

Fighting BAC!

**Food safety for food handlers
working in the
Older Americans Nutrition
Program**

Participant Manual

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Lesson 1 — Looking at the Enemy

Each day millions of older adults eat food prepared and served through the Older Americans Nutrition Program. All food that is served, regardless of whether it is served at a site or delivered to a home, *must* be safely handled. If it is not, participants could get sick. Some could develop severe complications and some might even die.

Foodborne illness

Foodborne illness is caused by eating food containing harmful microorganisms, such as bacteria (or their poisons), viruses, or parasites. These microorganisms are everywhere: in food; in soil and water; and in and on humans, animals and birds. You cannot tell if they are there by simply looking at, smelling or tasting food. Therefore, you must always handle food safely from the time you receive it until the time you serve it.

Potential victims

Each year in the U.S. about 76 million people get foodborne illness. Most cases are not life threatening, but every year more than 5,000 people die from foodborne illness and 325,000 are hospitalized due to complications. Serious complications are more common in high-risk populations such as infants and toddlers, pregnant women, older adults, and the chronically ill.

Also, individuals who are malnourished are at a greater risk for foodborne illness. Over 40% of participants who eat at congregate nutrition sites are at moderate to high risk for malnutrition. Nearly 90% of those who receive home delivered meals are at moderate to high risk for malnutrition.

Common symptoms

Symptoms of foodborne illness usually begin within 6 to 24 hours but can occur up to one week after unsafe food is eaten. Sometimes foodborne illness is confused with what some people call stomach or intestinal flu because the symptoms are so similar. The most common symptoms of foodborne illness are:

- nausea
- diarrhea
- vomiting
- fever

Healthy adults usually recover quickly from foodborne illness, but members of high-risk populations, such as older adults, pregnant women, infants and toddlers, and those who are chronically ill are more likely to develop serious complications that could lead to death.

What is unsafe food?

Unsafe food is food that contains harmful bacteria (or their poisons), viruses, parasites, physical or chemical hazards. You cannot always tell if a food is unsafe because it might not smell, look or taste bad. Keep food safe by handling it safely from the time you buy it until the time you serve it. If you think a food is unsafe, do not taste it! Throw it out! It is better to waste this food than to risk foodborne illness.

What makes food unsafe to eat?

- Bacteria or their poisons
- Viruses
- Parasites
- Physical hazards, such as band aids, glass, metal shavings, wood, or bone
- Chemical hazards, such as cleaning supplies and pesticides

Bacterial Growth

Under ideal conditions bacteria can multiply every 30 minutes. Ideal conditions include: a potentially hazardous food that is kept in the temperature danger zone (45°F to 140°F) for more than two hours. To illustrate this, let us look at a cooked hamburger that has 10 bacteria on it at 12:00 noon. If that hamburger is kept at room temperature for five hours, the bacteria will grow like this:

12:00	10 bacteria
12:30	20
1:00	40
1:30	80
2:00	160
2:30	320
3:00	640
3:30	1,280
4:00	2,560
4:30	5,120
5:00	10,240 bacteria

If somebody ate this hamburger, the bacteria would enter their body. The bacteria could then possibly cause foodborne illness.

What is a potentially hazardous food?

Potentially hazardous foods are foods that are moist, low acid, and contain some protein. Examples include: meat, fish, and poultry; most dairy products; garlic-in-oil; cut melons, cooked vegetables; and some beverages made from dairy products, fruits and vegetables. Keep potentially hazardous foods at 45°F or colder or 140°F or hotter.

What are bacterial poisons?

Some bacteria form poisons, which are also known as toxins. Eating food that contains bacteria or their toxins can cause foodborne illness. Toxins usually form because food has been in the temperature danger zone for more than two hours. Cooking food will not destroy toxins so food must be kept hot or cold to prevent these poisons from forming.

Viruses

Viruses are believed to be the number one cause of foodborne illness. About 3.9 million people alone become sick each year due to a virus called “Norwalk-like virus”). Viruses do not require a potentially hazardous food to cause foodborne illness. They simply use the food as a vehicle to get from one person to another. A sick food handler who does not properly wash their hands could contaminate food with viruses.

What is spoiled food?

Spoiled food is food in which non-harmful bacteria, molds, or yeast have grown or natural chemical reactions have occurred that make the food unfit to eat. Spoilage cannot be prevented – proper handling and storage can only slow it. You usually can detect spoiled food by looking at it or smelling it. Color changes and bad smells are good indicators of spoilage. Throw out spoiled food.

