

Food Safety for Temporary Food Service Establishments

Julie A. Albrecht, Extension Food Specialist

Food safety, including causes of and tips for preventing food-borne illness, at temporary food service establishments such as food stands and bake sales.

Food stands, bake sales, bazaars and other food sales provide good opportunities for organizations to raise money, but the food you prepare and offer for sale must be wholesome and safe for the consumer. If customers are unhappy with the products they purchase from you, they will not be back. Word-of-mouth advertisement from a bad experience may hurt future business. Sponsoring organizations are responsible for the safety of the food products they offer for sale.

The Nebraska Food Service Code has rules for Temporary Food Service Establishments. Food stands, bake sales, bazaars and community suppers could be inspected by the Department of Agriculture or Department of Health under this ruling. Bake sales and church/community suppers are not routinely inspected, but commercial food stands at county fairs and other events are. If complaints are made or if a reported illness results from food sold at an event, inspection and/or investigation may result.

A “Temporary Food Service Establishment” is defined as a food service establishment that operates at a fixed location for a period of time of not more than 14 consecutive days in conjunction with a single event or celebration. If your food sale event extends beyond this definition, your event and facilities will be regulated by the appropriate agency (either the Nebraska Department of Agriculture or your local health department).

Potentially hazardous foods are those that have been implicated in numerous food-borne illness outbreaks. These foods include: meat and poultry; pastries made with cream or custard fillings; salads and sandwiches made with meat, poultry, eggs or fish; and home-canned, low-acid foods such as vegetables and meats.

Reports of food-borne illness have made the headlines in recent years, but many cases of food-borne illness go unreported because the symptoms are similar to the flu. Most food-borne illness outbreaks have involved food prepared

away from home, but food prepared under home conditions also may cause these flu-like symptoms.

Foods contaminated with microorganisms cause food-borne illness. Contaminated food usually does not taste bad, smell bad or look bad.

What food handling practices contribute to food-borne illness? If we look at the cause of reported food-borne illness outbreaks, we have some clues where microbial contamination occurs.

The ten most important factors which contributed to recently reported food-borne illnesses in the United States are listed below. Ways to prevent a food-borne outbreak from food served at your event is included in the discussion.

1. Improper Cooling

- a. Leaving cooked foods at room temperature
- b. Storing foods in large containers in refrigerators

Food-borne microorganisms grow best at temperatures between 41°F and 135°F. Food left at room temperature for more than two hours provides the ideal conditions for microorganisms to multiply rapidly.

- Keep foods that are served cold at 41°F.
- Keep foods that are served hot at or above 135°F.
- Keep a thermometer handy to check the temperatures often.
- Do not leave food out for more than two hours.
- Maintain refrigerator at or below 41°F and freezer at or below 0°F.

Hot food stored in large containers in refrigerators or freezers cannot cool down quickly, creating conditions which can contribute to rapid growth of bacteria.

- Store foods in small shallow containers and refrigerate immediately.
- Use ice to quickly chill foods and to keep them cold.

- Do not cool hot foods at room temperature before refrigeration. Refrigerate hot foods immediately.
- Ice used to keep food cold should not be used for human consumption.

2. Lapse of 12 or More Hours Between Preparation and Eating

Microorganisms need time to grow and multiply. By reducing the amount of time between preparation and eating, we reduce the potential for any microorganisms present growing to large numbers.

- Shorten the length of time between preparation and the sale of the food items.

3. Colonized or Infected Persons Handling Foods

Staphylococcus bacteria is found naturally on our bodies. Sores or pimples will have higher numbers of this bacteria. People who are ill also have higher numbers of microorganisms that cause illness. Food handlers should practice a high degree of personal hygiene and cleanliness.

- Wash hands often when handling raw foods such as poultry and meats; after coughing or blowing your nose; after handling garbage; and after using the bathroom facilities.
- If cuts do exist on hands, use plastic gloves.
- Use utensils as much as possible; tongs work well for handling raw vegetables and other “finger” foods.
- Protect foods from dust, sneezing and handling by customers. Use appropriate packaging and covers on food. If possible, provide dust/sneeze guards on serving lines.

4. Inadequate Reheating

Cooked foods may become contaminated after heating. If these foods are not reheated to at least 165°F, microorganisms may not be destroyed.

- Heat pre-cooked foods purchased for reheating to at least 135°F or check the label for instructions.
- Do not use leftovers in temporary food service establishments.
- Discard prepared food left over from serving.

5. Improper Hot Holding

Hot foods held below 135°F encourage the rapid growth of microorganisms. Foods on a buffet table should be checked often.

- Use warming plates to keep food at or above 135°F.
- Use a thermometer to measure the temperature of the hot food.

- Do not mix a fresh hot batch of a food item with an existing item.
- Prepare several small batches rather than one large batch to replenish food.
- Do not leave hot food at room temperature for more than two hours.

