Food Safety Guidelines
(Important Concepts)

Definitions

Cross-contamination: Transfer of harmful substances to food or to other surfaces.

Food Contamination:
- Biological – bacteria, viruses, etc.
- Chemical – cleaning products, insecticides, pesticides, etc.
- Physical – hair, glass, etc.

Food-borne Illness: A disease carried or transmitted to people from food.

Food-borne Illness Outbreak: An incident in which two or more people experience the same illness after eating the same food.

Highly Susceptible Populations (HSP): Individuals more likely to experience a food-borne illness as their immune system is weakened or not fully developed.

Potentially Hazardous Food (PHF) or Time/Temperature Control for Safety (TCS): Food that requires time and temperature control for safety to reduce the risk of food-borne illnesses.

Ready-to-Eat Food (RTE): Food that is edible without additional preparation or cooking.

Temperature Danger Zone: Temperature range in which food can become unsafe, which is between 41F and 135F.

Employee Health and Hygienic Practices

Hand washing steps:
- Wet hands with running water as hot as you can comfortably stand
- Apply soap and vigorously scrub hands and forearms for at least 20 seconds
- Clean under fingernails and between fingers
- Rinse thoroughly under running water
- Dry hands with a single-use paper towel, and turn off faucet with paper towel

Food handlers shall wash hands after the following:
- Using the restroom
- Handling raw food
- Touching hair, face, or body
- Sneezing, coughing, or using handkerchief
- Touching aprons or clothing
- Touching unsanitized surfaces
- Clearing tables or busing dirty dishes
- Handling garbage or chemicals
• Smoking, eating, drinking, chewing gum or tobacco
  o Employees may use cups with tight fitting lids and straws, or spouts. Store away from all food products, equipment, single-service articles, etc.
• After touching anything that could contaminate hands
• Before putting on gloves, and between changing gloves

**Employees must report to management if diagnosed with one of the following (Big 5):**

- Salmonella Typhi, aka Thyphoid Fever
- Shigella
- Shiga toxin-producing E coli / E coli 0157:H7
- Hepatitis A
- Norovirus

**Employee shall report to management the following symptoms or exposure:**

- Vomiting or diarrhea
- Sore throat with fever
- Jaundice
- Open lesion
- Living with someone exposed to or diagnosed with one of the Big 5

**Management shall exclude or restrict an employee depending on the situation. Please contact the health department for clarification regarding exclusion and restriction.**

**Exclude:** Not permitted to work.

**Restrict:** Restrict to prevent disease transmission; an employee cannot handle the following:

- Exposed food
- Equipment
- Utensils and dishware
- Linens and unwrapped articles

**Big 5 or Jaundice**

- Exclude, contact health department

**Vomiting and/or diarrhea**

- Exclude, no need to contact health department. Must be symptom free for 24 hours.

**Sore throat with fever**

- Restrict, need medical clearance
- Exclude in Highly Susceptible Populations (HSP), need medical clearance
- No need to contact health department

**Infection, wound or cut**

- Restrict until cleaned, bandaged, and gloved
- No need to contact health department

**Reported exposure with no diagnosis or symptoms**

- Educate on symptoms, ensure good hygienic practices
Food Preparation

All ingredients and food products must come from commercially, approved sources.

Please contact our office for requirements regarding specialized processes such as, canning or pickling, sous vide, and reduced oxygen packaging (cryovac).

General preparation practices:
- Prepare raw meat, fish, and poultry away from ready-to-eat and cooked foods
- Use clean and sanitized utensils and equipment to prepare food
- Prepare food in small batches
- Take out from cold holding only as much food as is needed at one time
- Store prepared foods quickly and safely in cold or hot holding units

Cross-contamination:
- Prepare raw meat, fish, and poultry separately from cooked and ready-to-eat foods
- Assign specific equipment to each type of food product
- Clean and sanitize work surfaces, utensils, and equipment after each use
- Wiping cloths buckets should be assigned an area, stored off the floor, and away from food and food contact surfaces
  - Wiping cloths shall be stored in sanitizer solution when not in-use
- Make sure employees wash their hands properly
- Consider single use gloves or utensils when handling raw animal products

Minimum cooking temperatures:
- Poultry: 165F for 15 seconds
- Ground meat (hamburger): 155F for 15 seconds
- Shelled eggs, for hot holding: 155F for 15 seconds
- Steaks: 145F for 15 seconds
- Roasts: 145F for 4 minutes, other time and temperature combinations exist
- Pork: 145F for 15 seconds
- Fish: 145F for 15 seconds
- Shelled eggs: 145F for 15 seconds

Cooling:
- Cool cooked food from **135F to 70F in 2 hours**, and then to **41F in the next 4 hours**
  - Food between 135F and 70F for more than 2 hours shall be discarded
  - Total cooling time shall not exceed 6 hrs
- May also rapidly cool to 41F in 4 hours. Example: Tuna salad made from room temperature ingredients.
- Methods for cooling include reducing size of the food storage containers, ice-water baths, and blast chillers. Store food items in shallow, stainless steel pans. Place on top shelves of refrigerator. Position pans so air circulates around them. Keep food uncovered during the cooling process.
Thawing:

Four approved methods:
1. Thaw in refrigerator; 41F or lower
2. Submerged under cold, running water
3. In microwave, if the food will be cooked immediately
4. As part of the cooking process

Reheating:
Reheat potentially hazardous foods to 165F for 15 seconds for hot holding.