Moldy food

Like bacteria, some molds produce poisons that cause foodborne illness. Therefore, foods that have undesirable mold growing on them should be discarded. This includes all cheese, fruit, vegetables, and breads. Mold spores can spread easily throughout these foods. Cooking will not destroy these poisons.

Regulations that congregate nutrition sites must follow:

All sites that are under the guidance of the Older Americans Nutrition Program *must* follow the NC Rules Governing the Sanitation of Restaurants and other Foodhandling Establishments. The Rules are available at: <http://www.deh.enr.state.nc.us/ehs/Rules/t15a-18a.26.pdf>

These exceptions apply to congregate meal sites that have their meals catered. The only exceptions to the rules are:

- Coffee pots and tea pitchers can be cleaned on-site, in a two-compartment domestic sink. You may rinse other utensils and pans, but send them back to the catering kitchen for proper washing, rinsing and sanitizing.
- Domestic refrigeration is allowed *if* there is no food preparation done on site.
- A can wash facility is not required if liners are used and trashcans are kept clean.
- North Carolina law also allows congregate nutrition sites to prepare and serve food and drink on the premises of the nutrition program in connection with a fundraising event one day per month.

Foodborne illness is nearly 100% preventable if you:

- CLEAN: Wash hands and surfaces often.
- SEPARATE: Don't cross-contaminate.
- COOK: Cook foods to proper temperatures.
- CHILL: Refrigerate foods promptly.

**Foodborne illness is nearly 100% preventable if
food is handled safely from the time it is received
until the time it is served.**

Lesson 2 — Receiving

Although you may have little control over what happens to food before it reaches your site, there are steps you can take when you receive food to keep it safe. Most food comes in hot or cold. This lesson focuses on the food safety standards for receiving safe food.

General guidelines

- Food served as part of the Older Americans Nutrition Program *must* come from an approved source.
- Delivery vehicles must be clean.
- Carriers used to transport food must be cleaned and sanitized.
- Food received from a caterer must be labeled with time and date of receipt.
- Food must be inspected when it is received to assure that it meets food safety standards.

Approved sources

All food that arrives at your site must be from approved sources, such as:

- a permitted foodservice operation,
- a grocery store, or
- a food wholesaler.

Foods from unapproved sources have not passed a state or federal inspection and may not be safe to eat. The only exception is produce. Whole, uncut fruits and vegetables from a garden, a farmer's market, or a roadside vendor can be served. Fresh fruits and vegetables cannot be prepared at a catered site.

Sometimes participants might bring in cakes or cookies to celebrate a birthday or other event. This is permissible but some sites might prefer to prohibit this practice.

Food for Fundraising Events

Some sites will host fundraisers. The NC Foodservice Rules allow you to sponsor fundraisers one time per month under your current foodservice permit. It is recommended, though not required that foods for these events do come from a safe source because you will be legally responsible if an outbreak should occur. Examples of unapproved foods that

could cause foodborne illness include: home-canned food, unpasteurized dairy foods, and wild game.

Donated foods

Many sites receive donations from local grocery stores or bakeries. This is acceptable as long as the food is in good condition. Check to be sure that the package is still intact and that the food is not spoiled.

When food arrives at your site

If a potentially hazardous food is delivered at an unsafe temperature, do not accept it because it could be unsafe to eat. Do not reheat food if it is delivered at an unsafe temperature because you cannot be sure how long it was in the temperature danger zone before it was received by you. Check the temperature of all potentially hazardous foods immediately after they have been received to be sure they are safe.

- Frozen food must be frozen.
- Cold food must be at 45°F or colder.
- Hot food must be at 140°F or hotter.

Developing a back-up plan

Develop a back-up plan to help you determine what to do if you should have to reject a food shipment. Audrey Edmisten, Nutrition Program Consultant, should review your back-up plan.

**You are responsible for the safety of all of the food
that enters your site.
So, inspect before you accept.**

Lesson 3 — Storage

Food might be safe when you receive it, but improper storage can make it unsafe to eat. Proper storage can slow food spoilage. More importantly, proper storage can prevent cross-contamination and bacterial growth. Cross-contamination is one way that food becomes unsafe to eat. This lesson will focus on how to keep food safe during storage.

General storage guidelines

There are two types of storage common to congregate nutrition sites — refrigerated and dry. Regardless of the type of storage used, all food must be:

- covered,
- clean,
- labeled, and
- dated.

When food is received it must be put into the proper storage area. Potentially hazardous foods (described on page 4) need to be kept hot or cold. Refrigerate cold foods and place hot foods in hot holding equipment. If the food is delivered close to mealtime, it can be kept in the food carrier in which it was received.

