

# Focusing on Retail Food Safety

## *Guidance for Industry*



Georgia Department of Agriculture  
Food Safety Division



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# Introduction

The landscape of the U.S. food industry continues to change, and correspondingly, there have been significant changes in the retail food industry in the past several years. Today's consumer shops at retail stores multiple times each week and spends more money dining outside the home than ever before. With this emphasis on convenience and efficiency, the food industry is under greater pressure to meet public demand for a greater variety of high-quality foods that have been prepared and cooked safely.

Preparing high-quality, safe food begins with well-trained and knowledgeable staff that is involved in a company-wide culture of food safety. This handbook is designed to help you focus on the items critical to safely preparing, cooking, holding and storing food. It identifies and discusses the basics to help prevent foodborne illnesses.

Food safety and sanitation is not a part-time job. It is the daily responsibility of those who prepare, handle and cook food. It is imperative that a cooperative partnership between industry and regulatory officials be maintained to support the common goal of preventing foodborne illnesses.

*For additional information, visit the Georgia Department of Agriculture website at [www.agr.georgia.gov](http://www.agr.georgia.gov) and review the information found on the Food Safety Division webpages.*

*Follow the Food Safety Division on Twitter @GDAFoodSafety for recall alerts and other food safety updates and tips.*



# Your Role in Preventing Foodborne Illness

“Looking clean” is not enough to prevent foodborne illness. Foodborne illness is real and affects thousands of people every day. Each year, there are an estimated 48 million cases of foodborne illnesses in the U.S., resulting in 128,000 hospitalizations and 3,000 deaths. Foodborne illness costs Americans \$77 billion each year due to costs such as hospital bills, lost wages, lost productivity, recalls, business bankruptcy, regulatory investigations and more. Be on the lookout for causes of foodborne illnesses in your facility and how you can help prevent them from occurring!

## ***Foodborne Illness Agents:***

- Biological hazards: bacteria, viruses, parasites, yeast and molds
- Physical hazards: glass, plastics, fingernails and jewelry
- Chemical hazards: cleaners, sanitizers, pesticides and medications
- Naturally occurring chemical hazards: fish toxins and plant toxins

## ***Foodborne Illness Sources:***

- Humans/food workers: contaminated hands, illness
- Foods: contaminated food, time and temperature abuse

## ***Foodborne Illness Symptoms:***

- Common symptoms usually start within 12 - 36 hours and include diarrhea, vomiting, sore throat with a fever and/or infected wound.
- Rare symptoms can include bodily system shutdowns, kidney failure, coma and death.

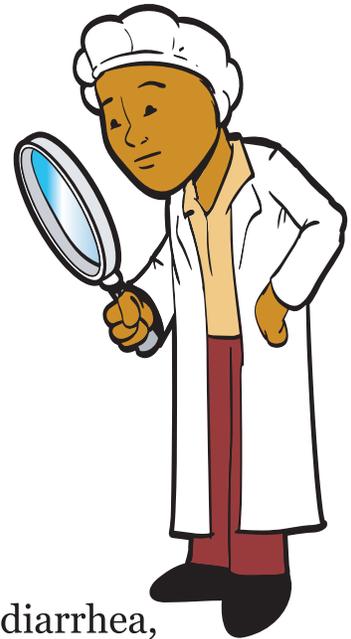
## ***Microorganisms Need Favorable Conditions to Grow.***

*The conditions that help microorganisms to multiply include:*

- Food Source
- Temperature
- Oxygen
- Time
- Moisture
- Acidity

## ***Time and Temperature:***

- **The temperature DANGER ZONE is 41° F to 135° F, the range in which rapid microbial growth occurs.**
- Foods requiring time and temperature control for safety (TCS) should not be exposed to the danger zone for more than four hours total, including time spent preparing, cooling and reheating the food item(s).



# Food Safety Risk Factors

Risk factors are defined as practices or procedures that pose the greatest potential for foodborne illness. These broad categories of factors are determined by the Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA), and are regulated in part by the Georgia Department of Agriculture during inspections at retail facilities.

## *Food Sources:*

- Food from an unapproved or uninspected source
- Unsound condition of food or adulterated food
- Shellfish products must always have intact records/tags verifying source, temperature control, and safe handling



## *Inadequate Cooking:*

- Improper cooking temperatures
- Improper reheating temperatures



## *Improper Holding:*

- Improper cooling
- Lack of date marking
- Improper cold/hot holding time and temperatures

## *Contamination:*

- Raw meats, poultry or seafood not separated from ready-to-eat foods
- Species not separated from each other (such as beef from fish, etc.)
- Improper storage/labeling of foods, chemicals or cleaning products
- Lack of effective wash-rinse-sanitize procedures
- Presence of pests, including insects or rodents
- Lack of potable (drinking) water
- Improper sewage disposal



## *Poor Personal Hygiene:*

- Improper hand washing and/or lack of hand washing
- Bare hand contact with ready-to-eat foods
- Ill food workers
- Employees eating, drinking or using tobacco outside of designated areas

# Practice Good Hygiene

***Good hygiene is the responsibility of the food worker and management, to create a companywide culture of food safety practices.***

- Wash hands in hand sinks only - not in dishwashing, food preparation or mop sinks.
- Ill employees can cause foodborne illness. Norovirus and other highly pathogenic organisms can be easily spread by ill food handlers person-to-person (via the fecal-oral route) or through contaminated airborne droplets, food, water and environmental surfaces. Enforce a strict sick leave policy or reassign duties.
- Employees should only eat, drink, and/or use tobacco products in specially designated areas, away from food preparation and production.
- Do not repeatedly use the same cloth towels or aprons for hand wiping.
- Do not touch ready-to-eat food with bare hands.
- Wear nails short, clean and unpolished.
- Eliminate jewelery in food preparation and processing areas (or restrict to plain band rings only).
- Cover open cuts and burns with finger cots or bandages and single-use gloves.
- Follow single-use glove guidelines  
(see page 6 for tips).



# Food Safety is in Your Hands

Hand washing is important in preventing foodborne illness; improper hand washing and/or a lack of hand washing causes one-third of all foodborne illness outbreaks.

