



MARYLAND Department of Health

Food Establishment Standard Operating Procedures

Who must have standard operating procedures?

- All new firms applying for a license from the State of Maryland for a Food Processing Plant
- All existing licensees that hold a State of Maryland License required to do so through the Food Safety Modernization Act

What are standard operating procedures?

- Procedures specific to your operation that describe the activities necessary to complete tasks in accordance with the Code of Maryland Regulations (COMAR) for food, and the Food Safety Modernization Act. The procedures are used to train the staff members responsible for the tasks
- Purposes for establishing SOP's for your operation are required to: protect your products from contamination from microbial, chemical, and physical hazards. This is determined for each individual product as determined by the required Hazard Analysis for the product that will be manufactured. See the Guidance Document on Hazard Analysis to help your firm conduct a Hazard Analysis on each product manufactured to determine the hazards and associated controls necessary

Why must procedures be submitted?

- Maryland's food law requires standard operating procedures to be established prior to opening

How must procedures be developed?

- Procedures are mostly for use by managers and employees. Develop procedures in the language, style and format best for the establishment. An English copy of the procedures is needed for the plan reviewer with the State of Maryland

What are procedures that an establishment must submit?

- These vary according to the firm's products/processes but may include the following:
 - Handwashing
 - Personal hygiene, including cuts and sores
 - Preventing bare hand contact with ready-to-eat food (gloves, utensils, etc.).
 - Employee illness
 - Purchasing food from approved sources

What procedures must all establishments submit when applicable to their specific product?

- Time and temperature controls for receiving foods, both potentially hazardous food that require temperature control and ambient stored goods

- Time and temperature controls for cooking potentially hazardous food
- Time and temperature control for cooling potentially hazardous food
- Time and temperature control for cold holding potentially hazardous food
- Procedures for shelf stable food manufacture as determined by your process authority if applicable. This may include time and temperature to achieve a certain water activity, pH formulation for acidified foods, batch formulation for Acid and Formulated Acid Foods, thermal process times (hot fill), etc.
- Packaging: Specialized packaging such as reduced oxygen packaging, or ROP may introduce hazards. Vacuum packaging is an example

After procedures are developed, where should they be sent and what happens to them?

- Procedures should be sent to the agency reviewing the plans with the other required information for review. See Plan Review Submission document for details about what is necessary for review
- Technically correct procedures must be in place by the pre-opening inspection
- Plan reviewers will make sure the information in the procedures is correct. Be sure to leave enough time to make corrections. Contact your plan reviewer if you have questions
- Procedures that are determined by your Hazard Analysis to be “Critical Control Points” will be expected to be monitored and recorded in writing. Examples can include: Time out of refrigeration during the manufacturing process, Cook Time/Temperature, Cooling Time/Temperature, Cold Holding of finished product or raw materials, etc.

Standard Operating Procedures

(name of establishment)

Subject: Handwashing

Food employees shall clean their hands and exposed portions of their arms, including surrogate prosthetic devices for hands or arms for at least 20 seconds, using a cleaning compound in a conveniently located, accessible handwashing sink that is stocked with the appropriate supplies at all times. All employees must wash hands at handwashing sinks only. Do not wash at dishwashing, food, or mop sinks.

How will new employees will be trained and by whom?

Please indicate the number and locations of handwashing sinks:

Handwashing steps are as follows:

- Rinse hands and exposed portions of arms under clean, running warm water
- Apply an amount of cleaning compound recommended by the manufacturer
- Rub together vigorously for at least 10 to 15 seconds while paying particular attention to removing soil from underneath the fingernails during the cleaning procedure and creating friction on the surfaces of the hands and arms, finger tips, and areas between the fingers
- Thoroughly rinse under clean, running water
- Immediately follow the cleaning procedure with thorough drying using paper towels, or other approved method

To avoid re-contaminating their hands, food employees may use disposable paper towels or similar clean barriers when touching surfaces such as manually operated faucet handles on a handwashing sink or the handle of a restroom door.

When must all employees wash hands?

- At beginning of shift and immediately before engaging in food preparation, including working with exposed food, clean equipment and utensils, and unwrapped single-service and single- use articles
- After using the toilet room
- After coughing, sneezing, using tissue or handkerchief, eating, drinking, or using tobacco
- When switching between working with raw food and working with ready to eat food
- After removing gloves and before donning gloves before working with food

- After handling dirty dishes/soiled utensils
- After touching hair or any body part except clean hands or arms
- During food preparation as often as necessary to remove soil and contamination and to prevent cross-contamination when changing tasks
- After engaging in other activities that contaminate hands, such as handling trash or chemicals

Who will make sure it's done and how?

_____ (specify whom) Are expected to continually model appropriate handwashing practices for employees.

_____ (specify whom) Shall monitor employee handwashing.

_____ (specify whom) Staff are to assure that handwashing stations, including bathrooms, are supplied with soap and paper towels.

_____ (specify whom) Shall monitor hand sinks at _____ to assure that sinks have the necessary supplies. (specify time frame)

What specific corrective action(s) will be taken to eliminate imminent health hazards?

(If employees observe inadequate hand washing or lack of necessary supplies, what will be done and by whom?)

What records will be kept and where?

Date created: _____ By: _____

Last revised: _____ By: _____

Controlling Time and Temperature During Preparation (Sample SOP)

PURPOSE: To prevent foodborne illness by limiting the amount of time that potentially hazardous foods are held in the temperature danger zone during preparation.