Proper refrigeration

Refrigerator temperatures should be no warmer than 39°F. To check the temperature of your refrigerator, keep a thermometer inside the refrigerator near the door. This is the warmest location. (You can buy a refrigerator thermometer at most grocery stores, discount stores, and restaurant suppliers.) Refrigerated foods must be at 45°F or colder to slow bacterial growth. To keep foods at 45°F or colder, set your refrigerator between 34°F and 39°F. If your refrigerator temperature is higher than 39°F, adjust the setting to make it colder. Each morning check the temperature of the refrigerator and the food that is stored in it. Record your observation on a temperature log. Post the log on the door of the refrigerator. Monitor and record temperatures daily.

Milk

Do not store milk in a container other than in the original container. At the dairy plant, milk is dispensed into sterilized cartons or jugs. You could contaminate the milk if you transfer it to another storage container.

Dry storage

Store unopened, non-perishable food and single-use items on clean shelving that is at least 12 inches (6 inches if on a portable unit) off the floor or in clean kitchen cupboards. Never store food, equipment, or single-use items under any plumbing lines (especially kitchen sinks). If the lines drip, these items can become contaminated. Never store food on the floor. Dirt, rodents, insects or water that might be on the floor can contaminate the food. Keep areas clean and uncluttered.

Hot-Holding

Only commercial hot-holding equipment that meets National Sanitation Foundation (NSF) standards or equal can be used. You may use hot-holding cabinets, steam tables, or ovens. Hot foods must be at 140°F or hotter until they are served.

Lesson 4 — Preparation

Food can easily become contaminated during preparation. To prevent contamination, begin with clean hands and clean surfaces. This lesson will focus on how to prevent foodborne illness while preparing food.

A checklist for all food handlers:

- ❑ Do not work if you are sick.
- ❑ Bathe, or shower, and shave daily.
- ❑ Pull back your hair and wear a hair net, cap, or visor.
- ❑ Wear clean clothes.
- ❑ Wear minimal jewelry — only wedding bands can be worn on hands.
- ❑ Do not smoke in food storage, preparation, or service areas.
- ❑ Wash hands thoroughly and often

When employees are sick

If you or a worker is experiencing any of the following — nausea, vomiting, diarrhea, fever, coughing, runny nose, boils, infected cuts or wounds — do *not* handle food, equipment, or single-use items. A sick worker could contaminate them and potentially make others sick. Furthermore, if you or a worker has been diagnosed with one of the following diseases — *E. coli* 157:H7, *Shigella*, *Salmonella* Typhi, or Hepatitis A — **do not work**. These are highly contagious diseases and one cannot return to the site until a medical release from a doctor is presented.

Single-use gloves

The NC Foodservice Rules do not require food handlers to wear gloves when preparing or serving food. However, a worker must wear gloves if they have an uninfected cut or sore on their hand or they have a band-aid on their hand or forearm. If the cut or sore is infected, the individual is not allowed to handle food.

If you wear gloves, you must follow proper procedures. When used properly, single-use plastic gloves can prevent microorganisms from being transferred from your hands to the food.

- Wash hands before putting on gloves to begin work.
- Change gloves after every task.
- Wash bare hands each and every time you change gloves.
- Do not reuse gloves. Take them off and dispose of immediately.

- Changes gloves after coughing, sneezing, or touching your face or hair.
- Dispose of them every time you change to a different task.

Do not use latex gloves as they have been shown to potentially cause allergies in those who use them. They also have been shown to result in an allergic response in some highly sensitive individuals from food handled by workers wearing them.

Handwashing

- Use a separate hand-washing sink. Never use a food preparation, dishwashing, or janitorial sink to wash your hands.
- Adjust the water so that it is lukewarm. Water that is too hot will cause your hands to dry out.
- Lather up with antibacterial soap.
- Scrub for *at least* 20 seconds (the time it takes to sing "Happy Birthday").
- Use a clean, disposable paper towel to thoroughly dry your hands.
- Use the paper towel to turn off the water.
- Wash your hands frequently during your shift and with each glove change.

Preparing food for fundraisers

Most congregate nutrition sites are not preparing food at the site. However, if you do prepare food for special events you need to be certain that you also follow safe food handling practices. Safe food begins with safe ingredients.