## **Food workers and management:**

- Wash hands **FREQUENTLY** and **EFFECTIVELY**.
- Rinse hands with warm water; wash with soap for at least 20 seconds (about the time it takes to sing the Happy Birthday song twice from start to finish).
- Use clean, single use paper towels to dry hands.
- Keep hand sinks accessible with hand soap and paper towels **AT ALL TIMES**.
- Wash hands at **APPROPRIATE TIMES**.
- Reminder: Hand sanitizer can be used in addition to hand washing, but can never replace hand washing at appropriate times.

## **Wash hands every time after:**

- Smoking, eating or drinking
- Handling raw food
- Going to the restroom or changing a diaper
- Coughing, sneezing or using a tissue
- Cleaning or handling garbage
- Also, always wash hands **BEFORE** putting on gloves



# No Bare-Hand Contact

What is a ready-to-eat (RTE) food? It is considered any food that can be consumed without further preparation. Bare-hand contact with RTE food is prohibited.

When handling RTE foods, food service workers must use the following, either alone or in combination:

- Deli tissue
- Single-use gloves
- Dispensing equipment
- Utensils such as spatulas, tongs or forks



## Single-Use Glove Guidelines:

- Gloves do not replace the need for good hand washing practices.
- Wash hands before putting gloves on and always dispose of gloves as soon as you remove them.
- Put gloves on only when you are ready to handle ready-to-eat foods, then discard the gloves after the task has been completed.
- If you are interrupted during food preparation, remove the gloves. After the interruption, wash hands and then replace with new, clean gloves before resuming food preparation. Reminder: Hand sanitizer can be used in addition to hand washing, but can never replace hand washing at appropriate times.
- When beginning new tasks, always wash hands first and then put on new, clean gloves.
- Single-use gloves should not be used around heat or hot fats.
- Gloves are susceptible to contamination; discard anytime they are soiled or damaged.
- Fabric or reusable gloves may NOT be used with ready-to-eat food.
- If using natural rubber latex, be aware of allergies.

## Correct Glove Usage:

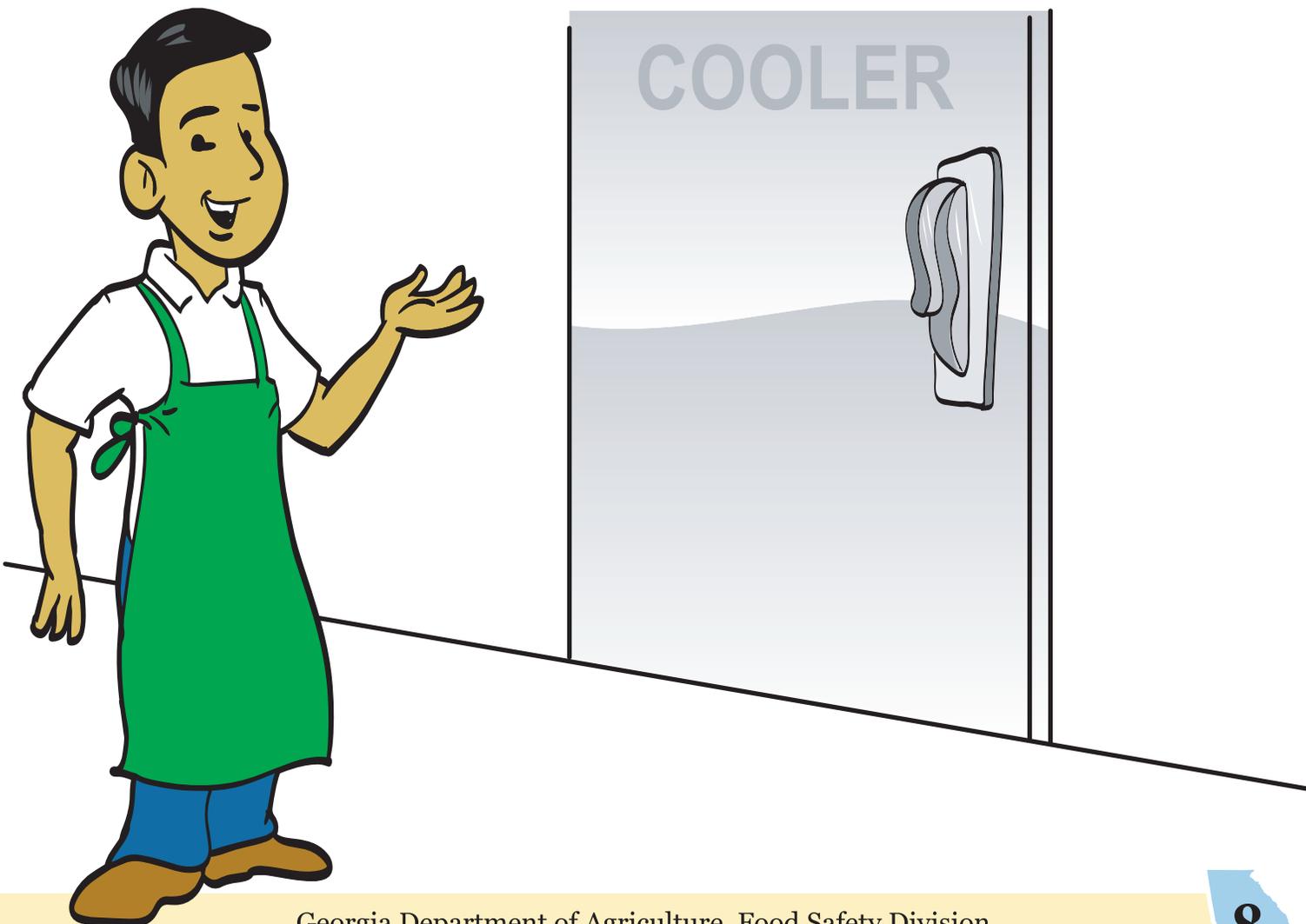


- Be sure there is never any bare-hand contact with ready-to-eat foods; use gloves, deli tissue, utensils and/or dispensing equipment
- When slicing meat, if meat cutting gloves are used, the plastic glove must be worn **OVER** the meat cutting gloves
- When using oven mitts, the mitts are **ONLY** to be used to touch the hot pans and cannot come into direct contact with food; if gloves come into direct contact with the food, the food should now be considered contaminated and a corrective action must be taken (e.g., put the food into the oven to cook it, or dispose of the food, etc.)

