

**Michigan Department of Agriculture
Food Service Sanitation Section**

**Risk Control Plan
Guidance**

Overview:

The purpose of this guide is to help food operators and sanitarians 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. The following is a list of suggestions for completing the sample plan:

- Observation: The observation is a brief statement of the problem. For example, "Hamburgers are being cooked to 130 degrees F."

➤ Uncontrolled Process / Hazard examples

Uncontrolled Process	Hazard
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

- Critical Limit: The critical limit is the standard for each control measure to be applied for the purpose of eliminating, preventing, or minimizing a hazard. The critical limit for cooking safe hamburgers, for example, is 155 degrees F for 15

seconds. 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.

- Corrective Action When Limits are Not Met: 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. 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 refrigeration 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.

- Narrative: The narrative is 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.”

Plan Narrative: 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 for each task, training and equipment needs, and how the results will be communicated to the sanitarian.