

Grundy County Health Department

**FOOD SAFETY
TRAINING COURSE**

July 2014

Grundy County Health Department

Online Food Safety Training Course

Please study the following food safety information.

To demonstrate your level of understanding and receive a GCHD Training Certificate, you must take a 20-question multiple-choice test. You must answer at least 14 questions correctly to receive a passing score and attain a Training Certificate.

Once you have mastered the material and are ready to take the written exam, contact the Grundy County Health Department at (660) 359-4196 for an appointment. You can take as much time as you like with the course information before scheduling a testing appointment.

Following the test, there will be time for questions and a clarification of incorrect answers, if needed.

Topics

Introduction

Food Related Illness

Potentially Hazardous Foods

Hygiene & Handwashing

Employee Health Guidelines

Food Storage

Temperatures

Thermometers

Thawing & Cooling Foods Safely

Date Marking

Re-heating Foods Safely

Dishwashing

Safe & Clean Facility

Preventing Food-Related Illnesses

Statistics

- ✓ 76 million cases each year in the U.S.
- ✓ 325,000 hospitalizations a year in the U.S.
- ✓ 5,200 deaths a year in the U.S.
- ✓ \$77,000.00 average cost per incident

Causes

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

People are the #1 cause of foodborne illness in the U. S.!



Sources

- ✓ People - contaminated hands, illness
- ✓ Foods - contaminated food, time and temperature abuse

Symptoms

- ✓ Common Symptoms (begin 12-36 hours after eating)
diarrhea, cramping, nausea, vomiting, low-grade fever, body aches
- ✓ Rare Symptoms - system shut down, coma, death

Potentially Hazardous Foods

What are Potentially Hazardous Foods (PHF)?

PHF is any food, from animal origin (i.e. meat, eggs, milk) heat treated plant foods, raw seed sprouts, cut melons, etc., that supports rapid growth of bacteria.



Meat and Dairy

Cooked or raw animal products such as beef, pork, poultry, seafood. Dairy, such as milk and cheese.

Vegetables and Starches

Cooked vegetables and starches such as cooked rice, beans, potatoes and pasta.



Sprouts and Melons

Tofu, raw seed sprouts, cut melons, garlic in oil, eggs, etc.

Observe Good Hygienic Practices

✓ Wash hands only in the hand sink, not in the dishwashing, food preparation or mop sinks.

✓ Drinks in food areas must have a lid and a straw



✓ No use of tobacco in any form in food areas



✓ Do not use a cloth towel or an apron for drying hands

✓ No bare hand contact with ready-to-eat foods or ice



✓ Wear nails short, clean, and unpolished

✓ No jewelry; restrict rings to plain bands

✓ Cover open cuts and burns with bandages, finger cots or single-use gloves.



Hand Washing

STOP DISEASE! WASH YOUR HANDS!

Wash your hands **BEFORE** starting work and putting on gloves!



Wash your hands **AFTER:**

- Using the restroom
- Sneezing or coughing
- Handling raw food
- Taking a break
- Eating or smoking
- Touching your face or hair
- Mopping the floor
- Taking out the garbage
- Touching anything else that may contaminate your hands

The Right Way to Use Gloves

- Glove usage DOES NOT replace the need for good hand washing practices.
- Always wash your hands before putting on gloves.
- Put gloves on only when you are ready to handle ready-to-eat foods.
- Use gloves for designated food tasks only.
- DO NOT use gloves for handling money, garbage, cleaning, etc.
- Use gloves for ONE TASK and one task only.
- Discard gloves immediately after being soiled, damaged or after a task.



Food Employee Health Guidelines

The Person-In-Charge (PIC) of a food establishment will:

- Recognize diseases that are transmitted by foods.
- Notify the Health Department when an employee is diagnosed with a “**Big Five**” illness
- Inform employees of reporting requirements
- Restrict or exclude infected workers

Recognize diseases that are transmitted by food.

