and frozen food), dry food and non-food products.				
a. The Receiving Area was clean when food was received	PRP 2.1.1.1			
b. The Receiving staff performed a visual check of the interior of the vehicle to assess the presence of food hazards	PRP 2.1.1.2			
c. The Receiving staff checked the temperature of each pallet that was delivered	PRP 2.1.1.3			
d. The Receiving staff inspected the incoming food	PRP 2.1.1.4			

for damage, expiration and signs of tampering				
e. Staff recorded the above activities (a.-d.)	PRP 2.1.1			
Transport/Distribution of Food - Observe monitoring practices in Distribution/Dispersed Area				
Records: Review five random samples of Dispersed Feeding Records (Annex D) completed during the last month. Ensure records for dispersed feeding were complete and correct.	PRP 2.4.1.1, 2.4.1.2 Annex D			
Observe Issuing Activities: Observe food being received during dispersed activities and verify the following:				
a. Staff completed the Dispersed Feeding Record (Annex D) when food was issued	PRP 2.4 Annex D			
b. The dispersed feeding staff checked the cleanliness/condition of the vehicle used to transfer the food	PRP 2.4 Annex D			
Inspection Areas	**PRP / HPB Ref**	**Issue? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
Thawing of Food - Observe Thawing Activities				
Observe Thawing Activities: Observe thawing activities* conducted on the production floor and verify the following: *Note: If no thawing activities are taking place in production area, check fridge(s) that is/are used for thawing				
One of the four approved methods of thawing was being used (e.g., food that is being thawed never goes above 4°C)	HBP 1.1			
When food is being thawed, it is covered and protected from possible contamination	HBP 1.2			
Cold Holding of Food - Observe Cold Holding Activities				

Records: Review five random samples of cold holding records (Annex I) completed during the last month. Ensure records were complete and correct.	HPB 2.1 and 2.2 Annex I			
Observe Cold Holding Activities: Observe cold holding activities, in all areas but the serving areas.				
a. Cold food was held at 4°C or less and for not longer than two hours	HPB 2.1			
b. Cold holding activities being conducted ensured that food was not exposed to potential cross-contamination	HPB 2.2			
c. The above activities were recorded	HPB 2.1 and 2.2			
Cooking and Reheating of Food - Observe Cooking Activities				
Inspection Areas	**PRP / HPB Ref**	**Issue? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken**
Records: Review five random samples of cooking/reheating records (Annex J) completed during the last month. Ensure records were complete and correct.	HBP 3.1, 3.2, 7.1, 7.2 Annex J			
Observe Cooking and Reheating Activities: Observe cooking activities in the production area.				
a. Production staff verified the internal temperature of each batch of food that was being cooked or reheated	HPB 3.1, 7.1			
b. When food was being cooked or reheated it was not at risk of cross-contamination	HPB 3.2, 7.2			
c. The above activities were recorded	HPB 3.1, 3.2, 7.1, 7.2			
Hot Holding of Food - Observe Hot Holding Activities				
Records: Review five random samples of Hot Holding Records (Annex K) completed during the last month.	HPB 4.1 and 4.2 Annex K			

Ensure records were complete and correct.				
Observe Hot Holding Activities. Observe hot holding activities, in all areas but the serving area.				
a. Was hot food being held above 60°C and not held longer than two hours?	HPB 4.1			
b. When hot holding activities were conducted, the food was not exposed to the risk of cross-contamination	HPB 4.2			
c. The above activities were recorded	HPB 4.1 and 4.2			
Cooling of Food - Observe Cooling Activities				
Inspection Areas	**PRP / HPB Ref**	**Issue? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken**
Records: Review five random samples of cooling records (Annex L) that were completed during the last month. Ensure records for cooling were complete and correct.	HBP 5.1, 5.2 Annex L			
Observe Cooling Activities: Observe cooling activities in production.				
a. Production staff both verified the temperature of each batch of food being cooled and monitored the time in each temperature zone	HPB 5.1			
b. Food being cooled was not exposed to potential contaminants	HPB 5.2			
c. The above activities were recorded	HPB 5.1, 5.2			
Service of Food - Observe Service Activities				
1. Records. Review five random samples of service records (Annex I and K) that were completed during the last month. Ensure records for service are complete and correct.	HBP 6.1, 6.2 Annexes I and K			
2. Observe Service Activities. Observe service activities in serving areas.				

a. Hot food was being held above 60°C and not held for longer than two hours	HBP 6.1			
b. Cold food was being held at 4°C or less and not for longer than two hours	HBP 6.1			
c. During service there was not a possibility of cross-contamination in food being held at cold, hot and room temperature	HBP 6.2			
d. The above activities were recorded	HPB 6.1, 6.2			
Inspection Areas	**PRP / HPB Ref**	**Issue? (Y/N)**	**If Yes, Identify Issue(s)**	**Corrective Action Taken / Required**
Check Prevention of Cross-contamination Assessment				
Was there a completed Prevention of Cross-contamination Assessment for your food service location? If not, conduct an assessment with management staff. If an assessment has been conducted, reassesses with management staff and update if needed	HBP 8.1 Annex M			

Other Observations by Kitchen Manager or Second in Command

Signature of Kitchen Manager or Second in Command_____ **Date:**_____

Additional Comments by Base/Unit Food Services Officer or Brigade Chief Cook

Signature of Base/Unit Food Services Officer or Brigade Chief Cook_____ Date:_____

PART 3 - Sanitation Assessment (using ATP-B)

Note: *Supplementary instructions can be found in Appendix 1 to this Annex*

Background and Instructions for completion of ATP-B assessment forms

1. Background. ATP-B rapid tests are a tool to assist with the evaluation of the overall cleanliness of Food Services operations. The objective of this testing is to get a general feel for the overall effectiveness of sanitation/cleanliness measures.

2. Testing Method. Follow the manufacturer's direction. (Most likely, use a zigzag pattern in east to west and then north to south direction while applying pressure and rotating the swab). The swab will then be placed into a collection tube (mixed with reagents) and shaken. The collection tube will then be inserted into luminometer for measurement).

3. Pass/Fail Rates. The pass rate for cleanliness is set at less than 301 Relative Light Units (RLU) and the critical failure rate is set at above 1000 RLU. The critical failure rate assessment (Column 4, Critical Fails %) is used to further emphasize areas that require more attention in relation to sanitation measures.

Step 1 - Conduct 50 ATP-B Tests at the following times:

1. During a Shift Testing – Conduct 25 ATP-B Tests during a shift. The areas tested should be in locations where staff should have cleaned as per the cleaning schedule. Do not test areas/equipment/utensils that are in process of being used. Suggested areas where to test are included below in the ATP-B Rapid Test Results Talley Sheet. Other areas could be tested based on suspected problems areas.

2. After Shift Testing Period – Conduct 25 ATP-B Tests after a shift (preferable at the end of the day or before the food service operation begins). Suggested areas where to test are included below in the ATP-B Rapid Test Results Talley Sheet. Other areas could be tested based on suspected problems areas.

ATP-B Rapid Test Results Tally Sheet

Base:				**Date:**	
Name / Rank of Kitchen Manager / Second in Command:				**Time:**	
Sample Number	**Equipment or Area Tested**	**Time / Date of Test**	**Area visually clean? (Y/N)**	**Description of Equipment or Location Tested**	**Relative Light Units (RLU) Recorded**
1	Food Prep Area/ Sinks				
2	Food Prep Area/Sinks				
3	Food Prep Area/Sinks				
4	Food Prep Area/Sinks				
5	Food Prep Area/Sinks				
6	Food Prep Area/Sinks				
7	Food Prep Area/Sinks				
8	Food Prep Area/Sinks				
9	Food Prep Area/Sinks				
10	Food Prep Area/Sinks				
11	Cutting boards, knives or slicers				
12	Cutting boards, knives or slicers				
13	Cutting boards, knives or slicers				
14	Cutting boards, knives or slicers				
15	Cutting boards, knives or slicers				
16	Cutting boards, knives or slicers				
17	Cutting boards, knives or slicers				
18	Cutting boards, knives or slicers				
19	Cutting boards, knives or slicers				
20	Dining tables				
21	Dining tables				
22	Dining tables				
23	Dining tables				