Canned Foods. Before opening cans and jars, check for leaks, bulges, including bulging lids, severe dents, cracks, and loose lids. If you detect any of these, reject the can or jar and the food in it – it could contain harmful bacteria or their toxins. Throw out cans or jars that are rusty or very dirty. The food is either old or was stored in an unsafe place. After opening cans and jars of food, throw the food away if you detect spurting liquid, bubbles, and bad smells. Gas or acid has formed and that means bacteria has probably grown in the food

Fruits and Vegetables. If you plan to serve fruits or vegetables raw, wash them first. Washing will remove some of the microorganisms on the surface. Clean tough-skinned fruits and vegetables, such as cucumbers, peppers, melons, and apples, with a vegetable brush and lukewarm water. Do not use soap or detergent because it might leave a residue that could

make you sick. Soak more delicate fruits and vegetables like lettuce and berries for a few minutes in lukewarm water, then rinse thoroughly. Store cut fruits and vegetables in the refrigerator until you get ready to serve them

Mayonnaise Myth. Commercially prepared mayonnaise does not cause foodborne illness because it is a high-acid food. However, when it is mixed with other ingredients, such as tuna, cooked pasta, or chicken, the resulting dish becomes potentially hazardous. Therefore, pre-chill *all* ingredients, including cooked items, before mixing them with cold foods. Refrigerate or serve immediately. By doing this, you can prevent bacteria from growing.

Preventing Cross-Contamination. Take special care between handling foods such as raw meats and ready-to-eat vegetables. For instance:

- Do not cut chicken and lettuce on the same board without sanitizing the cutting board between uses.
- Clean and sanitize all kitchen utensils, preparation surfaces, and equipment before and between uses.
- Always store raw meat, poultry, and fish below ready-to-eat foods in the refrigerator to prevent cross-contamination.
- Do not use cloth towels or dishcloths, or sponges in food preparation. The damp environment of cloth towels is a breeding ground for microorganisms and should not be used at your site. Paper towels are the best alternative to cloth towels for drying hands and wiping up spills.

Bacteria and viruses can easily be introduced into food during food preparation. Keep your hands and surfaces clean.

Lesson 5 — Cooking

The purpose of cooking is to kill microorganisms that are naturally present in raw foods or that are introduced into the foods during preparation. This lesson will focus on why cooking foods to proper temperatures is so important and how to measure food temperatures.

Cooking food for fundraisers

Most congregate nutrition sites do not prepare food at the site. However, if your site does prepare food, you will need to follow safe food handling practices. *Remember — you are only allowed sponsor one fundraiser each month. If you host more than that, you will need to get a permit from the local health department.*

Oven temperatures. Set the oven temperature to at least 325°F or hotter to safely cook meats, fish, and poultry. Cooking must be continuous. Never partially cook food, let it sit, then finish cooking it until later. This provides conditions that allow harmful bacteria to grow and toxins to be formed. Cooking does not always destroy toxins, so reheating the food later will not necessarily make it safe to eat.

Microwave cooking. Food cooked in a microwave oven might have cold spots. These cold spots can support the growth of harmful bacteria. So, always stir and rotate foods frequently to evenly distribute heat. Also, if reheating a commercially packaged frozen food, follow the package directions.

Eggs. Eggs must be thoroughly cooked until the white and the yolk are firm (not runny). Never serve raw or partially cooked eggs – they might contain harmful bacteria.

Food that might contain raw or undercooked eggs include:

- Cake batter
- Cookie dough
- Homemade eggnog
- Homemade mayonnaise
- Homemade ice cream
- French toast
- Quiche

Checking food temperatures

The best thermometer to measure hot and cold food temperatures is an instant-read (or bi-metallic) stemmed thermometer with 2°F increments.

Thermometers should have a range capable of checking hot and cold foods such as 0°F to 220°F. Check the temperature of potentially hazardous food immediately after cooking and before serving food. To check food temperatures:

- Clean and sanitize your thermometer probe. Sanitize the thermometer with a properly prepared sanitizing solution (one tablespoon of unscented household bleach mixed into a gallon of warm, not hot, water) or an alcohol swab.
- Insert the probe into the thickest part of the food item or the center of food in a pan. Be careful not to touch the metal pan bottom with the tip of the thermometer.
- Record the temperature on a temperature log.
- Wash, rinse, and sanitize probe between each temperature reading.

Calibrating thermometers

The accuracy of a food thermometer must be checked each day or every time it is dropped. Dropping a thermometer can cause the thermometer to inaccurately register temperatures. To check the accuracy of your food thermometer, follow these steps.

1. Loosely fill a glass or cup with crushed ice.
2. Pour cold water over the crushed ice.
3. Let sit for a minute.
4. Insert the probe of the thermometer into the glass or cup.
5. Let sit for about 30 seconds or until the temperature is stabilized.
6. If the thermometer reads 32°F, then it is accurate. If it does not, then you need to adjust it so that it does.