There are nearly 300 organisms associated with foodborne illness. Some of the more common symptoms of illnesses that can be spread easily by foods are:

Diarrhea	Vomiting
Jaundice (<i>turning yellow</i>)	Discharges from the eyes, nose and mouth
Fever	Infected wounds or boils
Sore throat with fever	

The Big Five Illnesses

There are five foodborne illnesses that are both highly infectious and highly virulent. The Big Five are:

Salmonella typhi	Shigella spp
E Coli 01 57:H	Norovirus
Hepatitis A Virus	

Inform Employees of reporting requirements:

Employees must inform employers if they have any of the “Big Five”; or if they have symptoms of other illnesses that can be readily spread via food, like diarrhea.

Restrict or exclude infected workers

The Person-In-Charge must prevent food contamination by employees with certain medical conditions by requiring them to stay home or perform duties that don't require food handling, such as sweeping the floor or emptying the trash.

- Restriction means preventing an employee from working with exposed food, clean equipment, utensils and lines, and unwrapped single service and single use articles.
- Exclusion means the employee is not allowed in any part of the food establishment.

Proper Food Storage

Proper Storage According to Cooking Temperatures



Top Shelf

Vegetables, fruits, cooked products

2nd Shelf

Raw Seafood

(minimum cooking temperature 145° F)



3rd Shelf

Raw whole pork and raw whole beef

(minimum cooking temperature 145° F)

4th Shelf

Raw ground hamburger, sausage, pooled

or shelled eggs (minimum cooking temperature 155° F)



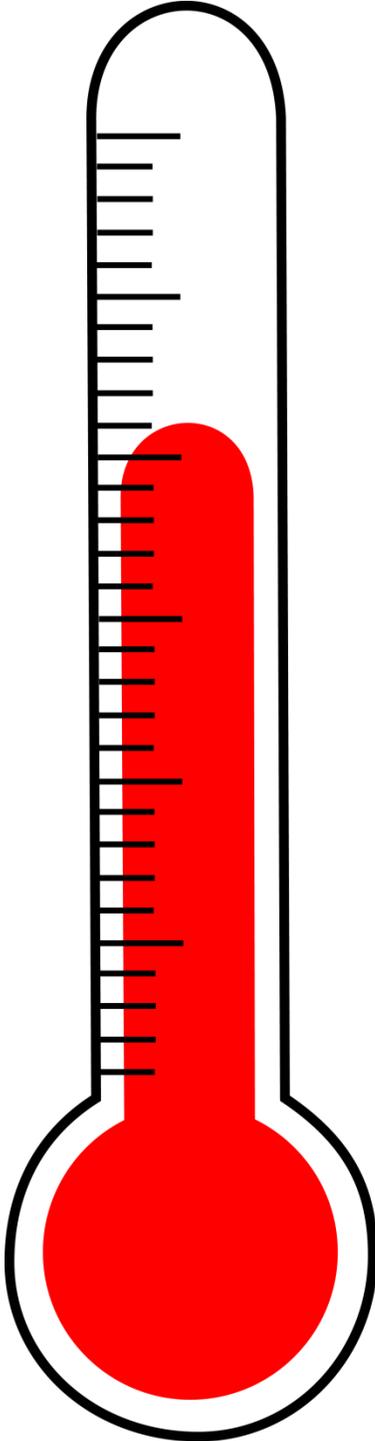
Bottom Shelf

Raw poultry, stuffed meats

(minimum cooking temperature 165° F)