# Risks of Cross-Contamination

## **Use separate cutting boards for raw meats and cooked or ready-to-eat foods**

- Practice good hand washing and hygiene
- No bare-hand contact with ready-to-eat foods or ice
- Use proper utensils or single-use gloves
- Store raw meat, raw poultry and raw shell eggs **BELOW** cooked or ready-to-eat foods in the cooler
- Clean and sanitize all utensils and surfaces that touch food:
  - ✓ After each use
  - ✓ When changing/switching products
  - ✓ Between meat species (e.g., beef, seafood, pork, chicken)
  - ✓ Frequently when preparing large amounts
  - ✓ Between raw and cooked meats or ready-to-eat foods



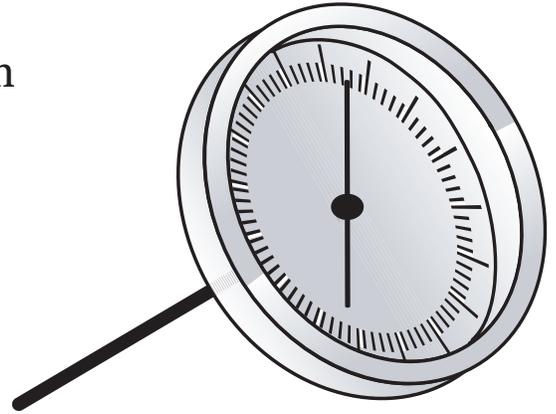
# Monitoring Temperatures

## Use and Care of Temperature-Taking Devices

***To prevent foodborne illness, monitor time and temperature controls for safe food (TCS)***

### **Calibrating:**

- Insert sensing area into a cup of ice slush
- Allow indicator to stabilize
- Adjust calibration nut to 32° F
- Digital thermometer and thermocouple units can be checked for accuracy using this method



### **Cleaning:**

- Use a clean, sanitized thermometer
- Single-use alcohol wipe or other approved sanitizer may be used

### **Taking Temperatures:**

- Use a metal stem thermometer, digital thermometer, or thermocouple unit. Sanitize thermometer before use.
- Place the thermometer probe in the center or thickest part of the food
- For packaged foods, place the probe in the fold of the flexible packaged food product or between packages of food; do not puncture the packaging
- Allow time for the thermometer to register and record the temperature
- Use a thin tip thermometer for thinner foods

*Reminder: Remember to calibrate thermometers frequently.*

# Food Preparation Critical Temperatures

## *Minimum required temperature to cook and/or reheat*



FOOD	145°F, or Above (Held for 15 Seconds)	155°F, or Above (Held for 15 Seconds)	165°F, or Above (Held for 15 Seconds)
<b>Baluts</b>			For Immediate Service, or Hot Holding
<b>Eggs</b>	Broken and Prepared for Immediate Service	Broken and Prepared for Hot Holding	
<b>Fish</b> <i>(Alligator, Aquatic Turtles, Crustaceans, Finfish, Frogs, Jellyfish, Sea Cucumber, Urchin; and the Roe of these Animals)</i>	Whole, Intact Filets or Cuts	Comminuted (Ground)	Stuffed Fish, or Stuffing Containing Fish
<b>Game Animals*</b> <i>(Antelope, Bison, Deer, Elk, Land Snakes, Muskrat, Nutria, Opossum, Rabbit, Raccoon, Reindeer, Squirrel, Water Buffalo)</i>	Whole, Intact Filets or Cuts	Comminuted (Ground), Mechanically Tenderized, or Injected	<ul style="list-style-type: none"> <li>• Stuffed Game Animals, or Stuffing Containing Game Animals</li> <li>• <b>Wild Game Animals</b> <i>(All Preparations: Filets, Cuts, Comminuted, Injected, Mechanically Tenderized, Stuffed, etc.)</i></li> </ul>
<b>Meat</b> <i>(Beef, Veal, Pork, Lamb, Goat)</i>	Whole, Intact Filets or Cuts	Comminuted (Ground), Mechanically Tenderized, or Injected	Stuffed Meat, or Stuffing Containing Meat
<b>Poultry*</b> <i>(Chicken, Duck, Geese, Guineas, Ratites, Squab, Turkeys, and Waterfowl and Game Birds†)</i>		<b>Ratites:</b> Whole, Intact Filets or Cuts	<ul style="list-style-type: none"> <li>• For Immediate Service, or Hot Holding</li> <li>• Stuffed Poultry, or Stuffing Containing Poultry</li> </ul>
<b>SPECIAL COOKING CONSIDERATIONS</b>			
<b>Microwave Ovens</b>	<ul style="list-style-type: none"> <li>• Rotated and stirred midway, or throughout cooking, to evenly distribute heat;</li> <li>• Covered to retain surface moisture;</li> <li>• Heated to 165°F in all parts of the food; and</li> <li>• Allowed to stand covered for 2 minutes for temperature equilibrium.</li> </ul>		
<b>Raw or Undercooked</b>	<ul style="list-style-type: none"> <li>• Whole-muscle, intact beef steaks may be cooked to a top and bottom surface temperature of 145°F, as long as there is a cooked color change achieved on both surfaces.</li> <li>• Raw or under cooked foods of animal origin (including raw, or soft-cooked eggs; raw, and marinated-raw fish, raw molluscan shellfish; or partially cooked, rare meats) may be served or offered for sale under the following stipulations:                             <ul style="list-style-type: none"> <li>○ A HACCP Plan is filed with the Department, and a variance is granted; and</li> <li>○ Consumer Advisory reminders/disclosures are conspicuously posted.</li> </ul> </li> </ul>		
<b>Roasts</b> <i>(Beef, Corned Beef, Cured Pork (Ham), Lamb, and Pork)</i>	There are varying oven temperatures and holding times for roasts. It is recommended that you contact the Department and discuss available options to produce a roast that meets your quality standards, and ensures the safety of the food that is produced.		
<b>Vegetables</b>	Fruits and vegetables cooked for hot holding must be cooked to 135°F.		