Cooked foods are ready-to-eat so protect them from contamination after cooking.

Lesson 6 — Serving

Food can become contaminated during serving. This lesson will focus on how to prevent contamination during serving.

Guidelines for food servers

Food servers must follow the same personal hygiene practices as the individuals that prepare the food. They must:

- Wear clean clothes and an approved hair restraint. (Approved hair restraints include a hair net or a ball cap or visor *if* the hair is pulled back.)
- Never eat while serving food.
- Never smoke while serving food.
- Wash hands before serving food.

Setting the table and serving tips:

- If your site requires them, wear single-use gloves and change them after each task.
- Hold silverware or single-use utensils by the handles only.
- Do not touch plates where food will be placed.
- Handle beverage containers by the sides only. Do not touch the rim.

Serving lines

The NC Foodservice Rules do not require that congregate nutrition sites install sneeze guards. However, you still need to protect the food from coughs and other air-borne contaminants. Do so by:

- Providing each food item with a separate serving utensil.
- Having extra utensils that have been cleaned and sanitized in case a utensil is dropped.

Ice is a food

Ice can become contaminated just like any other food, therefore:

- It must be from a regulated source.
- Always serve ice with a scoop or tongs. Never use hands or a serving pitcher. Store scoop or tongs in clean containers or store in the ice so that the handles do not come in contact with the ice.
- Wash, rinse and sanitize scoops, tongs, and ice containers.
- Do not serve ice that has been used to display or transport food or food containers.

Lesson 7 — Handling Leftovers

Properly storing food for later use is important to keeping food safe to eat. Food needs to be cooled quickly to prevent bacteria and their poisons from growing or forming. This lesson will focus on safe ways to save leftovers.

In order to cool and reheat leftovers safely, congregate meal sites would be required to meet the same requirements for restaurants, including commercial refrigeration, and cooking equipment. Only those congregate meal sites that have permits to prepare and serve food may cool and reheat leftovers. For fundraising events only prepare the amount of food that you will use. Leftovers cannot be saved for service at a subsequent meal period.

Leftovers policy

There are two ways that leftovers can be handled. Participants can either take home leftovers *or* the food can be donated to a food pantry or program that works with the homeless. Uneaten food served to an individual can only be taken home by *that* individual. *No one* can take home food that was served to somebody else.

If a participant wants to take home food, somebody from the nutrition program staff must educate the participants about the potential food hazards and explain proper handling and storage of leftover food. Site staff should emphasize the need to transport the leftovers in an insulated container and refrigerate it immediately upon arriving home. Food donated to a local food pantry or program for the homeless programs must also be maintained at proper temperatures and delivered or picked up in an insulated container.

Improper cooling is a cause of bacterial foodborne illness.

Lesson 8 — Cleaning and Sanitizing

Properly cleaning and sanitizing surfaces prevents food from becoming contaminated. This lesson will focus on how to properly clean and sanitize surfaces at your site. Surfaces that are in poor condition and cannot be effectively cleaned should not be used. When possible they should be removed.

What is cleaning?

Cleaning is removing dirt, food, and grease from a surface with soap or detergent and water. Following by rinsing with a clean water rinse.

What is sanitizing?

Sanitizing is killing harmful microorganisms that can be on a surface even if it looks clean. Sanitizing is usually done with a solution of sanitizer and water.

What to sanitize

It is best to clean and sanitize:

- Countertops
- Sinks
- Tables used for eating
- Placemats
- Tea pitchers
- Coffee pots
- Anything that food or utensils come in contact with

Harmful microorganisms on these surfaces can make food unsafe. Proper sanitizing will kill these microorganisms.

Sanitizing with bleach

Household bleach is an approved sanitizer. It is inexpensive, effective, and available at your local grocery store. Do not use scented bleaches, such as fresh scent or lemon scent, to prepare sanitizing solution. The scents in these types of bleach have not yet been proven to be safe for food use. For other approved sanitizers, contact your local health department.

Sanitizing solution for surfaces

- Mix between 1 teaspoon and 1 tablespoon of unscented household bleach in a one-gallon bucket of warm (not hot) water *or* put one cap

of household bleach into a spray nozzle bottle, cap it, swish around so that the bleach covers all surfaces, discard the remaining bleach, then fill with water.