24	Dining tables				
25	Dining tables				
26	Dining tables				
27	Dining tables				
28	Dining tables				
29	Production equipment				
30	Production equipment				
31	Production equipment				
32	Production equipment				
33	Production equipment				
34	Production equipment				
35	Production equipment				
36	Production equipment				
37	Pots, Plates or Serving Trays				
38	Pots, Plates or Serving Trays				
39	Pots, Plates or Serving Trays				
40	Pots, Plates or Serving Trays				
41	Pots, Plates or Serving Trays				
42	Pots, Plates or Serving Trays				
43	Pots, Plates or Serving Trays				
44	Fridges/Freezers (coils and handles)				
45	Fridges/Freezers (coils and handles)				
46	Fridges/Freezers (coils and handles)				
47	Fridges/Freezers (coils and handles)				
48	Fridges/Freezers (coils and handles)				
49	Fridges/Freezers (coils and handles)				
50	Fridges/Freezers (coils and handles)				

Step 2 – After the 50 Tests are taken the test results should be summarized in the table below:

Summary of ATP-B Rapid Test Results

Category	Number of Samples Taken	Pass Rate (%)	Critical Fails (%)	Average RLU per Category (RLU)	Highest Recorded Values in each Category (RLU)
Food Prep Areas					
Cutting Boards, Knives and Slicers					
Dining Room Tables					
Production Equipment					
Pots, Plates or Serving Trays					
Fridges/Freezers Handles and Fan Vents					
All Categories Overall Totals					

General Comments from Kitchen Manager or Second in Command (use Summary of Results to identify problem areas)

Trend Analysis by Kitchen Manager or Second in Command: (Compare the current ATP-B results with those obtained during the last three months. Are there differences between months? Are there any negative or positive trends, if so why?)

Signature of Kitchen Manager or Second in Command_____Date:_____

Additional Comments by Base/Unit Food Services Officer or Brigade Chief Cook

Signature of Base/Unit Food Services Officer or Brigade Chief Cook_____Date:

Appendix 1 to Annex O

PART 1

Instructions for completion of Level 2 Verification - Food Safety Inspections form

1. This form must be completed monthly by the Kitchen Manager or Second in Command.

2. This form must be reviewed by the Base/Unit Food Services Officer or Bde Chief Cook.

3. Firstly, the Kitchen Manager or Second in Command must fill in his his/her name and date

4. Completion of Table:

Inspection Areas (1)	PRP Ref (2)	Food Safety Issue(s)? (Y/N) (3)	If Yes, Identify Issue(s) (4)	Corrective Action Taken / Required (5)

   a. Column (1) – This column indicates key inspection areas.

   b. Column (2) – This column provides the PRP reference for the area of inspection.

   c. Column (3) – In this column, the Kitchen Manager or Second in Command will identify whether a food safety issue exists in this area.

   d. Column (4) – In this column, the Kitchen Manager or Second in Command supervisor will identify the specific food safety issue.

   e. Column (5) – In this column, the Kitchen Manager or Second in Command will identify the corrective action taken to mitigate the food safety issue.

5. The final block allows the Kitchen Manager or Second in Command to identify any additional food safety concerns observed during the inspection [to include corrective action taken].

6. Upon completion, the Kitchen Manager or Second in Command will sign the inspection report, indicating completion, and pass it on to the Base/Unit Food Services Officer or Bde Chief Cook for their review.

7. The Base/Unit Food Services Officer or Bde Chief Cook will then review the inspection report and identify any additional concerns, or simply provide comment.

8. The Base/Unit Food Services Officer or Bde Chief Cook will then sign/date to indicate review of the inspection report.

PART 2

Instructions for completion of the Observation of Monitoring and Personnel Hygiene Activities Form

1. This form must be completed monthly by the Kitchen Manager or Second in Command.

2. This form must be reviewed by the Base/Unit Food Services Officer or Bde Chief Cook.

3. Firstly, the Kitchen Manager or Second in Command must fill in his/her name and date

4. Completion of Table:

Inspection Areas **(1)**	**PRP Ref** **(2)**	**Food Safety Issue(s)? (Y/N)** **(3)**	**If Yes, Identify Issue(s)** **(4)**	**Corrective Action Taken / Required** **(5)**

a. Column (1) – This column indicates key inspection areas.

b. Column (2) – This column provides the PRP reference for the area of inspection.

c. Column (3) – In this column, the Kitchen Manager or Second in Command will identify whether a food safety issue exists in this area.

d. Column (4) – In this column, the Kitchen Manager or Second in Command supervisor will identify the specific food safety issue.

e. Column (5) – In this column, the Kitchen Manager or Second in Command will identify the corrective action taken to mitigate the food safety issue.

5. The final block allows the Kitchen Manager or Second in Command to identify any additional food safety concerns observed during the inspection [to include corrective action taken].

6. Upon completion, the Kitchen Manager or Second in Command will sign the inspection report, indicating completion, and pass it on to the Base/Unit Food Services Officer or Bde Chief Cook for their review.

7. The Base/Unit Food Services Officer or Bde Chief Cook will then review the Observation of Monitoring and Personnel Hygiene Activities report and identify any additional concerns, or simply provide comment.

8. The Base/Unit Food Services Officer or Bde Chief Cook will then sign/date to indicate review of the Observation of Monitoring and Personnel Hygiene Activities report.

PART 3

Instructions for completion of the ATP-B assessment forms

1. This form must be completed monthly by the Kitchen Manager or Second in Command.

2. This form must be reviewed by the Base/Unit Food Services Officer or Bde Chief Cook.

3. First, the Kitchen Manager or Second in Command must fill in his/her name and date.

4. Completion of Rapid Test Results Tally Sheet:

(1) Sample Number	(2) Equipment or Area Tested	(3) Time / Date of Test	(4) Area visually clean? (Y/N)	(5) Description of Equipment or Location Tested	(6) Relative Light Units (RLU) Recorded

a. Column (1) – This signifies the sample number you will assign to the sample e.g., Food Prep Area (FPA) 1, FPA 2, FPA 3… etc.;

b. Column (2) – This identifies the category being assessed. Category and equipment of areas tested may be changed by management;

c. Column (3) – Enter the date and time of each test;

d. Column (4) – Indicate if the specific equipment or area is visually clean, yes (Y) or no (N);

e. Column (5) – Describe the equipment or area being tested; and

f. Column (6) – Record the Relative Light Units (RLU) from the measured area.

5. Using the information from the ATP-B Rapid Test Results Talley Sheet the Kitchen Manager or Second in Command must complete the Summary of ATP-B Rapid Test Results as follows:

(1) Category	(2) Number of Samples Taken	(3) Pass Rate (%)	(4) Critical Fails (%)	(5) Average RLU per Category	(6) Highest Recorded RLU in each Category

a. Column (1) – This signifies the category that was being evaluated;

b. Column (2) – State the number of samples taken as per the category;

c. Column (3) – Take the number of passes (less than 301 RLU) per each specific category and divide by the number of total test for the same category and multiply by 100, which will give the pass rate percentage;

d. Column (4) – Take the number of critical fails (more than 1000 RLU) per each specific category and divide by the number of total test for the same category and multiple by 100 which will the give the critical fail rate percentage;

e. Column (5) – Add all RLU results for each specific category together and divide by the number of tests from the same category. This will provide the average RLU per category (RLU).

f. Column (6) – Provide the highest RLU result for each category.

6. The Kitchen Manager or Second in Command will provide comment of trouble areas that were stated in the Summary of ATP-B Rapid Test Results and any action taken or action that needs to be taken.

7. The Kitchen Manager or Second in Command will provide comment comparing the current results with the last three months' ATP-B results and identify/explain any trends or continued problem areas.

8. Once the ATP-B Result with comment are completed, the Kitchen Manager or Second in Command will sign to indicate PART 3 - Sanitation Measurement (using ATP-B) has been completed.

9. The Base/Unit Food Services Officer or Brigade Chief Cook will then state other comments and other actions were taken. Lastly, the Base/Unit Food Services Officer or Brigade Chief Cook will sign/date that they have review the Sanitation Measurement (using ATP-B) form.

Annex P
Level 3 Verification

Level 3 Verification – Base/Unit Food Safety Audits

Level 3 Verification – Quarterly Activities (2-parts)

Note - *Supplementary instructions can be found in Appendix 1 to this Annex*

Part 1 – Review of Level 2 Verification (Food Safety Inspections)

Part 2 – Audit of Prerequisite Programs

Part 1 – Review Level 2 Verification - Food Safety Inspections

Base/Unit_____ Base/Unit and or Deputy Food Service Officer_____ Date_____

Review Level 2 Verification. Review five random samples of Level 2 Verification – Food Safety Inspections (Annex O) that were completed during the last three months. Note below the five top issues that have been noted from the reviewed records.
1. Issue –
2. Issue –
3. Issue –
4. Issue –
5. Issue –
Comment if Level 2 Verification is occurring and if Food Safety Inspections are generally complete and correct.