\*Game Animals commercially raised for food, or game animals under a voluntary inspection program.

†Migratory Waterfowl and Game Birds may include grouse, partridge, pheasant, pigeon or quail.

# Reheat Foods Quickly and Safely

***Do not mix new/fresh food with leftover items  
(first in, first out method recommended)***

## ***What is the difference between reheating and cooking?***

Cooking is defined as the "practice or skill of preparing food by combining, mixing, and heating ingredients." Reheating is defined as "heating food again." The biggest difference is "cooking" normally includes raw foods. When reheating food, the food has already been cooked or has come from a commercial processing facility.

### ***Key elements:***

- Reheat foods previously cooked and cooled at the store to an internal temperature of 165° F or above
- Rapid reheating is required (2 hours or less to achieve the required temperature)
- Stir foods frequently to distribute the heat
- Measure the internal temperature with a probe thermometer
- After reaching 165° F, the food must then be held at 135° F or above
- Commercially prepared products that have already been heat treated/cooked at a commercial processing facility can be reheated to 135° F (examples include canned green beans, most frozen vegetables, commercially premade casseroles that were frozen, etc.)

### ***Reheating methods:***

- Direct heat (stove top) is best; one may also use steam cookers, ovens and microwaves if reheating achieves 135°/165° F within two (2) hours
- Using steam tables or crock pots to reheat foods is unsafe and not recommended (these methods generally cannot heat food quickly enough)

***Hint: Monitor, verify and keep logs of temperatures.***

# Safely Holding Hot and Cold Foods

Proper holding temperatures must be maintained during display, storage and transportation of foods.

***Cold foods must be maintained at an internal temperature of 41°F or below:***

- Date mark foods appropriately
- Cover foods to maintain cold holding temperature
- Foods labeled as "Keep Refrigerated" must be refrigerated
- Any foods labeled "Keep Frozen" must be maintained frozen (hard to the touch)

***Hot foods must be maintained at an internal temperature of 135°F or higher:***

- Use proper equipment for hot holding
- Stir frequently to distribute the temperature
- Covered foods maintain temperature longer



***Hint: Monitor, verify and keep logs of these temperatures.***

# Cool Foods Quickly and Safely

*Improper cooling is a leading cause of foodborne illness*

Cooked foods that require time/temperature control for safety (TCS) need to move quickly through the temperature danger zone to limit microbial growth:

- The product must be cooled from 135 °F to 41 within six (6) hours total, ***provided that it cools from 135°F to 70°F*** within the first two (2) hours of cooling.
- Anything prepared from ambient or refrigerated foods must be cooled to 41 °F in four (4) hours or less
- These temperatures must be MONITORED to verify the appropriate temperatures are reached within these required timeframes.  
(Hint: Simply placing food in the cooler overnight does NOT count as "monitoring.")

## ***Cooling Methods***

Shallow metal pans - 2” to 4” deep:

- Leave pan loosely covered or uncovered.
- Refrigerate or freeze immediately (use the freezer to achieve rapid chill and then move it to the refrigerator).
- DO NOT stack hot pans; allow for air flow.

## Ice Bath

- Fill a clean sink or large pan with ice and add cold water.
- Divide product into 1 gallon, or smaller, containers.
- Immerse product container in ice bath until product is level with ice.
- Agitate/stir every 10 minutes using an ice paddle, spoon or similar mixing device.
- Drain water and replenish ice as it melts.
- Use a clean, sanitized thermometer to monitor the temperature of food.
- Proper cooling limits (times and temperatures) must be met.
- After the food has cooled to 41° F, refrigerate it immediately.

# Cooling Foods: Reduce Quantity/Volume

- Divide food into smaller pans
- Separate food into smaller or thinner portions (2” depth for thick foods; 4” for thick liquids)
- Cut or slice portions of meat no larger than 4” or four (4) pounds

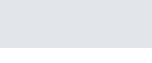


## *Additional tips/hints:*

- Add ice directly to the product as an ingredient, if possible
- Use rapid chill refrigeration equipment that encourages quick cooling
- Plastic containers are not recommended for cooling foods, because plastic is an insulator
- Foods should not be allowed to cool at room temperature (bacteria grows faster at ambient room temperatures)
- Spread shallow pans out in coolers
- Check the temperature often to ensure food is cooling within the required time frames; monitor, verify and keep logs of temperatures

# Corrective Actions

Food Safety is YOUR Responsibility

Risk Factors		Corrective Action
<b>Unapproved Source:</b> Avoid food from unapproved sources or in unsound condition		Discard/reject; return product to original source
<b>Hand washing:</b> Food handling employee not washing hands at appropriate time		Provide training and instruct employee when, where and how to effectively wash hands; post signage reminders
<b>Cold holding:</b> Food requiring TCS held above 41° F MORE than 4 hours		Discard Post signage reminders
<b>Cold holding:</b> Food requiring TCS held above 41° F LESS than 4 hours		Use immediately or cool rapidly Post signage reminders
<b>Cooking:</b> Food requiring TCS is undercooked		Continue cooking to proper temperatures <i>(See pages 9 -10 for additional tips)</i>
<b>Hot holding:</b> Food requiring TCS held below 135° F MORE than 4 hours		Discard
<b>Hot holding:</b> Food requiring TCS held below 135° F LESS than 4 hours		Rapidly reheat to 165° F in LESS than 2 hours or discard
<b>Cooling process:</b> Food requiring TCS cooled from 135° F to 70° F in MORE than 2 hours		Discard
<b>Cooling process:</b> Food requiring TCS cooled from 135° F to 41° F in MORE than 6 hours total		Discard
<b>Cooling process:</b> Food requiring TCS cooled from ambient, room temp, or refrigerated temps in MORE than 4 hours		Discard
<b>Reheating:</b> Food requiring TCS is not reheated to 165° F in 2 hours or less		Discard

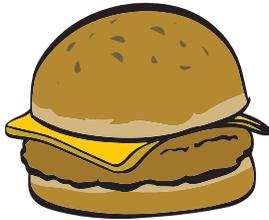
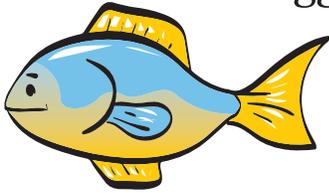
*(Foods must be cooled to 41 degrees or less in no more than 6 hours total, PROVIDED 135°-70° is reached WITHIN 2 hours.)*

*(Examples of these types of foods include sandwiches and salads, e.g., chicken salad, potato salad, etc.)*

# Consumer Advisory

Consuming raw or undercooked foods may increase risk of foodborne illness. If any of the below foods are being sold on-site in ready-to-eat form (or as an ingredient in another ready-to-eat food), the retail establishment selling the raw or undercooked foods must have an advisory to inform consumers of the significantly increased health risks associated with consuming raw or undercooked foods.

