



## Michigan Department of Agriculture Food Service Sanitation Section Risk Control Plan Guidance

### Overview:

The purpose of this guide is to help food operators, with the help of their inspector, write a simple yet effective Risk Control Plan.

The use of Risk Control Plans for addressing chronic problems in food service establishments is encouraged. Benefits of a Risk Control Plan include:

- The plan, developed by the operator, allows the operator to consider all of the options and decide what is best for his/her establishment.
- Input from the sanitarian helps to create a team approach to problem solving.
- Creates long-term behavioral changes.
- Restores managerial control over procedures that have the chance for causing foodborne illness.

### Definitions:

**CDC Identified Risk Factors:** The practices or behaviors, which have been identified by the Centers for Disease Control through epidemiological data as being the most prevalent contributing factors of foodborne illness or injury. CDC risk factors include:

- Poor personal hygiene
- Food from unsafe sources
- Inadequate cooking
- Improper holding temperatures
- Contaminated equipment

**Food Code Interventions:** a) Demonstration of knowledge. b) Hands as a vehicle of contamination, c) Employee health, d) Time temperature relationships, e) Consumer advisory.

**Hazard:** Any biological, physical, or chemical property that may cause an unacceptable consumer health risk.

**Risk:** The chance or probability for harm to occur.

**Risk-based Inspection:** An inspection approach focused on identifying significant behaviors and practices associated with the risk factors identified by the CDC and the Food Code interventions.

**Risk Control Plan:** A mutually agreed upon plan that is written by the management of the food establishment and approved by the sanitarian. The plan describes the establishment's management system for controlling the chance of harm to occur.

**Uncontrolled Hazard:** An unmanaged source of harm.

### **When to Initiate a Risk Control Plan**

For the most part, the normal inspection and inspection report writing process is sufficient to eliminate Food Code violations. Violations are noted and then corrected. However, some uncontrolled hazards may become continuous or chronic.

The Risk Control Plan process requires management to analyze the problem and propose a solution. Management is required to implement the plan over a given period of time while keeping records to verify the plan is working. Repeating the desired behavior over a given time period creates good long-lasting habits.

### **Types of hazards normally covered under a Risk Control Plan**

Typically, Risk Control Plans address uncontrolled hazards that are **procedural or behavioral** in nature. Virtually any type of procedure needing managerial control ranging from facility/equipment cleaning and maintenance, equipment monitoring, time/temperature compliance, food handling, employee hygiene, etc. can benefit from a Risk Control Plan.

One-time actions to fix a problem such as the installation of a vacuum breaker on a hose bib or the installation of a ventilation hood over a piece of cooking equipment are generally addressed by other means.

### **Elements of a Risk Control Plan**

A Risk Control Plan must address:

- The hazard to be controlled
- How the hazard will be controlled
- Who is responsible for control
- What are the critical limits
- What monitoring, corrective actions, and record keeping are required
- The corrective action that will be taken should the critical limit not be met.
- The agreed time frame for correction
- How the results will be communicated to the sanitarian

### **Sample Risk Control Plan**

A Risk Control Plan does not have to be written using any special form. This guide includes an example of a form for those that wish to use it, and a guide for completing the attached Risk Control Plan :

- **DESCRIBE THE VIOLATION (RISK FACTOR) / FOOD CODE SECTION NUMBER:** (this is to be filled out by the inspector)  
This is a brief statement of the problem. For example, “Hamburgers are being cooked to 130 degrees F.” State the code number of the violation observed. Why is this violation a food safety hazard?

**\*\*\*\*\*The following questions should be answered by the person in charge. Assistance can be provided by the inspector.**

- DESCRIBE THE PROBLEM. WHY IS THIS PROBLEM OCCURRING? WHY IS IT DIFFICULT TO CONTROL THIS PROBLEM? (Uncontrolled Process / Hazard examples can be found at the end of the document)

The critical limit is the standard for each control measure to be applied for the purpose of eliminating, preventing, or minimizing a hazard. **Example:** The critical limit for cooling chili is to assure the food temperature goes from 140 degrees to 70 degrees within 2 hours, and from 70 degrees to 41 degrees within an additional 4 hours.

(The FDA “Food Spec Sheet” and the “Equipment Spec Sheet” contain a summary of critical limits to control many hazards. The Spec sheets are available on the MDA website.)

Knowing that the standard for food safety is to cool chili to 70 degrees within 2 hours, and to 41 degrees in an additional 4 hours, why is the chili not being cooled properly? Is there a problem with monitoring the process? Is there a lack of proper equipment to allow this standard to be met? What is the **real issue** that exists to prevent this critical step from occurring?

- HOW WILL YOU CORRECT THE PROBLEM?  
**In your facility**, what can be done to assure that the chili will be cooled correctly? What are some approved cooling methods? What are some possible alternatives to cooling chili?
- WILL STAFF NEED TO BE RE-TRAINED? WHO WILL TRAIN THEM?  
When you have figured out how to solve your problem, you must make sure that this plan will be followed to assure a long term correction. Who cooks and cools the chili? Do they understand the new process? Have you trained them to now cool foods properly? Do they understand that this solution is not only for the chili, but for all foods that need to be properly cooled?
- HOW WILL THE CORRECTIVE ACTION BE MONITORED?
- WHO WILL MONITOR IT? HOW OFTEN?  
It is important to devise a plan to instruct employees what to do when they observe that the critical limit is not met. Otherwise, the hazard will remain uncontrolled and unsafe food may be served to the public. Many corrective actions are simple. For example, the corrective action to be taken when an employee finds the temperature of a cooked hamburger to be 130 degrees F is “Continue to cook until critical limit is met”.