Part 2 – Audit Prerequisite Programs

Food Safety Compliance Issue Coding

Critical (C) - Major errors in the food safety system were detected: Product(s) contamination is likely. Address issue(s) immediately.
Major (M) – Errors in the food safety system were detected. Product(s) contamination is possible. Address issue(s) promptly.
Satisfactory (S) – No observed issues.
Observation (O) – Comments provided to improve the system.

Items to Check During Quarterly Audit (one every three months)	Refs	Issue Compliance Code [C,M,S,O]	Identify Issue(s)	Corrective Action Taken	Environmental Food Services Officer Comments
Prerequisite Programs. Conduct a walkthrough of all kitchen / Food Services operation areas [to include building exterior]. Note any areas of non-compliance and the corrective action(s) taken.					
PRP 1 – Internal and External Premises					
1. External Premises: Perform an external walk around of the facility to identify any external hazards that may potentially contaminate the interior of the food service operation. Visually assess exterior walls of the facility for potential pest access areas and/or potential sources of contamination	PRP 1.1				
2. Internal Premises: Conduct a thorough walkthrough of the Food Services operation. Note any internal issue(s) and in particular the following:	PRP 1.2 to PRP 1.8				
a. Confirm that work flow and personnel traffic flow patterns do not facilitate cross-contamination of food items	PRP 1.2 a.-c.				
b. Ensure walls, floor, ceilings are intact and clean so not to aide in cross-contamination	PRP 1.2 d.-i.				
c. Ensure lighting is adequate and light sources (e.g. bulbs) are shatterproof or shielded	PRP 1.3				
Items to Check During Quarterly Audit (one every	**Refs**	**Issue**	**Identify Issue(s)**	**Corrective Action**	**Environmental Food**

three months)		Compliance Code [C,M,S,O]		Taken	Services Officer Comments
d. Ensure the ventilation system is working and filters are changed when required. Note as filter change outs are a CE function this may require contacting B/W CE	PRP 1.4				
e. Check that garbage and waste disposal (internal and contracted) occur at the necessary frequency. Assess the flow of garbage in the facility and ensure there are no opportunities for cross-contamination with non-waste food items	PRP 1.5				
f. Verify that washrooms, lunchrooms and change rooms are clean and adequately stocked	PRP 1.6				
g. Ensure that water, ice and steam do not present potential sources of contamination to food items, that the supply is adequate (hot and cold) and that there is adequate water pressure	PRP 1.7				
h. Verify if there have been any reported plumbing issues during the reporting period. If yes, what actions were taken and what actions will be taken to prevent reoccurrence	PRP 1.8				
PRP 2 - Purchasing/Receiving/Storage/Packaging Transport (this will be covered in the next section)					
PRP 3 – Equipment and Utensils					
1. Equipment:	PRP 3.1				
a. Ensure all major and minor equipment is clean, well maintained and not a source of contamination for food items.	PRP 3.1.1, 3.1.2				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer**

		Code [C,M,S,O]			Comments
b. Ensure maintenance program is in place and that the CAF Food Services Equipment and Maintenances Database is being used correctly.	PRP 3.1.3				
c. Review calibration records for completeness and correctness.	PRP 3.1.4				
d. Ensure utensils will not contaminate food through either structural or maintenance deficiencies.	PRP 3.1.4				
PRP 4 – Personnel					
1. Personnel Hygiene Records: Review a sample of the Personnel Hygiene Records (Annex F) to ensure they are being completed. Have all Food Services staff received the briefing?	PRP 4.2.1 Annex F				
PRP 5 – Sanitation					
1. Cleaning Schedule: Ensure that an adequate cleaning schedule is in place.	5.1.1				
PRP 6 – Pest Control					
1. Pest Control Records: Review pest control records to identify if there have been any pest issues since last reporting period.	PRP 6.1.1 d. (6)				
PRP 7 – Response to Foodborne Illness					
1. Foodborne Illness: Check if there have been any reports from diners who suspected that food from your location made them sick. If yes, what action(s) were taken by Food Services staff?	7.1.3				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance Code [C,M,S,O]**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer Comments**

PRP 8 Food Defence					
1. Verify that all Food Services worker have a minimum enhanced reliability check	PRP 8.1 b.				
2. Confirm whether a Physical Security Survey been conducted for the food services operation	PRP 8.2				
HACCP-Based Programs (includes some PRP areas). Walk the route from where food is received within the Food Services operation to where it is finally served, disposed of and/or dispersed.					
1. Personnel Hygiene Practices: While conducting audit activities observe if correct personal hygiene practices are being followed, this includes, but is not limited to, the following:	PRP 4.2.1				
a. Proper handwashing;	PRP4.2.1a				
b. Clean work clothing, hair is covered	PRP4.2.1b				
c. Prohibited jewellery not being worn	PRP4.2.1c				
d. Correct use of utensils and equipment	PRP4.2.1d				
e. Personal effects not being used (e.g., phones)	PRP4.2.1e				
f. Human traffic flow and the flow of food is not a potential source of cross-contamination for food items	PRP4.2.1g				
g. Unauthorized visitors are not present in the Food Services operational or prohibited area. If visitors are authorized, ensure they follow all food safety rules	PRP 4.3.1				
h. Observe staff for any signs of illness or uncovered open cuts/wounds	PRP 4.1.1				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance Code [C,M,S,O]**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer Comments**
2. Receiving: Perform a walkthrough of the receiving area and verify the following:					

a. Check the exterior areas outside of the receiving area for cleanliness and presence of potential hazards to food or personnel.	PRP 2.1.1				
b. Verify that the receiving area is clean and there are no possible contamination issues	PRP 2.1.1				
c. Review a sample of the receiving records for the past three months (suggest two records from each month). Confirm that they are both complete and correct	PRP 2.1.1				
d. Confirm that Receiving staff are receiving CFIA food recalls. Verify that staff are aware of actions to take in the event of a recall to include recording procedures	PRP 7.1.1				
3. Storage: Follow the food flow from receiving to storage areas. Check all refrigerated, frozen and dry storage areas.	PRP 2.2.1				
a. Verify refrigerator storage areas are clean, temperature monitoring charts are present and complete and that there is no potential for cross-contamination.	PRP 2.2.1				
b. Verify freezer storage areas are clean, temperature monitoring charts are present and complete and that there is no potential for cross-contamination.	PRP 2.2.1				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance Code [C,M,S,O]**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer Comments**
c. Verify dry storage areas are clean, humidity is within acceptable parameters, food items are stored at least 15cm off the floor and that there is no potential for cross-contamination.	PRP 2.2.1				

d. Verify that cleaning supplies are separated from food and non-food items to ensure no potential for cross-contamination.	PRP 5.1.1				
4. Prep Areas: Follow the flow of food from the storage areas to the prep areas (pre-production).					
a. Ensure that prep areas are clean and that they are cleaned on a regular basis IAW the Food Services operation's cleaning schedule	PRP 3.1.1				
b. Check that there are no potential cross-contamination issues in prep areas.	PRP 2.2.5				
5. Production Area: Follow food flow from the prep areas to the production areas.					
a. Ensure all major and minor equipment is clean, well maintained and not a source of contamination for food items.	PRP 5.1.1.				
b. Verify that temperature monitoring charts are present (and in use) on the production refrigerators. Perform a visual assessment of the refrigeration units to evaluate the potential for contamination of food items.	PRP 2.1.1				
c. Verify that there are no cross-contamination issues occurring in the Production Area.	PPR 8.1				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance Code [C,M,S,O]**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer Comments**
d. **Cooking/Reheating:** Confirm that cooking/reheating records (Annex J) are complete and correct. Verify that staff are taking temperatures at the right time and that no cross-contamination issues are occurring.	HPB 3.1, 3.2 Annex J				