- Beef
- Fish
- Pork
- Egg
- Lamb
- Poultry
- Shellfish



*The advisory must include a DISCLOSURE and a REMINDER*

DISCLOSURE must include:

1. A description of the animal-derived foods, such as “oysters on the half shell (raw oysters),” “raw-egg Caesar salad,” and “hamburgers (can be cooked to order)”;
2. Identification of the animal-derived foods by asterisking them to a footnote that states that the items are served raw or undercooked, or contain/may contain raw or undercooked ingredients.

REMINDER must include asterisking the animal-derived foods requiring disclosure to a footnote that states:

1. Regarding the safety of these items, written information is available upon request;
2. Consuming raw or undercooked meats, poultry, seafood, shellfish or eggs may increase your risk of foodborne illness; or
3. Consuming raw or undercooked meats, poultry, seafood, shellfish or eggs may increase your risk of foodborne illness, especially if you have certain medical conditions.

# Date Marking

***“When in doubt, throw it out!”***

**Clearly mark the date by which food is to be consumed or discarded:**

- Food can be held for a MAXIMUM of seven days in adequate refrigeration (41° F or less)
- The day of preparation or the day a commercially processed food is opened counts as “day one;” from this date add six days to get the accurate maximum of seven days
- If a finished product includes multiple ingredients with various dates for consumption/discarding, the final day of consumption will be determined from the earliest expiration date for any of the various ingredients
- If ready to eat foods, or foods requiring time/temperature control for safety, are refrigerated before being frozen, when food is removed from the freezer, mark with a “consume by” date that is seven days minus the length of time food was refrigerated before being frozen

## **Must be date marked if it is:**

- Prepared on-site and held under refrigeration to keep for more than 24 hours
- Commercially processed, after the original container is opened; some exclusions apply.
- A ready-to-eat product, requiring time and temperature control for safety (TCS)

*Reminder: if a required date-mark is missing, it is considered out of date and is to be discarded*

## **Using Time for Food Safety without Temperature Control:**

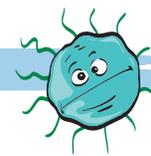
***A written procedure must be provided if time is used in lieu of temperature.***

- **4 hours:** The food must have an initial temperature of 41° F or less when removed from cold holding, or 135° F or more when removed from hot holding and must be marked to indicate the time which is four (4) hours past the point in time when the food was removed from temperature control, and then used within four (4) hours.
- **6 hours:** (For cold holding only.) The food must have an initial temperature of 41° F or less when removed from cold holding and may not exceed 70° F within a maximum time of six (6) hours. The food must be marked to indicate the time which the food was removed from 41° F temperature control AND the time that is six (6) hours past the time the food was removed. The food shall be monitored to ensure that no portion of the food exceeds 70° F. If food temperature exceeds 70° F it must be discarded.

*Reminder: Any food in containers unmarked with time or past the marked 4 or 6 hour time shall be discarded.*

***Hint: Monitor, verify and keep logs of these temperatures.***

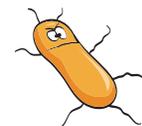
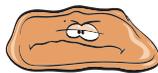
# Sick Food Workers



## Reportable Symptoms:

*Employees must report these symptoms to a person in charge at work.*

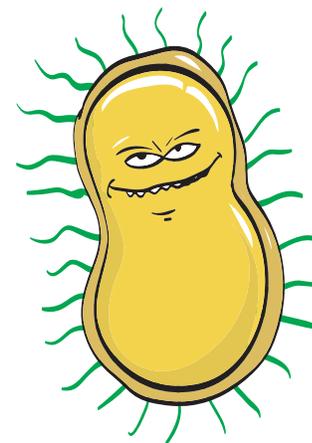
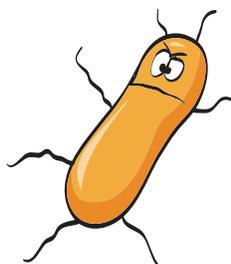
- Diarrhea
- Vomiting
- Fever
- Jaundice (yellowish pigmentation of the skin and eyes)
- Sore throat with fever
- Uncovered infected wound (i.e. cut, lesion or boil)
- Contact with any ill persons who have any illness listed below



## Reportable Diagnosis:

*Management shall notify the regulatory authority when a food employee is jaundiced or diagnosed with any of the following:*

- Salmonella Typhi
- Shigella
- Shiga Toxin-Producing E coli
- Hepatitis A
- Norovirus
- Nontyphoidal Salmonella



## Restriction

Restricted employees cannot work with food or equipment. They can perform tasks such as taking out the trash or taking inventory, but they should not come into contact with ready-to-eat foods and/or equipment.

## Exclusion

Excluded employees are not allowed to be present in the facility at all. If an employee becomes ill with any of the following or comes into contact with people who have any of these illnesses, the information must be reported immediately to management and the local health department.