- After preparing the sanitizing solution using either method, test its concentration with an appropriate test strip. The concentration should be 50-100 ppm. If the solution strength falls below 50 pm prepare a fresh solution.
- Sanitizing solution prepared in an open bucket needs to be changed frequently throughout the day. If the mixture is stored in a labeled spray bottle, it can be used for up to *one week* as long as the bottle is stored in a cool, dark area. However, it should be checked with test strips each day to be sure it is maintained at the proper strength.

Sanitizing surfaces

1. Clean surface with warm, soapy water.
2. Rinse with clean water.
3. Thoroughly saturate the surface with sanitizing solution.
4. Spread the sprayed solution over the surface with a clean paper towel.
5. Air dry. Do not rinse off the sanitizing solution.

Immersion sanitizing

Because congregate nutrition sites that do not prepare food are not required to have a three-compartment sink, utensils, food containers, and pans must be returned to the caterer to be properly washed, rinsed, and sanitized. The only items that can be sanitized at the site are coffee pots and tea pitchers. These need to be sanitized using the immersion method of sanitizing.

Trash tips

- Use double bags inside trashcans and keep the can covered with a lid.
- Empty trash daily.
- Clean and sanitize trashcans each week.
- Breakdown cardboard boxes and dispose of immediately.
- Keep outside trash containers away from building. The outside refuse container should be clean and covered.
- A can wash facility is not required if liners are used and trashcans are kept clean.

Pest control

- Pests can be a source of harmful microorganisms.
- Clean up all food crumbs and spills because they can serve as a source of food for pests.
- Notify supervisor of suspected infestation.
- The site manager should initiate pest control procedures.

Floor cleaning tips

- Mop floors daily with an approved cleaning solution.
- Wash, rinse, and sanitize mop heads after use.
- Hang mops to dry.
- Do not store mops near cooking or food storage area.

Proper storage of cleaning supplies and chemicals

- Store in a labeled area away from food or preparation areas.
- Store in original or clearly labeled containers.
- Only use chemicals that are approved for use in foodservice establishments.

Lesson 9 — Home Delivered Meals

In order for an older adult to receive home delivered meals they must have a physical or mental limitation. It has been reported that 89% of home delivered meal recipients are at moderate/high risk for malnutrition. Malnutrition is one risk factor for foodborne illness. This lesson will focus on how to protect food during the packaging and delivery of home delivered meals.

Packaging foods for safe delivery

- All food delivery containers used for both hot and cold foods must be smooth, easily cleanable, and made non-toxic materials. Examples of appropriate delivery containers would be Igloo-type coolers or pizza-type delivery bags.
- Securely package and seal each individual meal. Food needs to be packaged so that it will not come in direct contact with any surface of the carrier.
- Hold hot food entrees at 140°F or hotter and cold foods at 45°F or colder until volunteers are ready to pick up the meals for delivery.
- Carefully place hot meals in clean, sanitized delivery containers (use oven mitts to prevent injury).
- Keep hot foods separate from cold foods to prevent warming of the cold foods.
- Use ice packs or heat stones to maintain safe temperatures.
- The length of a delivery route should be short enough so that hot foods stay above 140°F and cold foods 45°F or below. The general recommendation is that the route should take no longer than 60 to 90 minutes to complete.

Delivery guidelines

- Allow no more than two hours from the time the food was placed in the carrier until it is delivered.
- Call the County Nutrition Program Director if there will be delays in the delivery of food.
- Delivery containers must be cleaned and sanitized daily. This is usually performed by whoever provides you with your food.
- Delivery vehicles/cargo space should be vacuumed and cleaned regularly.

- Volunteer drivers should be healthy, groomed, and wearing clean clothing. Drivers should report any illness to their supervisor to determine if a substitute should be used.

Checking temperatures

The manager should supply a sample meal each month for each delivery route. At the beginning and end of a delivery route, have the volunteer check the temperature of all potentially hazardous foods (described on page 4) in the extra meal. This practice ensures proper temperatures are maintained for each route.

RESOURCES

FOOD SAFETY AUDIT

Inspect each location where you store, prepare, and serve food. If you circle "YES" after any item, refer to the "ACTION TO TAKE" to see how you can correct the problem.