Cooking Temperatures

15 Seconds at the Proper Temperature Kills Bacteria!



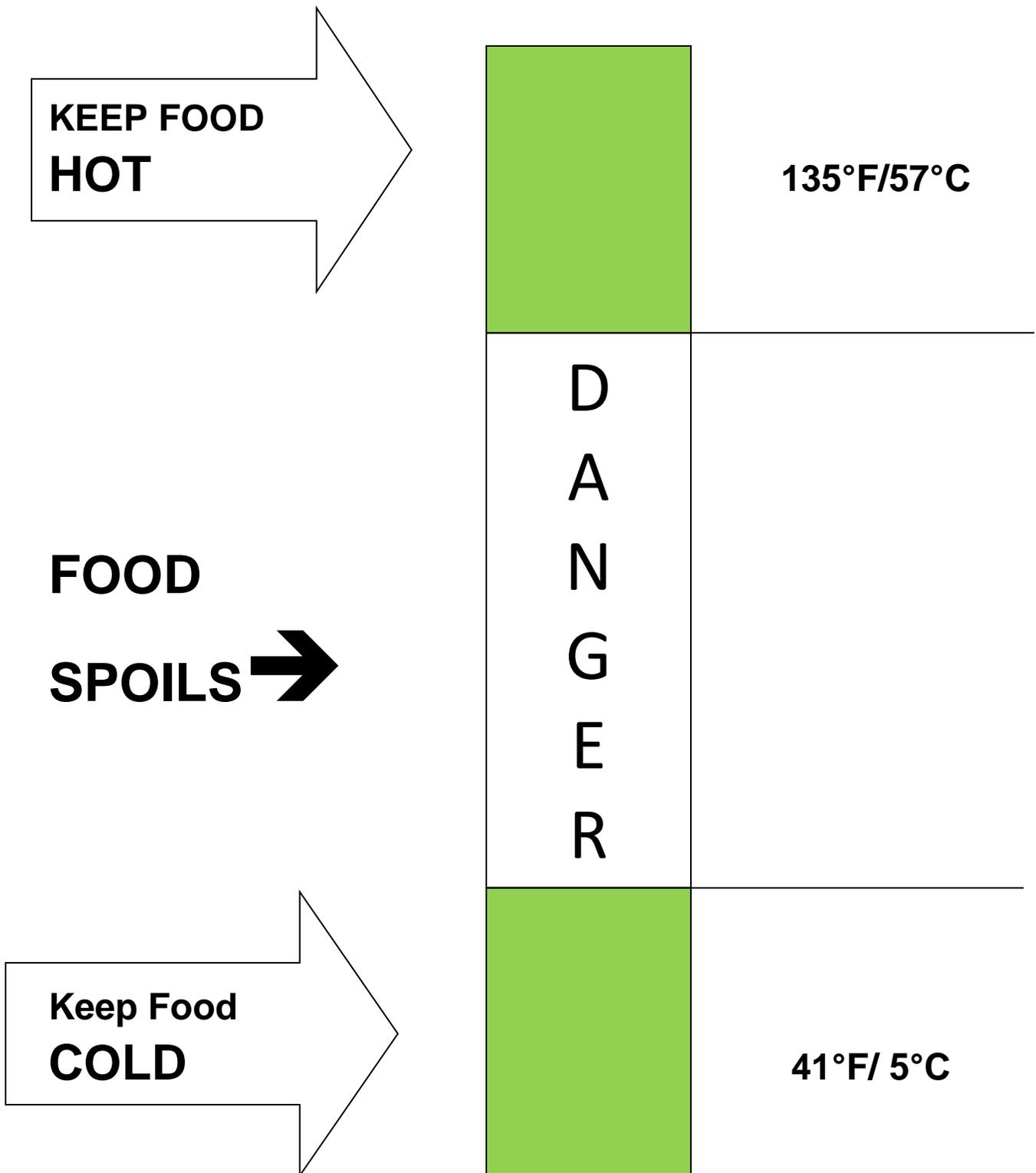
165°F Reheated foods, mixtures, stuffing, stuffed items, poultry, wild game.

155°F Ground beef, other ground meats excluding poultry, flaked/chopped meats and fish, eggs cooked for holding, injected meats.

145°F Raw, whole animal products such as beef, pork, seafood, eggs for immediate consumption.

135°F Holding hot products

Bacteria grows rapidly between 41°F and 135°F



Thermometers

Use and Care of Temperature-Taking Devices

Cleaning:

- Use a clean and sanitized thermometer.
- Single use alcohol wipes or other approved sanitizer may be used.

Taking Temperatures:

- Use a metal stem thermometer, digital thermometer or thermocouple unit.
- Place the probe in the center or thickest part of the food, between the fold of flexible packaging or between packages of food; do not puncture the packaging.
- Allow time for the thermometer to register and record the temperature.



Calibrating Metal Stem Thermometers;

- Calibrate thermometers frequently.
- Insert sensing area into a cup of ice and water.
- Allow indicator to stabilize.
- Adjust calibration nut to 32°F while in ice water
- Digital thermometers and thermocouple units can also be checked for accuracy using this method.