e. **Cold and Hot Holding:** Confirm that hot and cold holding records (Annex I and K) are complete and correct. Ensure that there are no cross-contamination issues occurring during holding operations.	HBPs 2.1, 2.2, 4.1, 4.2 Annex I and K				
f. **Thawing:** Observe thawing activities to verify that one of the four approved methods of thawing is being used. If no thawing activities are occurring, ask shift supervisor to describe how thawing is normally accomplished and to identify the area where thawing activities generally occur (most likely in thawing or production fridge).	HPBs 1.1. 1.2				
g. **Cooling Activities:** Observe cooling activities to verify the proper cooling methods are being used. Ensure the food being cooled does not enter the temperature danger zone and food is covered to prevent cross-contamination. Check cooling records (Annex L).	HPBs 5.1, 5.2 Annex L				
6. Service Area: Follow food from the production area to the services area(s).					
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance Code [C,M,S,O]**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer Comments**
a. Ensure that hot and cold records are complete and correct (Annex I and K).	HPB 6.1 Annex I, K				
b. Observe staff during meal service. Verify that there are no cross-contaminations or temperature abuse situations occurring during	HBP 6.2				

service and that personal hygiene infractions are not occurring.					
7. Transportation/Distribution Areas: Follow the flow of food from the production area to the distribution / transport area (i.e., the area where food items, (e.g. hayboxes) leave the kitchen to be sent to another location). This includes dispersed areas of the Food Services operation.					
a. Verify that the distribution area is clean and that there are no cross-contamination issues are occurring.	PRP 2.4				
b. Confirm that appropriate packing material is used to prevent cross-contamination.	PRP 2.3.1				
c. Ensure that dispersed feeding records (Annex D) are complete and correct.	PRP 2.4.1 Annex D				
8. Waste/Garbage Disposal: Follow the flow of food from the production and service areas to the waste and/or garbage disposal area.					
a. Confirm that waste and garbage is disposed of in a timely manner from the Food Services operational areas IOT reduce potential for contamination of food	PRP 1.5.1				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance Code [C,M,S,O]**	**Identify Issue(s)**	**Corrective Action Taken**	**Environmental Food Services Officer Comments**
b. Confirm that waste and garbage is stored correctly before being picked up from the Food Services operation. Ensure that it is stored in an appropriate area and at the right temperature to prevent cross-contamination of food, non-food, equipment, utensils and/or the facility itself	PRP 1.5.1				

Additional Observations by Base/Unit and or Deputy Food Service Officer:

9. Prevention of Cross-contamination Assessment: Review your Prevention of Cross-contamination Assessment. If the assessment is not relevant or there has been change in the Food Services operation, reassess the Prevention of Cross-contamination Assessment.	HBP 8.1 Annex M				
a. Confirm the assessment is still relevant. Identify whether the Food Services operation has changed since the last Level 3 Audit.					
10. Handwashing: During a staff coffee or meal break observe staff washing their hands. Comment on the total percentage of staff that you observe washing their hands after meal or break time.	PRP 4.2.2				

Name of Base/Unit and or Deputy Food Service Officer _____ **Date:**_____

Additional Comments by Environmental Food Services Officer:

Name of Environmental Food Services Officer _____ **Date:**_____

Appendix 1 to Annex P

Supplementary Instructions for Level 3 Verification – Food Safety Check form.

3. This form must be completed quarterly by the by Base/Unit and/or Deputy Food Services Officer.

4. Upon completion, this form must be submitted to the Environmental Command Food Services Officer for his/her review and comments.

5. First, the Base/Unit and or Deputy Food Services Officer must enter his/her name and the date.

6. The Base/Unit and/or Deputy Food Services Officer must first review the last three Level 2 Verifications – Food Safety Inspection reports. S/he must identify the top five issues within the three reports and provide a general comment about the completeness and correctness of the Level 2 Verification activities.

7. Following this record review, the Base/Unit and/or Deputy Food Services Officer can commence Part 2- Audit Prerequisite Program review.

8. Instructions for completion of Part 2 – Audit Prerequisite Program review form:

Key Columns:

(1) Items to Check During Quarterly Audit (one every three months)	(2) Refs	(3) Issue Compliance Code [C,M,S,O]	(4) Identify Issue(s)	(5) Corrective Action Taken	(6) Environmental Food Services Officer Comments

Instructions for completion

a. Column (1) – This column provides questions on what is to be assessed by the Base/Unit and or Deputy Food Services Officer.

b. Column (2) – This column provides the reference of what is being assessed.

c. Column (3) – The Base/Unit and or Deputy Food Services Officer determines the level of compliance reached (critical, major, satisfactory or observation) for each item.

d. Column (4) – The Base/Unit and or Deputy Food Services Officer explains the food safety issue(s) found.

e. Column (5) – The Base/Unit and or Deputy Food Services Officer states what he or she did to solve the food safety issue or what future action needs be conducted.

f. Column (6) – The Environmental Food Services Officer will insert his/her comments here.

7. Upon completion, the Kitchen Manager or Second in Command will identify any other food safety issues observed and the corrective actions taken.

8. Once the inspection is complete, the Base/Unit and or Deputy Food Services Officer will email the Level 3 Verification report to their respective Environmental Food Services Officer.

9. Upon receipt, the Environmental Command Food Services will review the completed form and provide comments on critical and major issues found by the Base/Unit and or Deputy Food Services Officer in Column (6) of the form.

10. In addition, the Environmental Food Services Officer will provide any additional comments at the end of the audit and return it to the Base/Unit and or Deputy Food Services Officer for filing.

Annex Q
Level 4 Verification

Level 4 Verification – Environmental or Strategic Food Safety Audits (3-parts)

Note – *Supplementary instructions can be found in Appendix 1 to this Annex*

Part 1 – Review of Level 3 Verification (Base/Unit Food Safety Audits)

Part 2 – Review of Audit Prerequisite and HACCP Based Programs

Part 3 - Sanitation Measurement (using ATP-B)

Part 1 – Review of Level 3 Verification – Base/Unit Food Safety Audits

Base/Unit_____ Date_____

Review Level 3 Verification: Review the Level 3 Verification audits completed during the last year (Annex P). Note below the five top issues from the reviewed records.
1. Issue –
2. Issue –
3. Issue –
4. Issue –
5. Issue –
Comment if Level 3 Verification is occurring and whether the audits are generally complete and correct.

Part 2 – Audit Prerequisite and HACCP Based Programs

Food Safety Compliance Issue Coding

Critical (C) - Major errors in the food safety system were detected: Product(s) contamination is likely. Address issue(s) immediately.
Major (M) –Errors in the food safety system were detected: Product(s) contamination is possible. Address issue(s) promptly.
Satisfactory (S) –No observed issues.
Observation (O) –Comments provided to improve the system.

Items to Check During Quarterly Audit (one every three months)	Refs	Issue Compliance Code [C,M,S,O]	Identify Issue(s)	Environmental or Strategic Food Services Officer Comments	Base/Unit Corrective Action(s) Taken
Prerequisite Programs. Conduct a walkthrough of all kitchen / Food Services operation areas [to include building exterior]. Note any areas of non-compliance and the corrective action(s) taken.					
PRP 1 – Internal and External Premises					
1. External Premises.	PRP 1.1				
2. Internal Premises	PRP 1.2				
PRP 2 - This will be covered in the next section					
PRP 3 – Equipment and Utensils					
Check major and minor equipment for wear and cleanliness. Ensure equipment maintenance program is in place and the CAF Food Services Equipment and Maintenance Database is being used. Check calibration records. Check utensils for wear /cleanliness.	PRP 2				

Items to Check During Quarterly Audit (one every three months)	Refs	Issue Compliance Code [C,M,S,O]	Identify Issue(s)	Environmental or Strategic Food Services Officer Comments	Base/Unit Corrective Action(s) Taken
PRP 4 – Personnel					
Verify that Personal Hygiene Records have been filled out correctly. Compare the number filled out to the number of staff employed in the kitchen / Food Services operation.	PRP 4				
PRP 5 – Sanitation					
Ensure that an adequate cleaning schedule is in place.	PRP 5				
PRP 6 – Pest Control					
Check pest control records to see if there have been any pest issues since last reporting period. Is there an adequate pest contactor in place? If no contractor is used, review pest control written procedures.	PRP 6				
PRP 7 – Response to Foodborne Illness					
Ask the kitchen manager if there have been any diner reports of foodborne illness suspected as a result of consuming food from the Food Services operation. If yes, what action was taken by the Food Services staff? Was it appropriate in the circumstance?	PRP 7				
PRP 8 - Food Defence					
1. Verify all Food Services workers have minimum 'enhanced reliability'	PRP 8				