Date: _____ Time: _____

Evaluator: _____

LOCATION	ACTION TO TAKE		
Refrigerator			
No refrigerator thermometer	Yes	No	Put a refrigerator thermometer in the top front corner of the unit.
Refrigerator temperature above 45°F	Yes	No	Set the refrigerator dial to a colder setting.
Food uncovered or improperly covered.	Yes	No	Cover foods with plastic wrap or aluminum foil or put in a tightly lidded container.
Food stored in opened cans	Yes	No	Transfer food to plastic or glass containers for storage.
Dirty shelves and drawers	Yes	No	Wash shelves and drawers frequently with soapy water, rinse, and dry.
Freezer			
Freezer not at 0°F or colder	Yes	No	Set the freezer dial to a colder setting.
Dirty inside	Yes	No	Defrost and wash shelves with soapy water, rinse, and dry.
Dishwashing Area			
Dirty dishcloth, sponge, or towels	Yes	No	Wash, rinse, and soak in a sanitizing solution <i>or</i> launder daily.
No dish soap	Yes	No	Purchase dish soap.
No sanitizer	Yes	No	Purchase sanitizer, such as unscented household bleach.
Cleaning supplies stored alongside food, dishes, or paper supplies	Yes	No	Separate cleaning supplies from food preparation and storage areas.

Handwash Sink			
No hand soap	Yes	No	Purchase hand soap.
Using cloth towels to dry hands	Yes	No	Use only single-use paper towels or an air dryer.
Dishwashing done in handwash sink.	Yes	No	Use a three-compartment sink to wash dishes.
Cupboard and Shelves			
Bulging or leaking cans; severely dented cans	Yes	No	Throw out.
Insects or rodents present	Yes	No	Take measures to eliminate insects and rodents.
Unlabelled chemicals	Yes	No	Label containers clearly on the side.
Chemicals stored with food	Yes	No	Separate chemicals from food preparation and storage areas.
Equipment and Utensils			
Dirty can opener	Yes	No	Wash in soapy water; rinse thoroughly; sanitize in a solution of 1 tablespoon unscented household bleach per gallon of warm (not hot) water; and air dry.
No metal-stem thermometer	Yes	No	Purchase a metal-stem thermometer that has a temperature range between 0°F and 220°F.
Counter tops			
Dirty counter tops	Yes	No	Wash in soapy water; rinse thoroughly; sanitize in a solution of 1 tablespoon unscented household bleach per gallon of warm (not hot) water; and air dry.
Insects or rodents present	Yes	No	Take measures to eliminate insects and rodents.
Serving area			
Hot-holding equipment not maintaining food at 140°F	Yes	No	Adjust equipment setting so that it keeps food at 140°F or hotter.
Area is dirty	Yes	No	Clean area.

Minimum Safe Endpoint Cooking Temperatures

Food Item	Temperature (°F)
Poultry	165°F for 15 seconds
Stuffing and stuffed meat	165°F for 15 seconds
Ground meat (including beef, pork, and other meat or fish)	155°F for 15 seconds
Pork, beef, veal, or lamb	150°F for 15 seconds
Fish	145°F for 15 seconds
Stuffed fish /or stuffing containing fish)	165°F for 15 seconds
Ground, chopped, or minced fish	155°F for 15 seconds
Shell eggs for immediate service	145°F for 15 seconds
Shell eggs that will be hot-held for service	155°F for 15 seconds
Fruits or vegetables that will be hot-held for service	140°F
Commercially processed, ready-to-eat food that will be hot-held for service	140°F for 15 seconds
Potentially hazardous food cooked in the microwave oven	140°F for 15 seconds

UNDERSTANDING SANITATION INSPECTIONS

Concentrate on the critical items

1. **Look for the boldfaced items** — These are the “critical items.” Violations of these are statistically linked to foodborne illnesses. On the NC Foodservice Inspection Sheet these are items 1, 2, 3, 4, 8, 9, 11, 18, 19, 22, and 31.
2. **Read the comments** — These should be specific to your operation.
“The chicken was found at 120°F. It should be 140°F or above.”
3. **Make the corrections** — Find the source of the problem and stop it. Check the temperature of the chicken when it arrives. Was the temperature too low when it was received or did improper storage practices cause this?
4. **Consult with the local health department** — Feel free to contact your Environmental Health Specialist between inspections if you have any questions. If they are not doing an inspection, they are not grading. Ask for help. They can help you to spot any problems in your food handling practices. Their goal is to protect the public's health.
5. **Work as quickly as you can on critical items -- they are important.** Critical items are those that have been directly implicated in cases of foodborne illness. One needs a sanitary facility to prepare safe food. The non-critical items (these are not boldfaced) that you find on your inspection sheet generally deal with sanitation. For example, a hole in the wall is not a health problem by itself, but it does allow an opportunity for roaches to get into the wall and build nests where the exterminator's spray cannot reach them.

The higher the deduction, the worse the problem

1. Critical items are worth 4 or 5 points, because they are the most important items. (“Critical Items” are defined above as the boldfaced items. These include only 5 point items, not 4 points.)
2. Full deductions are the things that the Environmental Health Specialist sees as being severe or long-running examples of a problem.
 - Half deductions are for new problems or less severe version of a problem.
 - General Comments (often marked “GC” in the comments sections) are items that the Environmental Health Specialist wants to bring to your attention so they are “nipped in the bud.”