SCOPE: This procedure applies to foodservice employees who prepare food.

KEY WORDS: Cross-Contamination, Time and Temperature Control, Food Preparation, Temperature Danger Zone

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
2. Follow State or Federal requirements.
3. Wash hands prior to preparing foods. Refer to the Washing Hands SOP.
4. Use clean and sanitized equipment and utensils while preparing food.
5. Separate raw foods from ready-to-eat foods by keeping them in separate containers until ready to use and by using separate dispensing utensils. Refer to the Preventing Cross-Contamination During Storage and Preparation SOP.
6. Pre-chill ingredients for cold foods, such as sandwiches, salads, and cut melons, to 41 °F or below before combining with other ingredients.
7. Prepare foods as close to serving times as the menu will allow.
8. Prepare food in small batches.
9. Limit the time for preparation of any batches of food so that ingredients are not at room temperature for more than 30 minutes before cooking, serving, or being returned to the refrigerator.
10. If potentially hazardous foods are not cooked or served immediately after preparation, quickly chill. Refer to the Cooling Potentially Hazardous Foods SOP.

MONITORING:

1. Use a clean, sanitized, and calibrated probe thermometer, preferably a thermocouple.
2. Take at least two internal temperatures from each pan of food at various stages of preparation.
3. Monitor the amount of time that food is in the temperature danger zone. It should not exceed 2 hours during preparation cumulatively.

CORRECTIVE ACTIONS:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Begin the cooking process immediately after preparation is complete for any foods that will be cooked at next step.
3. Rapidly cool ready-to-eat foods or foods that will be cooked at a later time.
4. Immediately return ingredients to the refrigerator if the anticipated preparation completion time is expected to exceed 2 hours cumulative.
5. Discard food held in the temperature danger zone for more than 2 hours.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record the date, product name, start and end times of production, the two temperature measurements taken, any corrective actions taken, and the amount of food prepared on the Production Log. The foodservice manager will verify that foodservice employees are taking the required temperatures and following the proper preparation procedure by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the Production Log daily. Maintain the Production Log as directed by your State agency. The foodservice manager will complete the Food Safety Checklist daily. The Food Safety Checklist is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____ BY: _____

DATE REVIEWED: _____ BY: _____

Cooling Potentially Hazardous Foods (Sample SOP)

PURPOSE: To prevent foodborne illness by ensuring that all potentially hazardous foods are cooled properly.

SCOPE: This procedure applies to foodservice employees who prepare or serve food.

KEY WORDS: Cross-Contamination, Temperatures, Cooling, Holding

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP. Refer to the Using and Calibrating Thermometers SOP.
2. Follow State or local health department requirements.
3. Modify menus, production schedules, and staff work hours to allow for implementation of proper cooling procedures.
4. Prepare and cool food in small batches.
5. Chill food rapidly using an appropriate cooling method:
 - a. Place food in shallow containers no more than 4 inches deep and uncovered on the top shelf in the back of the walk-in or reach-in cooler.
 - b. Use a quick-chill unit such as a blast chiller.
 - c. Stir the food in a container placed in an ice water bath.
 - d. Add ice as an ingredient.
 - e. Separate food into smaller or thinner portions.
6. Pre-chill ingredients and containers used for making bulk items such as salads.
7. State and Federal Requirements are to chill cooked, hot food from:
 - a. 135 °F to 70 °F within 2 hours. Take corrective action immediately if food is not chilled from 135°F to 70 °F within 2 hours.
 - b. 70 °F to 41 °F or below in remaining time. The total cooling process from 135 °F to 41 °F may not exceed 6 hours. Take corrective action immediately if food is not chilled from 135 °F to 41 °F within the 6 hour cooling process.
8. Chill prepared, ready-to-eat foods such as tuna salad and cut melons from 70 °F to 41 °F or below within 4 hours. Take corrective action immediately if ready-to-eat food is not chilled from 70 °F to 41 °F within 4 hours.

MONITORING:

1. Use a clean, sanitized, and calibrated probe thermometer to measure the internal temperature of the food during the cooling process.
2. Monitor temperatures of products every hour throughout the cooling process by inserting a probe thermometer into the center of the food and at various locations in the product.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Reheat cooked, hot food to 165 °F for 15 seconds and start the cooling process again using a different cooling method when the food is:

- a. Above 70 °F and 2 hours or less into the cooling process; and
 - b. Above 41 °F and 6 hours or less into the cooling process.
- 3. Discard cooked, hot food immediately when the food is:
 - a. Above 70 °F and more than 2 hours into the cooling process; or
 - b. Above 41 °F and more than 6 hours into the cooling process.
- 4. Use a different cooling method for prepared ready-to-eat foods when the food is above 41 °F and less than 4 hours into the cooling process.
- 5. Discard prepared ready-to-eat foods when the food is above 41 °F and more than 4 hours into the cooling process.

VERIFICATION AND RECORD KEEPING:

Foodservice employees will record temperatures and corrective actions taken on the Cooling Temperature Log. Foodservice employees will record if there are no foods cooled on any working day by indicating “No Foods Cooled” on the Cooling Temperature Log. The foodservice manager will verify that foodservice employees are cooling food properly by visually monitoring foodservice employees during the shift and reviewing, initialing, and dating the temperature log each working day. The Cooling Temperature Logs are to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____ BY: _____

DATE REVIEWED: _____ BY: _____

DATE REVISED: _____ BY: _____