Items to Check During Quarterly Audit (one every three months)	Refs	Issue Compliance Code [C,M,S,O]	Identify Issue(s)	Environmental or Strategic Food Services Officer Comments	Base/Unit Corrective Action(s) Taken
2. Has a Physical Security Survey been conducted for the food services operation?					
HACCP-Based Programs (includes some PRP areas). Walk the route from where food is received within the Food Services operation to where it is prepared, served, disposed of and/or dispersed.					
1. Personnel Hygiene Practices					
While conducting audit activities observe that staff are conducting the correct personal hygiene practices to mitigate the risk of contaminating food items.	PRP 4				
2. Receiving					
a. Check the exterior areas outside of the area outside building of the receiving area for cleanliness and presence of potential hazards to food or personnel Check that receiving records are complete. Verify with receiving staff if they are receiving CFIA recall notifications. Confirm that receiving staff are receiving CFIA food recalls. Verify that staff are aware of actions to take in the event of a recall to include recording procedures Check recall records.	PRPs 2.1 and 7. HBP 8				
b. If time permits, observe food being received and comment on procedures.	PRPs 2.1				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance**	**Identify Issue(s)**	**Environmental or Strategic Food**	**Base/Unit Corrective**

		Code [C,M,S,O]		Services Officer Comments	Action(s) Taken
3. Storage					
Check all refrigerated, frozen and dry storage areas that fridge charts are complete for every shift that all storage areas are clean, and there are no cross-contamination issues occurring.	PRP 2.2, HBP 8				
4. Prep Areas					
Check that prep areas are clean or are cleaned when required and no cross-contamination issues are occurring.	PRP 5, HBP 8				
5. Production Area					
a. Review five (5) samples of the following temperature charts from the past year and ensure that they are complete and correct. -Hot and Cold Holding -Cooking/Reheating and Cooling	HBPs 2 - 5 Annexes I - L				
b. Verify that there are no cross-contamination issues occurring in the Production Area and that the production area is cleaned when required.	HBPs 2,3,4,5 and 8				
c. Thawing: Observe thawing activities to verify that one of the four approved methods of thawing is being used. If no thawing activities are observed, ask shift supervisor to show where thawing activities are occurring.	HPBs 1 and 8				
Items to Check During Quarterly Audit	**Refs**	**Issue**	**Identify**	**Environmental or**	**Base/Unit**

(one every three months)		Compliance Code [C,M,S,O]	Issue(s)	Strategic Food Services Officer Comments	Corrective Action(s) Taken
d. Observe production area activities during the production activities. Comment on any food safety compliance issues.	HBPs 1, 2,3,4,5 and 8				
6. Service Area.					
a. Ensure that hot and cold records are complete and correct.	HPB 6				
b. Observe staff during meal hour. Verify that there are no cross-contaminations or temperature abuse situations (e.g. as a result of food left unattended) occurring during the meal hour. Verify that personal hygiene infractions are not occurring.	HBP 6 and 8				
7. Transportation/Distribution Areas					
a. Verify that distribution areas are clean and that there are no cross-contamination issues occurring. Check that dispersed feeding records are complete and correct.	PRP 2.4 HPB 8 Annex D				
b. Verify that proper packing material is used to prevent cross-contamination.	PRP 2.3 HBP 8				
c. Time permitting, observe dispersed meal or catering pick-up activities, comment on any compliance issues.	PRP 2.4				
Items to Check During Quarterly Audit (one every three months)	**Refs**	**Issue Compliance**	**Identify Issue(s)**	**Environmental or Strategic Food**	**Base/Unit Corrective**

		Code [C,M,S,O]		Services Officer Comments	Action(s) Taken
8. Waste/Garbage Disposal.					
a. Is waste and garbage disposed of from operational areas in a timely manner, thereby ensuring it does not contaminate food, non-food, equipment, utensils or the facility? Check area where garbage or waste is picked up from the Food Services operation.	PRP 1.5.				
9. Prevention of Cross-contamination Assessment.					
Review Prevention of Cross-contamination Assessment. Is it complete and correct?					
10. Handwashing					
During a break or a meal time observe staff washing their hands. Comment on the percentage of staff that are washing their hands after meal or break time.					
11. Food Safety Training					
a. Check training records. Have all staff received Basic Food Safety Training (Level 1 Food Safety Training)?					
b. In addition to basic Level 1 training, have the military staff received the necessary level of food safety training for their current positions.					

Other Part 1 Observations by Command or Strategic Food Service Officer

Signature: _____ Date:_____

PART 3 - Sanitation Measurement (using ATP-B)

Conduct ATP-P Testing using the same testing protocol as found in Level 2 Verification.

Background and Instructions for completion of ATP-B assessment forms

1. Background. ATP-B rapid tests are a tool to assist with the evaluation of the overall cleanliness of Food Services operations. The objective of this testing is to get a general feel for the overall effectiveness of sanitation/cleanliness measures.

2. Testing Method. Follow the manufacturer's direction. (Most likely, use a zigzag pattern in east to west and then north to south direction while applying pressure and rotating the swab). The swab will then be placed into a collection tube (mixed with reagents) and shaken. The collection tube will then be inserted into luminometer for measurement).

3. Pass/Fail Rates. The pass rate for cleanliness is set at less than 301 Relative Light Units (RLU) and the critical failure rate is set at above 1000 RLU. The critical failure rate assessment (Column 4, Critical Fails %) is used to further emphasize areas that require more attention in relation to sanitation measures.

Step 1 - Conduct 50 ATP-B Tests at the following times:

1. **During a Shift Testing** – Conduct 25 ATP-B Tests during a shift. The areas tested should be in locations where staff should have cleaned as per the cleaning schedule. Do not test areas/equipment/utensils that are in process of being used. Suggested areas where to test are included below in the ATP-B Rapid Test Results Talley Sheet. Other areas could be tested based on suspected problems areas.

2. **After Shift Testing Period** – Conduct 25 ATP-B Tests after a shift (preferable at the end of the day or before the food service operation begins). Suggested areas where to test are included below in the ATP-B Rapid Test Results Talley Sheet. Other areas could be tested based on suspected problems areas.

3. Record the results in the following table

ATP-B Rapid Test Results Tally Sheet

Base:				**Date:**	
Name / Rank of Env/Strat Food Services Officer:				**Time:**	
Sample Number	**Equipment or Area Tested**	**Time / Date of Test**	**Area visually clean? (Y/N)**	**Description of Equipment or Location Tested**	**Relative Light Units (RLU)**

					Recorded
1.	Food Prep Area/ Sinks				
2.	Food Prep Area/Sinks				
3.	Food Prep Area/Sinks				
4.	Food Prep Area/Sinks				
5.	Food Prep Area/Sinks				
6.	Food Prep Area/Sinks				
7.	Food Prep Area/Sinks				
8.	Food Prep Area/Sinks				
9.	Cutting boards, knives or slicers				
10.	Cutting boards, knives or slicers				
11.	Cutting boards, knives or slicers				
12.	Cutting boards, knives or slicers				
13.	Cutting boards, knives or slicers				
14.	Cutting boards, knives or slicers				
15.	Cutting boards, knives or slicers				
16.	Cutting boards, knives or slicers				
17.	Cutting boards, knives or slicers				
18.	Cutting boards, knives or slicers				
19.	Dining tables				
20.	Dining tables				
21.	Dining tables				
22.	Dining tables				
23.	Dining tables				
24.	Dining tables				
25.	Dining tables				
26.	Dining tables				
27.	Production equipment				
28.	Production equipment				
29.	Production equipment				
30.	Production equipment				
31.	Production equipment				
32.	Production equipment				
33.	Production equipment				
34.	Production equipment				
35.	Pots, Plates or Serving Trays				
36.	Pots, Plates or Serving Trays				

37.	Pots, Plates or Serving Trays				
38.	Pots, Plates or Serving Trays				
39.	Pots, Plates or Serving Trays				
40.	Pots, Plates or Serving Trays				
41.	Pots, Plates or Serving Trays				
42.	Pots, Plates or Serving Trays				
43.	Fridges/Freezers (coils and handles)				
44.	Fridges/Freezers (coils and handles)				
45.	Fridges/Freezers (coils and handles)				
46.	Fridges/Freezers (coils and handles)				
47.	Fridges/Freezers (coils and handles)				
48.	Fridges/Freezers (coils and handles)				
49.	Fridges/Freezers (coils and handles)				
50.	Fridges/Freezers (coils and handles)				

Step 2 – After the 50 Tests are taken the test results should be summarized in the table below:

Summary of ATP-B Rapid Test Results

Category	Number of Samples Taken	Pass Rate (%)	Critical Fails (%)	Average RLU per Category (RLU)	Highest Recorded Values in each Category (RLU)
Food Prep Areas					
Cutting Boards, Knives and Slicers					
Dining Room Tables					
Production Equipment					
Pots, Plates or Serving Trays					
Fridges/Freezers Handles and Fan Vents					
All Categories Overall Totals					

ATP-B Observations Command or Strategic Food Services Officer:

Signature of Environmental Food Services Officer _____ Date:_____

Return ATP-B Comments by Base/Unit Food Services Officer:

Signature of Base/Unit Food Services Officer _____ Date:_____

Appendix 1 to Annex Q

Supplementary Instructions for Level 4 Verification –

Environmental or Strategic Food Safety Audits Instructions

Step 1

The auditor (either the Command or Strategic Food Services Officer) will complete Part 1 and Part 2 of the audit. Informal audit results should be provided to the audited Base or Unit prior to departing.