# What You Need to Know About Foodborne Illness-Causing Organisms

Causative Pathogen	Onset Time after digesting	Length of Illness	Common Symptoms	Foods Involved/Sources	Prevention
Bacillus cereus (B. cereus food poisoning)	10-16 hours	24-48 hours	Nausea, vomiting, abdominal cramping, watery diarrhea	Rice and rice dishes, vegetables, sauces, meats, stews, gravies, vanilla sauce	Cook to proper temp. Reheat quickly. Cool foods rapidly
Campylobacter jejuni (Campylobacteriosis)	2-5 days	2 - 10 days	Cramps, fever, diarrhea (may be bloody), nausea, headache, vomiting	Unpasteurized dairy, raw and undercooked poultry and meats, contaminated water, infected food handler	Thoroughly cook all foods. Use only pasteurized dairy products. Proper hand washing.
Clostridium botulinum (Botulism)	12-72 hours	Variable	Vomiting, diarrhea, blurred vision, double vision, difficulty in swallowing, muscle weakness. Can result in respiratory failure and death	Improperly canned foods, especially home-canned vegetables, fermented fish, baked potatoes in aluminum foil	Persons who eat home-canned foods should consider boiling the food for 10 minutes before eating it to ensure safety. Persons who do home canning should follow strict hygienic procedures to reduce contamination of foods, and carefully follow instructions on safe home canning. Oils infused with garlic or herbs should be refrigerated. Potatoes which have been baked while wrapped in aluminum foil should be kept hot until served or refrigerated.
Clostridium Perfringens (Perfringens food poisoning)	8 - 16 hours	Usually 24 hours	Intense abdominal cramping, watery diarrhea, nausea	Meats, poultry, gravy, beans, stews, foods cooked slowly, dried or precooked foods, time and/or temperature-abused foods	Cook and reheat foods to proper temp. Cook in small batches. Cool foods rapidly.
Cryptosporidium (Intestinal cryptosporidiosis)	2 - 10 days	May be remitting and relapsing over weeks to months	Diarrhea (usually watery), stomach cramps, upset stomach, slight fever	Uncooked food or food contaminated by an ill food handler after cooking, contaminated drinking water	Use safe, uncontaminated water to wash all food that is to be eaten raw. After washing vegetables and fruit in safe, uncontaminated water, peel them if you plan to eat them raw. Avoid eating uncooked foods when traveling in countries with poor water treatment and food sanitation. Avoid water that might be contaminated
Cyclospora cayetanensis (Cyclosporiasis)	1 -14 days usually at least 1 week	May be remitting and relapsing over weeks to months	Diarrhea (usually watery), loss of appetite, substantial loss of weight, stomach cramps, nausea, vomiting, cramps	Various types of fresh produce (imported berries, lettuce, basil)	When traveling to developing nations, it's essential to be careful about what you eat and drink. However, recent cyclospora infection outbreaks have been linked to foods imported to or grown in the United States and Canada. Unfortunately, even careful washing of foods isn't enough to eliminate the parasite that causes the infection.
E. coli (Escherichia coli) producing toxin (E. coli infection, common cause of "traveler's diarrhea")	1 -3 days	3 - 7 or more days	Watery diarrhea, abdominal cramps, some vomiting	Water or food contaminated with human feces	Avoid eating foods or drinking beverages purchased from street vendors or other establishments where unhygienic conditions are present. Avoid eating raw or undercooked meat and seafood. Avoid eating raw fruits (e.g., oranges, bananas, avocados) and vegetables unless the traveler peels them.
E. coli O157:H7: Shiga Toxin-Producing E. coli (STEC) (Hemorrhagic colitis or E. coli O157:H7 infection)	1 - 8 days	5 - 10 days	Severe (often bloody) diarrhea, abdominal pain, and vomiting. Usually, little or no fever is present. More common in children 4 years or younger. Can lead to kidney failure	Raw and undercooked ground meats (esp. ground beef), Unpasteurized milk and juice, raw fruits and vegetables (e.g. sprouts), and contaminated water	Thoroughly cook ground meats. Avoid cross-contamination.

# What You Need to Know About Foodborne Illness-Causing Organisms

Hepatitis A (Hepatitis)	28 days average (15 – 50 days)	Variable, 2 weeks – 3 months	Diarrhea, dark urine, jaundice, and flu-like symptoms, i.e., fever, headache, nausea, and abdominal pain	Water, ice, shellfish, salads, cold cuts, sandwiches, fruit juices, milk, milk products, vegetables, food that will not receive further heat treatment, raw produce, contaminated drinking water, uncooked foods and cooked foods that are not reheated after contact with an infected food handler, and shellfish from contaminated waters	Obtain shellfish from approved sources. Prevent cross-contamination from hands. Ensure food handlers practice good hand washing and no bare hand contact.
Listeria monocytogenes (Listeriosis)	9 – 48 hours for gastrointestinal symptoms, 2- 6 weeks for invasive disease	Variable	Fever, muscle aches, and nausea, or diarrhea. Pregnant women may have mild flu-like illness, and infection can lead to premature delivery, stillbirth, or miscarriage. The elderly or immunocompromised patients may develop bacteremia or meningitis.	Unpasteurized dairy, cheese, vegetables, seafood, poultry, soft cheeses made with unpasteurized milk, and ready-to-eat deli meats	Use only pasteurized dairy products. Cook properly. Hold refrigerated for limited time.
Norovirus (Variously called: Viral gastroenteritis, Winter diarrhea, Acute non-bacterial gastroenteritis, Food poisoning, and Food infection)	12 – 48 hours	12 – 60 hours	Nausea, vomiting, abdominal cramping, diarrhea, fever, headache Diarrhea is more prevalent in adults, vomiting more common in children.	Raw produce, prepared salads, raw shellfish, contaminated drinking water, uncooked foods and cooked foods that are not reheated after contact with an infected food handler, and shellfish from contaminated waters	Thoroughly cook foods. Wash hands. Use certified shellfish. No bare hand contact.
Staphylococcus Aureus (Staphylococcal food poisoning)	1 – 6 hours	24 – 48 hours	Sudden onset of severe nausea and vomiting. Abdominal cramps. Diarrhea and fever may be present.	Ready-to-eat goods, i.e. sandwiches, salads, ham and other meats, potato salads, custards, warmed-over foods; often from infected food-handlers-cuts, throat, nose and acne, unrefrigerated or improperly refrigerated meats, egg salads, and cream pastries	Practice good hand washing and hygiene. Avoid contamination. Reduce bare hand contact with foods. Exclude food-handlers with cuts and lesions. Rapidly cool foods.
Salmonella (Salmonellosis)	6 – 48 hours	4 -7 days	Diarrhea, fever, abdominal cramps, vomiting	Undercooked or raw meats, poultry and eggs, poultry and egg salads, egg custards and sauces, protein foods, pets and infected handlers, unpasteurized milk or juices, cheese, contaminated raw fruits and vegetables	Avoid cross-contamination. Cool and refrigerate foods immediately. Cook meats/ poultry thoroughly. Practice good hand washing.
Shigella (Shigellosis or Bacillary dysentery)	4 – 7 days	24 – 48 hours	Abdominal cramps, fever, and diarrhea. Stools may contain and mucus.	Ready-to-eat foods associated with bare hand contact (salads, sandwiches, etc.), raw produce, contaminate drinking water, uncooked foods and cooked foods that are not reheated after contact with an infected food handler Source: humans (feces) and flies	Practice good hand washing after using toilet. Use approved water and foods. Control flies. No bare hand contact.
Vibrio parahaemolyticus (V. parahaemolyticus infection)	4 – 96 hours	2 – 5 days	Watery (occasionally bloody) diarrhea, abdominal cramps, nausea, vomiting, fever	Undercooked or raw seafood, such as shellfish (especially oysters)	Thoroughly cook seafood.
Vibrio vulnificus (V. vulnificus infection)	1 – 7 days	2 – 8 days	Vomiting, diarrhea, abdominal pain, bloodborne infection. Fever, bleeding, within the skin, ulcers requiring, surgical removal. Can be fatal to persons with liver disease or weakened immune systems	Undercooked or raw seafood, such as shellfish	Thoroughly cook seafood.