6. Contaminated Raw Food or Ingredients

Foods which come into contact with dirt and manure (eggs and produce grown with manure as a fertilizer) will contain a large number of microorganisms. Cracked eggs are also considered contaminated.

- Wash foods with water to remove dirt and manure.
- Do not use cracked eggs.
- Prevent rodents, insects, birds, animals, etc. from having contact with food.
- Store chemicals (cleaning solutions) away from food.
- Avoid using chemical insecticides to control insects.

7. Foods From Unsafe Sources

Illnesses have been reported from eating fish or seafood obtained from sources with unsafe water.

- Obtain foods from reliable sources.
- Thoroughly cook fish and other foods that may contain a large number of microorganisms.

8. Improper Cleaning of Equipment and Utensils

Food left on equipment and utensils help microorganisms survive for a time. When the equipment or utensil is used, microorganisms will be transferred to the food.

- Use clean dishes and utensils for food preparation.
- Wash with hot soapy water and sanitize equipment after use. If equipment has been stored for a long time, wash and sanitize before use.
- Wash equipment with hot soapy water after each food use when using the same piece of equipment for preparing several foods.
- Wash and sanitize food contact surfaces such as counters, tables, refrigerators, etc.

9. Cross Contamination From Raw to Cooked Foods

Juices from raw meat and poultry which come in contact with cooked food may recontaminate the cooked foods with microorganisms. Raw fruits and vegetables also can contaminate cooked foods if these foods are not properly cleaned.

- Keep cooked and raw foods separated in food storage areas.

- Thaw raw meats and poultry in the refrigerator so juices do not drip on other foods.
- Wash hands, utensils and food contact surfaces often when handling raw meat, poultry and eggs.
- Use containers designed for food for food storage; don't use containers which originally contained cleaning products.
- Use utensils to handle and serve food rather than hands.
- Do not reuse disposable items such as plastic bags, plastic spoons, etc.

10. Inadequate Cooking

Eating undercooked meats has resulted in food-borne illness outbreaks. The most serious cases of inadequate cooking result from not properly processing canned low acid foods. The spores of the botulinum microorganism can survive boiling temperatures. Improperly canned low acid foods may contain the deadly toxin that is produced when spores grow into bacteria and multiply.

- Cook ground meats, poultry, fish, and eggs thoroughly.
- Cook meats to an internal temperature of 165°F for 15 seconds for poultry, 145°F for 15 seconds for pork, and 155°F for 15 seconds for ground beef.
- Home-canned foods should not be used for temporary food service events.

Transporting Food

Occasionally food is prepared at one location and transported to a serving site. Safe food handling practices are critical, not only during preparation, but also when transporting food. Cold foods must be kept cold (41°F or below) and hot foods must be kept hot (135°F or above). Use insulated carrying containers that maintain the food at the appropriate temperature. All vehicles used for transporting food should be kept in good sanitary condition. Do not transport food in vehicles that have been used to carry pets, trash, chemicals, fertilizers or pesticides without thoroughly cleaning the compartment or vehicle. Foods and animals should not be transported together.

When food is delivered to the intended location, immediately store it to maintain the proper temperature and prevent contamination.

Sanitizers

Good housekeeping is important. Many types of cleaning and sanitizing solutions are available. Below are solutions made with chlorine bleach for washing dishes and cleaning food contact surfaces. Store chemicals away from food.

Washing Dishes:

1 teaspoon chlorine per gallon of water.

Washing Food Contact Surfaces:

1 tablespoon chlorine per gallon of water.

Resources

For more information contact the Nebraska Department of Agriculture or local health departments (Lincoln-Lancaster, Douglas County, Grand Island, Hastings, and Scottsbluff).

Your local Extension office can provide general information on safe food handling practices.

References

1. Hazard Analysis Critical Control Point (HACCP) Systems for Retail Food and Restaurant Operations. *J. Food Protect.* 53:978, 1990.
2. Food Safety for Bazaars. Illinois Extension Service. 1986.
3. Keep Food Safe. Colorado Cooperative Extension. 1989.
4. Food Service Code. Nebraska Department of Agriculture. 2007 Recommendations of the Food and Drug Administration.
5. Food Service Sanitation Guidelines to Avoid Food Poisoning Outbreaks. Dairy, Food and Environmental Sanitation. 11:430, 1991.
6. Guidelines for Satisfactory Food Protection and Sanitation Practices. Dairy, Food and Environmental Sanitation. 9:365, 1989.

UNL Extension publications are available online at <http://extension.unl.edu/publications>.

Index Foods & Nutrition Safety

Issued April 2007

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

University of Nebraska–Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

© 2007, The Board of Regents of the University of Nebraska on behalf of the University of Nebraska–Lincoln Extension. All rights reserved.