Step 2

Once the Level 4 Audit is complete, it will be sent formally from the Environmental or Strategic Food Services Officer (the one who completed the audit) through the Chain of Command to the Base/Unit.

Step 3

The Base/Unit that that was audited must then fill in Column 6 Base/Unit Comments (corrective action(s) taken) within Part 1 for any Critical or Major food safety issues found during audit. Actions that have rectified, or will rectify, critical or major compliance issues must be noted by the Base or Unit Food Services Officer. In addition, Base/Unit Food Services Officers must comment in area provided in Part 3 (ATP-B Summary Results) regarding the ATP-B results and their action(s) to rectify any identified sanitation issues or gaps.

Step 4

The Base/Units Food Services Officers must return their comments (Step 3) to the Command or Strategic Food Services Officer who initially conducted the audit through their Chain of Command within 60 days from when the formal audit was signed by auditor.

Annex R
Monitoring and Verification Matrix

This document summarizes who and when Food Services personnel or other organizations need to complete monitoring and verification activities.

Activity	What is Monitored/ Check/Verified	Who Conducts the Activity	When the Activity is Conducted	Where are the results Record
Monitoring Activities				
Receiving	1. Visual Monitoring of Receiving Area 2. Visual Monitoring of Delivery Vehicle 3. Measure Temperature of Food Received 4. Visual Monitoring of Food	Receiving staff	1. Before each delivery. 2. Before unloading food. 3. Each pallet frozen/refrigerated food (or part of). 4. All incoming food and non-food.	Annex B
Storage	1. Measure Storage Temperatures 2. Visual Monitoring of Storage Areas	Measuring - frontline staff Shift supervisor or designate	One every shift	Annex C
Transport of Food	1. Measure Transporting Time and Temperature 2. Visual Monitoring of Transportation Vehicle	Kitchen food distribution (dispersed or catering) staff	Every time food leaves the Food Services operation	Annex D
Thawing	1. Measure Thawing Temperature 2. Visual Monitoring of Thawing Processes	Shift supervisor or designate	During thawing procedures.	Annex N
Cold Holding	1. Measure Cold Holding Temperature 2. Visual Monitoring of Holding Processes	Frontline cooks	When conducting cold holding procedures	Annex I
Cooking	1. Measure Cooking Temperatures 2. Visual Monitoring of Cooking Processes	Frontline cooks	Measure/monitor every batch of food being cooked	Annex J
Hot Holding	1. Measure Hot Holding Temperature 2. Visual Monitoring of Holding Processes	Frontline cooks	When conducting hot holding procedures	Annex K
Cooling	1. Measure Cooling Temperature and Time 2. Visual Monitoring of Cooling Processes	Frontline cooks	During cooling processes.	Annex L

Service (Cold or Hot)	1. Measure Holding (Cold, Hot) Temperatures 2. Visual Monitoring of Serving Processes	Civilian supervisor, military supervisor or designate	Measure cold and hot products twice every meal hour. Shift supervisor must check service operations at least twice each meal.	Annex I for Cold Annex K for Hot Annex N (for supervisor)
Reheating	1. Measure Reheating Temperature 2. Visual Monitoring of Leftover/Reheating	Frontline cooks	Measure and visual monitor the reheating of leftovers.	Annex J
Prevention of Cross-contamination	1. Monitor and Assess Possible Cross-contamination Issues	Frontline supervisors, Kitchen Supervisors and Base/Unit Food Services Management	Initial Monitoring/Assessment of each Food Services operation. Reassessment required on monthly basis.	Annex M
Verification Activities				
Level 1 Verification – Food Safety Checks	Quick Assessment of Prerequisite Programs, Monitoring Activities	Shift Supervisor	Once every shift	Annex N
Level 2 Verification – Food Safety Inspections	All PRPs will be inspected along will all monitoring records. Sanitation verified by visual observation and ATP-B. Food safety practices observed such personal hygiene and monitoring activities.	Kitchen Manger or his/her Second in Command	Once a month	Annex O
Level 3 – Verification – Base/Unit Food Safety Audits.	Quick inspection of facilities and equipment and Food Services records. Observe food safety practices that performed by kitchen staff.	Base Food Services Officers and Deputy Food Services	Quarterly (four/year)	Annex P
Level 4 – Verification – Command/Strategic Food Safety Audits	All PRPs and HACCP-Based Programs (HBPs) will be audited. ATP-B will also be used.	Food Services Environmental Command L1 or Strategic Level Food Services	Once every one to two years.	Annex Q
Level 5 – Verification – Third Party	Third Party auditors help determine if the food safety system is working correct and are meeting food safety needs of the CAF.	Third Party Auditors	Once every five years	N/A

Auditors				
Preventive Medicine (PMed) Inspections	Inspection of Food Services operation in relation to possible health issues.	PMed Technicians/Health Services	Once every month (Health Services to determine)	PMed Formal Report
Food Supplier/ Manufacturer Audits	Audits of Food Supplier/ Manufacture	Veterinarians or persons with meaningful amounts of academic training in food safety and quality management systems, as well as sufficient experience doing food safety audits.	As required on domestic and international operations.	NATO AMedP 4.5 of STANAG 2556

Annex S
HACCP Analysis (7 Steps) of the CAF HACCP Based Program (HBP)

Process Step	**Hazards** What can go wrong?	**Hazard is controlled under PRPs? Yes or No**	**Prevention Measures** What can I do about it?	**Monitoring** How, when and where do I check?	**Corrective Measures** What I do if it is not right after checks?	**HACCP Step 6 Verification** How to ensure the HBP is working correctly? LV = Level Verification	**Records** **What do I have to write down?** LV = Level Verification
Receipt of Food	**Physical** Packaging foreign objects (glass, wood, stones, metal, plastics) pests.	**Yes – PRP 2**	Ensure no foreign material or tampering is present in deliveries.	Visual/sensory checks by staff receiving goods for each delivery. This includes the food supplies but also delivery vehicles.	Do not accept from supplier. Fill out food supply rejection form (Annex TBC).	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Monitoring – Annex B for each delivery. Verification – LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, chemical contaminates (e.g. pesticides, fertilizers), toxic elements (e.g. lead), other contaminates (e.g. POL, paint chips).		-Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure that food specifications are met within the food contract with suppliers. -Ensure supplies received have not contaminated food or non-food supplies.	-Check cleanliness of delivery trolleys and conveyer belts. -Check that chemicals are not stored in receiving area and used only when deliveries are not occurring.	-Do not accept contaminated food from supplier, inform supervisor, document the reason for return of supplies. -If food has been tampered with inform supervisor immediately to contact security elements (Military Police).		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		Ensure delivery temperatures are: Refrigerated Food: 4°C (40°F) or lower. Frozen Food: -18°C (0°F) or lower	For each pallet of food delivered, check food temperatures using a calibrated temperature thermometer or calibrated temperature gun. Record temperature.	If food is measured and is higher than 4°C (40°F) for refrigerated food or above 18°C (0°F) for frozen food reject the food order, inform supervisor, document the reason for return of supplies.		
Storage	**Physical** Packaging foreign objects (glass from	**Yes – PRP 2**	-Ensure storage rooms are kept clean with regular defrosting. -Ensure pests have no access to	Check efficacy of pest control contract/ operations. Visual/sensory checks.	-Pest control treatment by contracted services or authorized/qualified person.	LV 1 – Checks (each shift).	Monitoring – Annex C for storage areas.