Thaw Foods Safely

4 methods to safely thaw foods:

1. In a cooler/refrigerator at 41°F or less.
2. In cold (70°F) running water for two hours or less.
3. During the cooking process; continuous cooking with no interruption.
4. Using a microwave as the first step in a continuous cooking process.

Remember, microwaves do not thaw foods evenly.



NEVER thaw foods at room temperature. The thawed portions of the outside can support bacterial growth and result in an unsafe product!

Cooling

Improper Cooling is the Major Cause of Foodborne Illness!

Key Points

- Hot foods must be cooled from 135° F to 70° F within two hours and from 70° F to 41° F within additional 4 hours.
- Reduce the volume/mass of food.
- Stirring hot foods increases the cooling rate.
- DO NOT cool foods at room temperature.
- As a rule of thumb, food should be no deeper than 4 inches in any container in the refrigerator or freezer.

Methods

Shallow Metal Pans

- Leave pans partially uncovered.
- Refrigerate immediately.
- DO NOT stack hot pans--allow space for air flow.
- Stir frequently during cooling.



Ice Bath

- Divide product into 1 gallon containers.
- Immerse product pan in sink or larger pan of ice and water to depth of product.
- Stir/agitate often.
- Refrigerate immediately.

Freezer Stick

- Pour hot liquid into a large pot; stir with a freezer stick every 15 minutes.
- Additional freezer sticks may be needed to reach 70° F within 2 hours.
- Leave freezer stick in pot and place in walk-in cooler.

Small Portions

- Divide food into smaller pans.
- Cut or slice portions of meat.



Date Marking

Food must be date marked if it meets all of the following criteria:

- Prepared on-site and refrigerated
- Potentially hazardous
- Ready to eat
- Held for more than 24 hours



Mark with the date to be consumed by or discarded

Food can be kept for:

7 days if held at 41° F or less; or

4 days if held at 41° F

NOTE: The day the food is prepared for the day commercially prepared food is opened counts as “day 1”

If potentially hazardous, ready-to-eat food is frozen:

- Mark the length of time refrigerated before being frozen when food is placed in the freezer.
- When food is removed from the freezer, mark with a “consume by” date that is 7 (or 4) days minus the length of time the food was refrigerated, before being frozen.

Reheat Foods Quickly and Safely

Key Points

- Reheat previously cooked foods to an internal temperature of 165°F or above.
- Rapid reheating is required (2 hours or less).
- Stir foods frequently to distribute the heat.
- Measure the internal temperature with a thermometer.
- After reaching 165°F, the food must be hot held at 135°F or above.

Reheating methods

- Direct heat (stove top) is best; you may also use steam cookers, ovens and microwaves if reheating achieves 165°F within 2 hours.
- Reheating in steam tables and crock pots is **unsafe and prohibited**.
- Do NOT mix new fresh foods with leftover items.



Manual Dishwashing Procedure

1 Scrape

2 Wash

- Clean and sanitize sinks and drain boards
- Pre-soak/pre-rinse all eating utensils and equipment
- Use hot soapy water with a good detergent (minimum 110°F)

3 Rinse

- Use clean water to remove soap/detergent

4 Sanitize

- Use chemical sanitizer water (minimum 75°F)
- Chlorine - 50 parts per million(ppm)/7 seconds
- Quaternary - 200ppm/30 seconds
- Have test strips available to test strength/concentration

5 AIR DRY - DO NOT towel dry



Safe and Clean Facility

Insect and Rodent Control

Insects and rodents carry diseases and can contaminate food and food contact surfaces.



Utilize these measures to control insects and rodents:

- Inspect all incoming food and supplies for insects and rodents
- Protect outer openings by keeping outer doors closed, repair screens, maintain tight fitting doors and openings, use air curtains
- Eliminate places for insects to hide
- Have a plan for routine pest control

Toxic Materials

These items can be poisonous or toxic if ingested:

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



Storage, labeling, and use of Toxic Materials

- Store separately from foods and food contact surfaces
- Never store above foods or food surfaces
- Label all toxins
- Use only approved chemicals in food areas

Review Topics

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