Date marking:
Ready-to-eat, potentially hazardous foods shall be dated for 7 days after prepared or opened. Day of preparation or opening is considered day 1.

Examples include:
- Deli meats
- Deli salads, like chicken and tuna salad
- Cut melons – honeydew, cantaloupe, and watermelon
- Cooked and cooled rice, beans, pastas, meats and vegetables
- Sushi
- Soft cheeses (cottage, brie, cream, ricotta, teleme, nuefchatel, fresh mozzarella)
- Milk

Product shall be labeled and must include the following:
1. Date opened, or created
2. Date frozen, if applicable
3. Date to be consumed or discarded, maximum of 7 days
   - Product must be under refrigeration of 41F during 7 days, unless frozen
   - Product must be consumed or discarded on day 7
   - Preparation or opening is day 1

Time as a control:
Ready-to-eat, potentially hazardous foods removed from temperature control shall be discarded or consumed within 4 hours.

Bare hand contact:
No bare hand contact with ready-to-eat food items. Use utensils, disposable gloves, or deli paper.

Food Storage

Refrigeration storage:
- Raw animal products requiring higher minimum cooking temperatures shall be stored below those with lower cooking temperatures. Example: raw chicken (minimum cooking temp of 165F) shall be stored below ground beef (minimum cooking temp of 155F).
- Shelled, unpasteurized eggs shall be stored on the lowest shelf
- Ready-to-eat foods shall be stored on top shelves
- Cover and label all food containers
Cold holding:
Keep potentially hazardous foods at 41F or below.

Hot holding:
Keep potentially hazardous foods at 135F or above.

Dry storage:
Keep all items 6 inches off the floor.

Toxic (cleaning supplies, chemicals, etc.) storage:
Store all toxic items away from food, utensils, single service articles, etc. Toxic items should be stored in their own area, preferably near the mop sink.

Sanitizing Food Contact Surfaces
Sanitizing:
- After a change from raw foods to ready-to-eat foods
- After a change from raw fruits or vegetables to potentially hazardous foods
- Before using or storing a food temperature measuring device
- After four hours of continuous use, including cutting boards, deli slicers, etc.
- Storage containers, if kept below 41F or above 135F, when emptied
- Serving containers, if kept below 41F or above 135F, every 24 hours
- Anytime contamination has occurred
- If 3-compartment sink is used as a food preparation sink, compartments shall be cleaned and sanitized before and after use.
- Special items
  - Shall be cleaned and sanitized at frequency to preclude accumulation of soil, mold, or at a frequency specified by the manufacturer
    - Ice bins
    - Beverage dispensing nozzles
    - Enclosed components of equipment of ice makers, beverage and syrup dispensing lines, and water vending equipment
  - Large, stationary items may be cleaned and sanitized in-place. Refer to manufacturer’s guidelines and recommendations.

2 methods of sanitizing:
- Heat - dish machines must read 180F on gauge to achieve above 160F on surface
- Chemical – typically chlorine or quaternary based
  - Chlorine solution shall be approx 100ppm
  - Quaternary ammonia concentration shall be 150-400ppm
    - Read product label for exact concentration requirements
  - Chemical sanitizing agents are depleted in the process of sanitizing; test frequently

Washing dishware and utensils:
Three Compartment Sinks
1. Rinse, scrap, or soak utensils and equipment
2. Wash
3. Rinse
4. Sanitize (chemical sanitizers at minimum concentrations)
5. Air dry

**Dish machines**
1. Check for cleanliness, dispensers full
2. Verify sanitation with test strips throughout the day
3. Scrape, rinse, or soak items before washing
4. Load racks correctly
5. Check temperature of wash and rinse cycles
6. Air dry

**Food-borne Illnesses**

**Four types of microorganisms:**
1. Bacteria (Salmonella, campylobacter, E. coli)
2. Viruses (Norovirus, Hepatitis A)
3. Parasites
4. Fungus

Bacteria and viruses cause most food-borne illnesses.

**Bacterial growth:**
Six factors influencing growth:
1. Food
2. Acidity
3. Time
4. Temperature
5. Oxygen
6. Moisture

Time and temperature is easiest for food establishments to control.

**Allergens:**
- Milk
- Eggs
- Wheat
- Soy
- Fish
- Shellfish (crab, lobster, etc.)
- Peanuts
- Tree nuts (almonds, pecans, walnuts, etc.)

**Consumer advisory:**
If food is offered raw or undercooked (cooked-to-order), a food service establishment must identify those items by asterisking on the menu and provide a written statement disclosing that raw or undercooked items significantly increases the risk of a food-borne illness.