	lights) pests, other storage containers.		storage areas.		-If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean immediately and review cleaning schedules.	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, other contaminates (e.g. POL, paint)		-Keep refrigerators and storage areas clean. Adhere to cleaning schedule and follow manufacturer's instructions. -Store chemical and other contaminates separately from food and non-food supplies.	Visual/sensory checks.	-If food has been contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Inform supervisor. Clean immediately and review cleaning schedules.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		Ensure storage area temperature: Refrigerated Food: 4°C (40°F) or lower. Frozen Food: 18°C (0°F) or lower. -Ensure Humidity of dry storage areas is maintained between 50-55%. -Ensure cross-contamination does not occur by using proper storage methods. -Ensure FIFO method.	-Check temperatures (twice daily) using a calibrated temperature probe (each shift). -Check "Use By/ Best Before" dates. Visual/sensory checks.	-If food goes above 4°C (40°F) for refrigerated food or 18°C (0°F) for frozen food, hold food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE Adjust or repair refrigerator or freezer unit.		
Thawing	**Physical** Packaging, foreign objects (glass, wood,	**No**	-Ensure areas where thawing is occurring are kept clean. Ensure pests have no access to	-Check efficacy of pest control contract/ operations. Supervision.	-Pest control treatment by contracted services or authorized/qualified person.	LV 1 – Checks (each shift).	Monitoring – Shift supervisor will note thawing

	metal), pests, personal items.		areas where thawing is taking place.	Visual/sensory checks	Hold any contaminated food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean immediately and review cleaning schedules.	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	procedures on Annex N. Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents.		-Equipment used in thawing must be clean. -Adhere to cleaning schedule and follow manufacturer's instructions.	-Visual/sensory checks. Daily checks on cleaning techniques – check recorded.	-Liaise with cleaning supervisor. Dispose of contaminated food.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-Use only one of the four approved methods for thawing of food. -Wash hands before handling food. -Surfaces and equipment to be sanitised prior to thawing. Keep raw food separate from other types of food. **<u>Critical Control Point 1</u>** **Ensure food does not go above 4°C (40°F) when thawing.**	-Visual/sensory checks. Supervision. -Regularly check that food is being properly thawed using one of the four approved methods. -Randomly check thawing food with thermometer.	-If food goes above 4°C during thawing hold food in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE Verify proper training of staff in the approved methods of thawing food.		
Food Prep	**Physical** Packaging, foreign objects (glass, wood,	**No – PRP 5** **Yes – Will be covered by**	-Ensure areas where food prep is occurring are kept clean. Ensure pests have no access to	-Check efficacy of pest control contract/ operations. -Visual/sensory checks	-Pest control treatment by contracted services or authorized/qualified person.	LV 1 – Checks (each shift).	Monitoring – Shift supervisor will note food

	metal), pests, personal items.	**Cross-contamination Step**	areas where food prep is taking place.		Hold any contaminated food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean immediately and review cleaning schedules.	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	prep issue on Shift IC Check Document as per Annex N. Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents.		-Equipment used in food prep must be clean. -Adhere to cleaning schedule and follow manufacturer's instructions.	-Visual/sensory checks. Daily checks on cleaning techniques – check recorded.	-Liaise with cleaning supervisor. Dispose of contaminated food.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-Wash hands before handling food. -Surfaces and equipment to be sanitised prior to preparing food. Keep raw food separate from other types of food. -Ensure food does not enter the temperature danger zone (above 4°C (40°F) or under 60°C (140°F)) for long periods of time**.**	-Visual/sensory checks.	-If food goes enters the temperature danger zone (above 4°C (40°F) or under 60°C (140°F)) for long periods of time, put food in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE		
Cold Holding	**Physical** Packaging, foreign objects (glass, wood,	**No**	-Ensure areas where cold temperature holding is occurring are kept clean.	-Check efficacy of pest control contract/ operations. -Supervision.	-Pest control treatment by contracted services or authorized/qualified person.	LV 1 – Checks (each shift).	

	metal) pests, personal items.		-Ensure pests have no access to areas where cold holding is taking place. Ensure food is always covered when cold holding. -Clean cold holding equipment after each use.	-Visual/sensory checks.	-Hold any contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean of cold temperature holding equipment. Liaise with cleaning supervisor.	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Monitoring - Complete Annex I. Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, environmental contaminates if outside.		-Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure food is always covered when holding. Clean cold/hold equipment after each use.	Visual/sensory checks. Daily checks on cleaning techniques.	-Hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE -Clean cold temperature holding equipment. Liaise with cleaning supervisor.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-Surfaces and equipment to be sanitised prior to and after cold temperature holding. Keep food covered. <u>Critical Control Point 2</u> Ensure cold food that is being held is kept under 4°C (40°F) or lower at all times. Do not hold cold food for longer than two hours.	-Visual/sensory checks. -Check that cold food is being held outside of the temperature danger zone (under 4°C (40°F) or under 60°C (140°F)). -Checks with thermometer must be completed once every meal time.	-If food goes above 4°C during cold holding transfer to separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE -Ensure proper training of staff in the approved methods of food holding. Clean cold temperature holding equipment. Liaise with cleaning supervisor.		
Cooking	**Physical** Packaging foreign objects (glass, wood, stones, metal, plastic)	**No**	-Ensure areas where cooking is occurring are kept clean. -Ensure pests have no access to areas where cooking is taking	Check efficacy of pest control contract/ operations Supervision. Visual/sensory checks.	-Pest control treatment by contracted services or authorized/qualified personnel. -Hold contaminated food for	LV 1 – Checks (each shift). LV 2 – Inspections/	Monitoring - Complete Annex J.

	pests and personal items.		place. -Ensure food is always covered before and after cooking.		disposal in separate location until authorized disposal (PMed). Label food –DO NOT USE – FOOD SAFETY ISSUE. Ensure cleaning of cooking equipment after each use.	Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, environmental contaminates if outside.		-Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure food is always covered.	-Visual/sensory checks. -Supervision	-Liaise with cleaning supervisor. -Hold contaminated food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A). Cooking must kill or reduce harmful microorganism to a safe level for consumption.		-Surfaces and equipment to be sanitised prior to and after cooking. Keep food covered. **<u>Critical Control Point 3</u>** **Ensure the following food types are cooked to:** **1. Poultry: 85°C (185°F) or above** **2.Mixed Food (casseroles, meals with gravy, mayonnaise, milk): 74°C (165°F) or above** **3. Whole Cuts (Beef, Lamb, Pork) and Fish: 70°C (158°F) or above** **4. Ground meats (Beef, Pork, Fish): 70°C (158°F) or above** **5. Eggs: 63°C (145°F) or above**	-Use hand thermometer or calibrated temperature probe on every batch of food that is cooked.	-If proper required internal temperature is not reached continue cooking at least until correct internal temperature is reached. .		
Hot Holding	**Physical** Packaging, foreign objects (glass, wood,	**No**	-Ensure areas where hot temperature holding is occurring are kept clean.	-Check efficacy of pest control contract/ operations. -Supervision.	-Pest control treatment by contracted services or authorized/qualified person.	LV 1 – Checks (each shift).	

	metal) pests, personal items.		-Ensure pests have no access to areas where hot holding is taking place. Ensure food is always covered when thawing. -Clean hot holding equipment after each use.	-Visual/sensory checks.	-Hold any contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean hot holding equipment. Liaise with cleaning supervisor.	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Monitoring - Annex K. Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, environmental contaminates if outside.		-Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure food is always covered when holding. Clean hot holding equipment after each use.	Visual/sensory checks. Daily checks on cleaning techniques.	-Hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE -Clean of hot holding equipment. Liaise with cleaning supervisor.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-Surfaces and equipment to be sanitised prior to after hot holding. Keep food covered. **<u>Critical Control Point 4</u>** **Ensure hot food that being held is kept over 60°C (140°F). Do not hold hot food for longer than two hours.**	-Visual/sensory checks. -Check that hot food is being held outside of the temperature danger zone (over 4°C (40°F) or under 60°C (140°F)). -Checks with thermometer must be completed once every meal time.	-If food goes below 60°C (140°F) for hot holding transfer to separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE -Ensure proper training of staff in the approved methods of food holding. Clean hot temperature holding equipment. Liaise with cleaning supervisor.		
Cooling	**Physical** Packaging, foreign objects (glass, wood, metal) pests, personal	**No**	-Ensure areas where cooking is occurring are kept clean. -Ensure pests have no access to areas where cooling is taking	-Check efficacy of pest control contract/ operations -Supervision. -Visual/sensory checks.	-Pest control treatment by contracted services or authorized/qualified person. -Hold contaminated food for	LV 1 – Checks (each shift). LV 2 – Inspections/	Monitoring – Complete Annex L.