Communicate effectively

1. **Ask about terms you may not understand** — To maintain proper temperatures, you need to know what a potentially hazardous food is. Ask.
2. **Get a copy of the rules** — They are on the web at <http://www.deh.enr.state.nc.us/ehs/food/fudlinks.htm> or get a printed copy at the local health department. If you cannot find something in the rule call and ask.
3. **Paraphrase back to your inspector** — “Now, if I understand you correctly, you want everyone touching ready-to-eat foods to wear vinyl, plastic gloves.” This should clear up misunderstandings.
4. **If a question comes to mind later -- call.** If you weren't there and the comments don't make sense, call and ask. The environmental health specialists that inspect the food establishments have a goal of correcting problems, not hanging grades. But none of us were English majors!

Even if you don't like the messenger, listen to the message.

Calibrating Thermometers

You need to make sure your thermometer readings are accurate. Check them every day or always after it has been dropped. Thermometers can be calibrated by one of two methods -- ice point method for cold foods or boiling point method for hot foods.

To use the ice point method, submerge the thermometer probe in a 50/50 ice and water slush. For a bi-metallic stemmed thermometer, wait until the needle stops, then use a small wrench to turn the calibration nut until the thermometer reads 32°F (0°C). For a thermocouple or digital thermometer, try a new battery or have the manufacturer or a repair service check the unit.

To use the boiling point method, submerge the sensor into boiling water. For a bi-metallic stemmed thermometer, wait until the needle stops, then use a small wrench to turn the calibration nut until the thermometer reads 212° F (100°C). Follow the same instructions for the thermocouple and digital thermometer that were used with the ice point methods. You need to be very careful when using the boiling point method to avoid burns. Also, if your site is at an elevation of above 1,000 feet, the boiling point of water is lower. Therefore, you will need to adjust for this change.

Using Food Thermometers

Use the following general procedures:

- Wash, rinse, sanitize, and air-dry the thermometer before and after each use. A sanitizing mixture or alcohol swab can be used.
- Do not let the sensing areas touch the bottom or sides of food containers. Insert the probe so that the sensing area is in the center of the food. Wait at least 15 seconds for the reading to steady and then record the reading.
- Use the thermometer to measure frozen, refrigerated, tepid, and hot foods and liquids. Never leave the thermometer in food that is being cooked by oven, microwave, or stove as they could melt.

Sanitize Your Thermometer

With good food safety systems in place, your employees should be well-versed about how important it is to take the temperature of the food they're preparing and serving. What they might not know is that unsanitized thermometers can become a food safety hazard rather than a preventive tool.

When to Sanitize Thermometers

- First up, always wash the thermometer probe in proper food-contact-surface-approved detergent. Then sanitize...
- Prior to taking any temperatures.
- When you go from checking a raw food product to a cooked food product.
- When you are taking the temperatures of different species of raw meats (i.e. chicken to pork).
- When you are taking the temperatures of different foods in a walk-in or along a buffet.
- Whenever the thermometer probe has been handled, set down on an unsanitized surface, or otherwise contaminated.

How to Sanitize Thermometers

1. Purchase a supply of single-use alcohol swabs. After you've properly cleaned the probe, tear two opposite corners off the swab packet, insert the probe through the packet, fold the packet around the probe and thoroughly swipe it over the probe. Let air dry.
2. Again, properly clean debris off the probe. Sanitize the probe with disposable paper towel dipped in a bucket of sanitizing solution. Make sure the sanitizer is at proper strength by checking it with a test strip. Let probe air dry.
3. You can store thermometers throughout the kitchen in wall-mounted thermometer probe holders. Available from suppliers, these clear plastic units should be filled with fresh sanitizing solution daily. The lid of the unit is perforated with holes through which to insert probes. Periodically check the solution's strength with a test strip and change out if needed.

Food safety information is also available on the following Web sites:

Food Safety and Inspection Service

www.fsis.usda.gov

Government Food Safety Information

www.foodsafety.gov

Food and Drug Administration

www.cfsan.fda.gov

Centers for Disease Control and Prevention

www.cdc.gov/foodsafety

Partnership for Food Safety Education (Fight BAC!™)

www.fightbac.org

USDA/FDA Foodborne Illness Education Information Center at the National Agricultural Library

www.nal.usda.gov/fnic/foodborne/foodborn.htm

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