# Cleaning and Sanitizing

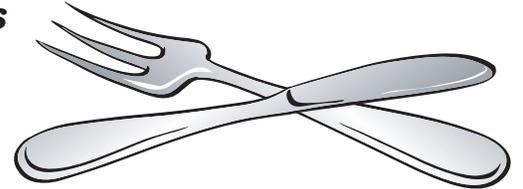
*Making 100 ppm Chlorine Solution is as easy as 1-2-3!  
1 ounce of bleach to 3 gallons of water*



## Manual Ware Washing:

- 1. Wash:**
  - Clean and sanitize sinks and drain boards
  - Pre-soak/pre-rinse solid particles from all eating utensils and equipment
  - Start with clean, hot (at least 110° F), soapy water
- 2. Rinse:**
  - Use clean, hot (at least 110° F) water
- 3. Sanitize:**
  - Use appropriate test strips to check concentration
  - Use 50 - 100 ppm chlorine; or 200 ppm quaternary ammonia (mix with 75° F water)
  - Use appropriate immersion time, typically 10 seconds chlorine; 30 seconds quaternary ammonia

Always follow manufacturer's directions as labeled
- 4. Air Dry - Do not stack wet items**
  - Air dry utensils and equipment



## High Temperature:

- 1. Wash temperature may not be less than:**
  - 150° F for single-tank, stationary rack, dual temperature machine
  - 160° F for single-tank, conveyor machine
- 2. Hot water sanitization:**
  - At least 165° F for stationary rack, single temp machines; at least 180° F for all other machines

## Low Temperature:

- 1. Chemical sanitization required**
- 2. Water temperatures according to manufacturer**
- 3. Chemicals must be auto-dispensed into final rinse water; check at least daily**
- 4. Must have a visual or audible low sanitizer indicator**

**Mechanical Dish-Machines:**  
*Pre-rinse before loading  
any machine for washing.*



# A Safe and Clean Facility

## Insect and Rodent Control



*Insects and rodents carry disease and can contaminate food and food-contact surfaces. Take steps to minimize their presence:*

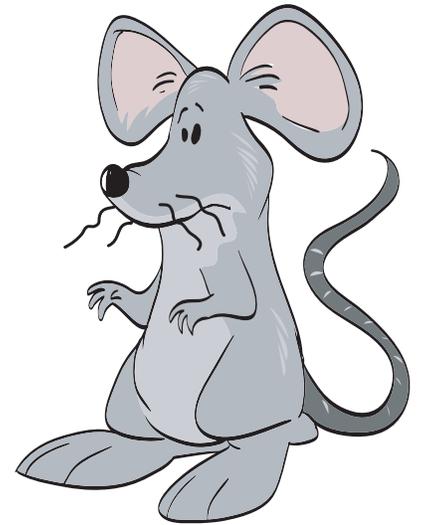
- Protect outer openings by keeping outer doors closed, repair screens, maintain tightfitting doors and openings, and use air curtains
- Eliminate clutter and garbage within and around the facility, including unused storage, garbage cans, boxes, old newspapers, etc.
- Keep weeds, grass, shrubs, and trees trimmed and away from the walls/roof
- Use only approved pest control methods

*Note: Maintain structural integrity of the building, make all food prep areas and food prep equipment smooth and easily cleanable, maintain clean floors, walls, ceilings, shelving, counter-tops, equipment, etc.*

### Toxic Materials

*Certain items can be poisonous or toxic if they come into contact with food. These items include:*

- Detergents
- Sanitizers
- Polishes and cleaners
- Insecticides
- Rodenticides
- First aid supplies and personal medications



*Proper storage, labeling and approved use of the above listed products and following their specific instructions can help prevent contamination issues. With any toxic materials, always be sure to:*

- Store separately from food and food contact surfaces
- Always store **BELOW** foods or food contact surfaces
- Keep chemicals in original containers when possible; if mixing into new containers be sure to properly label the new containers -- do not reuse containers for storing, transporting or dispensing food
- Use only approved chemicals in food areas

# Responsibilities of the Retail License Holder

## *Rules of the Georgia Department of Agriculture Chapter 40-7-1-40(10) Retail Food Sales*

Upon acceptance of the LICENSE issued by the DEPARTMENT, the LICENSE HOLDER, in order to retain the LICENSE, shall:

- (a) *Post the LICENSE in a location in the FOOD ESTABLISHMENT that is conspicuous to CONSUMERS;*
- (b) *Comply with the provisions of these Regulations including the conditions of a granted VARIANCE as specified under 40-7-1-.38(5) and APPROVED plans as specified under 40-7-1-.39(2);*
- (c) *If a FOOD ESTABLISHMENT is required under 40-7-1-.39(3) to operate under a HACCP PLAN, comply with the plan as specified under 40-7-1-.38(5);*
- (d) *Immediately contact the DEPARTMENT to report an illness of a FOOD EMPLOYEE or CONDITIONAL EMPLOYEE as specified under 40-7-1-.04(1)(b);*
- (e) *Immediately discontinue operations and notify the DEPARTMENT if an IMMINENT HEALTH HAZARD may exist as specified under 40-7-1-.41(12);*
- (f) *Allow representatives of the DEPARTMENT access to the FOOD ESTABLISHMENT as specified under 40-7-1-.41(13);*
- (g) *Replace existing facilities and EQUIPMENT specified in 40-7-1-.38(1) with facilities and EQUIPMENT that comply with these Regulations if:*
  - 1. The DEPARTMENT directs the replacement because the facilities and EQUIPMENT constitute a public health HAZARD or nuisance or no longer comply with the criteria upon which the facilities and EQUIPMENT were accepted,*
  - 2. The DEPARTMENT directs the replacement of the facilities and EQUIPMENT because of a change of ownership, or*
  - 3. The facilities and EQUIPMENT are replaced in the normal course of operation;*
- (h) *Comply with directives of the DEPARTMENT including time frames for corrective actions specified in inspection reports, notices, orders, warnings, and other directives issued by the DEPARTMENT in regard to the LICENSE HOLDER'S FOOD ESTABLISHMENT or in response to community emergencies;*
- (i) *Accept notices issued and served by the DEPARTMENT according to LAW; and*
- (j) *Be subject to the remedies authorized in LAW for failure to comply with these Regulations or a directive of the DEPARTMENT, including time frames for corrective actions specified in inspection reports, notices, orders, warnings, and other directives.*

# CERTIFIED FOOD PROTECTION MANAGER

New updates to Georgia’s retail regulations include a key provision that requires at least one employee with supervisory responsibilities to be a “Certified Food Protection Manager (CFPM).” The CFPM is required in 40-7-1-.03(3) of Georgia’s Retail Food Sales Regulations, which states:

- (a) At least one EMPLOYEE that has supervisory and management responsibility and the authority to direct and control FOOD preparation and service shall be a certified FOOD protection manager who has shown proficiency of required information through passing a test that is part of an ACCREDITED PROGRAM.
- (b) This section does not apply to certain types of FOOD ESTABLISHMENTS deemed by the DEPARTMENT to pose minimal risk of causing, or contributing to, foodborne illness based on the nature of the operation and extent of FOOD preparation.

## What is a CFPM?

In order to be considered a CFPM, the employee with supervisory duties must pass a test accredited by the American National Standards Institute (ANSI). Currently, there are four accredited programs that will satisfy the CFPM requirement in Georgia:

- 1) 360training.com, Inc . - Learn2Serve® Food Protection Manager Certification Program
- 2) National Registry of Food Safety Professionals - Food Protection Manager Certification Program
- 3) National Restaurant Association - ServSafe® Food Protection Manager Certification Program
- 4) Prometric Inc. - Food Protection Manager Certification Program

## Who needs a CFPM?

Firms with minimal risk will not be required to have a CFPM; however, they will still have to demonstrate knowledge of regulation requirements to our inspectors when violative conditions have been found. Firms with Time/Temperature Control for Safe Food who perform specific handling activities will have to comply with the CFPM requirement. The CFPM DOES NOT need to be present at all times, but a Person in Charge shall be present during all hours of operation, as required by 40-7-1-.03(1). The Person in Charge shall be the license holder, or his/her designee; and DOES NOT have to be a CFPM.

<b>No CFPM Necessary</b>	<b>CFPM Required</b>
<ul style="list-style-type: none"><li>• Pre-packaged Dry Goods</li><li>• Pre-packaged Refrigerated/Frozen Foods (Prepared in a licensed/inspected Processing Plant)</li><li>• Coffee Urns</li><li>• Cappuccino Machines</li><li>• Soda Fountains</li><li>• Slushee/Ice Type Machines</li><li>• Bulk, Self-Service Pastries</li><li>• Bagging Ice On-site</li></ul>	<ul style="list-style-type: none"><li>• Hot Holding Food</li><li>• Time as a Public Health Control</li><li>• Cold Holding (Foods Prepared On-site)</li><li>• Cooking Food</li><li>• Cooling Food</li><li>• Reheating Food</li><li>• Thawing Food</li><li>• Repacking Food</li></ul>



## Contact Information

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Main Fax: (404) 463-6428

District 1 (North Georgia): (770) 535-5955

District 2 (Metro/Middle Georgia): (404) 363-7646

District 3 (South Georgia): (229) 386-3489

Online: <http://agr.georgia.gov/foodsafety.aspx>

 Twitter: @GDAFoodSafety

Get to know who your GDA Food Safety inspector is, learn what GDA district you are located within, and know when to contact us! Examples of when you need to reach out to us:

- For licensing or inspection inquiries
- For plan review prior to any construction or remodeling
- For changes or additions to the type of operation, processing equipment or product line(s)
- To report a change of ownership or change of location
- To report a natural disaster and/or power outage involving food
- To report a food establishment or product complaint
- To report a foodborne illness or other circumstance that could endanger public health
- To request educational materials or a GDA Food Safety speaker for a conference, training or other industry or consumer related event

# Helpful Resources:

GDA Food Safety Division  
<http://agr.georgia.gov/foodsafety.aspx>

Georgia Grown Program  
<https://www.georgiagrown.com/>

Georgia Department of Public Health  
<http://dph.georgia.gov/>

List of District/Local Health Depts:  
<https://dph.georgia.gov/district-office-directory>

U.S. Food and Drug Administration (FDA)  
<http://www.fda.gov/>

United States Department of Agriculture (USDA)  
<http://www.usda.gov/>

Association of Food & Drug Officials (AFDO)  
<http://www.afdo.org/>

Association of Food and Drug Officials  
of the Southern States (AFDOSS)  
<http://www.afdoss.org/>

Georgia Food Safety & Defense Task Force  
<https://ga.foodprotectiontaskforce.com/>

Georgia Association for Food Protection  
<http://www.gaafp.org/>



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