	items.		place. -Ensure food is always covered before and after cooling.		disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Cleaning of cooling equipment. Liaise with cleaning supervisor.	Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Chemical agents.		-Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure food is always covered.	-Visual/sensory checks. -Daily check of cleaning techniques.	-Hold contaminated food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Cleaning of cooling equipment. Liaise with cleaning supervisor.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A). Cooling must inhibit microbial growth to maintain safe level for consumption.		-Use clean, shallow trays to aid cooling. -Keep raw food separate. **<u>Critical Control Point 5</u>** **Food that is being cooled must be:** **Cooled from 60°C (140°F) to 20°C (68°F) within two hours; and** **Cooled from 20°C (68°F) to 4°C (40°F) within four hours.**	Record cooling time and temperature using a hand thermometer.	-If food is not cooled to 20°C (68°F) within two hours and 4°C (40°F) within four hours hold contaminated food for disposal in separate location until authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Inform supervisor. Investigate possible process failure and if extra training is required.		
Service	**Physical** Packaging, foreign objects (glass, wood, metal) pests, personal items.		-Ensure areas where cold/hot service areas are kept clean. Ensure pests have no access to areas where thawing is taking place.	-Check the efficacy of pest control contract/ operations. -Supervision. -Visual/sensory checks.	-Pest control treatment by contracted services or authorized/qualified personnel. Hold any contaminated food for disposal in separate location until	LV 1 – Checks (each shift). LV 2 – Inspections/ Observations (monthly).	Monitoring - Complete Annexes I and K. Verification –

			-Ensure food is always covered when food is not being served. -Dining tables are cleaned after every meal or after each use.		authorized disposal (PMed). Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean service equipment. Liaise with cleaning supervisor.	LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, environmental contaminates if outside.		-Service equipment must be kept clean. Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure food is always covered when food is not being served. Dining tables are cleaned after every meal or after each use.	-Visual/sensory checks. -Daily checks on cleaning techniques .	Hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. Clean service equipment. Liaise with cleaning supervisor.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-Surfaces and equipment to be sanitised prior to cold/hot/room temperature serving. Keep food covered. **<u>Critical Control Point 2</u>** **Ensure cold food that is being held is kept at 4°C (40°F) or lower at all times. Do not hold cold food for longer than two hours.** **<u>Critical Control Point 4</u>** **Ensure hot food that being held is kept over 60°C (140°F). Do not hold hot food for longer than two hours.**	-Visual/sensory checks. -Check that hot and cold food is being held outside of the temperature danger zone (above 4°C (40°F) or under 60°C (140°F)). -Checks with a thermometer must be completed once every meal time.	-If food goes above 4°C (40°F) during cold holding or below 60°C (140°F) transfer to separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE -Verify proper training of staff in the approved methods of thawing food. -Clean service equipment. Liaise with cleaning supervisor.		
Reheating	**Physical** Packaging, foreign objects (glass, wood, metal) pests, personal items.	**No**	-Ensure areas where leftovers are stored and reheated are kept clean. -Ensure pests have no access to areas where leftovers are stored and reheated.	-Check efficacy of pest control contract/ operations. -Supervision. -Visual/sensory checks.	-Pest control treatment by contracted services or authorized/qualified person. -Hold any contaminated food for disposal in separate location until authorized disposal (PMed).	LV 1 – Checks (each shift). LV 2 – Inspections/ Observations (monthly).	Monitoring - Complete Annex J for reheating. Verification – LV 1 – Annex N

			-Ensure food is always covered when stored and reheated.		Label food – DO NOT USE – FOOD SAFETY ISSUE.	LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q
	Chemical Cleaning agents, other contaminates (e.g. POL, paint)		-Equipment must be clean. Adhere to cleaning schedule and follow manufacturer's instructions. -Ensure food is always covered when food is not being served. Ensure food is always covered when stored and reheated.	-Visual/sensory checks. -Daily checks of cleaning techniques.	Liaise with cleaning supervisor. Hold any contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-Keep leftovers covered and label date of last use. -For Cooling leftovers see HBP 6 Cooling. For storing leftovers see HBP 2 Storage. Ensure leftovers must are within 24 hours of original use **(TBC).** **<u>Critical Control Point 6</u>** **Ensure leftovers are heated to an internal temperature of 74°C (165°F) or higher within two hours of taking them storage for use.**	-Visual/sensory checks. -Ensure leftovers are checked with temperature thermometer every time they are reheated.	If the required internal temperature of 74°C (165°F) or higher is not reached continue cooking at least until temperature is reached.		
Transportation of Food	**Physical** Glass, wood, stones, metal, insulation, plastic and personal effects.	**Yes – PRP 2**	-When transporting food, vehicles (or other transportation modes) must be kept clean and free of all physical hazards. -All food and food supplies must be covered at all times	Ensure pest control. Visual/sensory checks of vehicles transporting food.	-Pest control treatment by contracted services or authorized/qualified personnel. -Hold any contaminated food for disposal in separate location until authorized disposal (PMed) -	LV 2 – Inspections/ Observations (monthly). LV 3 – Internal Audits (quarterly)	Monitoring – Annex D. Verification – LV 2 – Annex O LV 3 – Annex P

			during transport.		Label food – DO NOT USE – FOOD SAFETY ISSUE. -Clean vehicle.	LV 4 – External Audits (yearly	LV 4 – Annex Q
	Chemical Chemical hazards can include added chemical. (e.g. fertilizers), toxic elements and compounds (e.g. lead), contaminates (e.g. POL, cleaners) packaging materials (plastics) and personal items.		-When transporting food, vehicles (or other transportation modes) must be kept clean and free of all chemical contaminates. Vehicles that transport contaminates like POL must not be used to transport food or food supplies. -All food and food supplies must be covered at all times during transport.	-Visual/sensory checks of vehicles transporting food.	-Hold any contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE. -A chemically contaminated vehicle should not be used to transport food.		
	Biological Contamination from pathogenic bacteria, viruses, parasites (See Annex A).		-When transporting food, vehicles (or other transportation modes) must be kept clean so that food is not cross contaminated. -All food and food supplies must be covered at all times during transport. **-When transporting food, hot food must be held hot and cold food must be held cold. In both cases HBP 4 Holding must be followed.** **-Food that is transported must be consumed within four hours of distribution from a CAF kitchen. Hot and cold food being transported must never enter the temperature danger zone (over 4°C (40°F) or under 60°C (140°F)).**	-Visual/sensory checks. -Cold and hot foods are checked with temperature thermometer after transport and prior to service.	-If cold/hot food enters the temperature danger zone (above 4°C (40°F) or under 60°C (140°F)) or food is not consumed within four hours of distribution from CAF Kitchen. Hold food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE.		

Prevention of Cross-contamination	**Physical** During HPB 1-9 cross-contamination can occur at any time due to glass, wood, stones, metal, insulation, bone, plastic, personal effects. **Chemical** During HPB 1-9 cross-contamination can occur at any time by chemicals (e.g. fertilizers), toxic elements and compounds (e.g. lead), contaminates (e.g. POL, cleaners) packaging material (e.g. plastics) and personal items. **Biological** During HPB 1-9 cross-contamination can occur at any time. Contamination from pathogenic bacteria, viruses, parasites (See Annex A).	**No**	Separation of raw from finished or ready to eat (RTE) products. Use structural segregation - physical barriers, walls or separate buildings. Use access controls with requirements to change into the required work wear. Establish traffic patterns or equipment segregation - people, materials, equipment and tools (including use of dedicated tools) (ISO/TS 22002-1 : 2009)	For each kitchen (Food Services operation) develop the following: 1. Construct a flow diagram the flow of food from receiving to services or distribution; 2. Over the flow diagram, label where is each process step is taking place; 3. Circle areas where cross-contamination will most likely occur; and 4. Assess strategies to minimize likely contamination areas that have been identified. 5. Reassess flow diagram on a monthly basis.	If food is cross contaminated, hold contaminated food for disposal in separate location until authorized disposal (PMed) - Label food – DO NOT USE – FOOD SAFETY ISSUE.	LV 1 – Checks (each shift). LV 2 – Inspections/Observations (monthly). LV 3 – Internal Audits (quarterly) LV 4 – External Audits (yearly).	Monitoring – Complete Annex M. Verification – LV 1 – Annex N LV 2 – Annex O LV 3 – Annex P LV 4 – Annex Q