Other corrective actions may be more complex. The operator, for example, may set a critical limit of 38 degrees F for cooler unit air temperature. There may be a series of corrective actions that he/she might want to take when the limit is exceeded:

A) Employee responsible for monitoring will notify the manager when the air temperature of a refrigerator reaches 41 degrees F.

- B) The manager will check the temperature setting of the unit. Adjust if necessary.
- C) The manager will check the temperature of potentially hazardous food and the unit air temperature within 2 hours.
- D) If the critical limit is not met, transfer the potentially hazardous food to another cooler and call the repair service

- **WHO WILL CHECK THAT THE MONITORING WAS DONE? HOW OFTEN?**

Active Managerial Control is an important component to any risk control plan. Without monitoring, it is impossible to know that food safety issues are being addressed. By putting a plan into place where monitoring occurs at regular intervals, a long term correction can occur.

- **WHAT WILL BE DONE IF THE CORRECTION IS NOT WORKING TO CONTROL THE VIOLATION?**

When the person in charge discovers a problem with the correction, a new plan should be developed to promote food safety.

- **HOW WILL YOU COMMUNICATE THE RESULTS TO THE INSPECTOR?**

To work toward a long term correction, a communication plan should be developed with your inspector. Sometimes this is as simple as faxing charts (cooling / cold holding / hot holding / etc.) to your inspector weekly for a couple of months. For more serious violations, your inspector might arrange to stop by the facility (daily, weekly, monthly) to see if assistance can be provided.

**The Risk Control Plan should be agreed upon by both the person in charge and the inspector, creating a plan for long term compliance for the violation.**

<b>Uncontrolled Process</b>	<b>Hazard</b>
Food Source	Presence of pathogenic microorganisms, toxins produced by microorganisms, and/or chemical contaminants
Freezing	Failure to destroy parasites, prevent growth of pathogenic microorganisms
Cooking	Failure to destroy pathogenic microorganisms
Cooling	Failure to prevent growth of pathogenic microorganisms
Reheating	Failure to destroy pathogenic microorganisms
Hot Holding	Failure to prevent growth of pathogenic microorganisms
Cold Holding	Failure to prevent growth of pathogenic microorganisms
Thawing	Failure to prevent growth of pathogenic microorganisms
Cleaning	Failure to prevent the transfer of pathogenic microorganisms from a soiled surface to a clean food contact surface or directly onto food
Sanitizing	Failure to destroy pathogenic microorganisms that may remain on a food contact surface after cleaning
Employee Health	Failure to prevent communicable diseases from being transmitted to food by infected employees
Employee Hygiene	Failure to prevent the introduction of foreign objects into food; prevent the possibility of transmitting disease through food
Bare Hand Contact	Failure to prevent the possibility of transmitting disease through food
Knowledge of the Person in Charge	Failure to designate a person to be in charge of food safety operations, to be knowledgeable about foodborne disease prevention



# RISK CONTROL PLAN

Food Establishment: \_\_\_\_\_  
Person in Charge / Manager: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Inspection Date: \_\_\_\_\_

**TO BE FILLED OUT BY THE INSPECTOR:**

Describe the violation (Risk Factor): \_\_\_\_\_  
Food Code Section Number: \_\_\_\_\_

**TO BE FILLED OUT BY THE PERSON IN CHARGE:** (Use additional sheets if needed)

Describe the problem. Why is this problem occurring? Why is it difficult to control this problem? \_\_\_\_\_  
\_\_\_\_\_

How will you correct the problem? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Will staff need to be re-trained? Who will train them? \_\_\_\_\_

How will the corrective action be monitored? (logs, charts, visual monitoring of staff, etc.)  
\_\_\_\_\_  
\_\_\_\_\_

Who will be responsible to monitor it? How often?  
\_\_\_\_\_

Who will check that the monitoring was done? How often?  
\_\_\_\_\_

What will be done if the correction is not working to control the violation?  
\_\_\_\_\_

How will you communicate the results to the inspector? \_\_\_\_\_  
\_\_\_\_\_

Submitted by: \_\_\_\_\_ Approved by: \_\_\_\_\_  
Person in charge Inspector

If you do not feel comfortable filling out the risk control plan form, you can use a narrative as a written summary of the plan. The narrative should include a description of what needs to be controlled, how it will be controlled, the necessary records, name of the person who is responsible, training and equipment needs, and how the results will be communicated to the sanitarian. As an example:

“This plan is intended to assure the adequate cooking of hamburgers.

Sally Brown, the head chef, will train Bob and Jimmy, the grill line cooks, the proper procedures to cook hamburgers and to take temperatures using a digital thermometer.

Hamburgers will be cooked to an internal temperature of 155 F for 15 seconds. Bob and Jimmy will make random temperature checks. If the hamburgers are not cooked to at least 155 F, the hamburgers will be returned to the grill until 155 F is reached.

Sally will take four random temperatures of hamburgers in the morning and four random temperatures of hamburgers in the afternoon. She will record the temperatures on her production chart. In addition to returning any undercooked hamburgers to the grill, Sally will provide additional training and may make personnel changes if necessary should the critical limit be exceeded. A note about any corrective action taken will also be recorded on the production chart.

Sally will fax a copy of the production chart to Bill Smith, sanitarian, on Monday morning of each week. Sally will fax the charts for a period of two months ending on September 30, 2003.

Bill Smith will review the charts, notify Sally if there are any concerns, and conduct a follow-up inspection after September 30, 2003.”