

Sanitation and Food Handling—Table of Contents

Sanitation Standards	18.1
Hazard Analysis Critical Control Point (HACCP)	18.1
Reheating Potentially Hazardous Foods	18.1
Temperature Mini-Poster	18.2
Handling Precooked Meat Patties	18.3
E. coli	18.3
<i>Characteristics of E. coli</i>	
<i>Safe Food Handling Practices Prevent Foodborne Illnesses</i>	
<i>Characteristics of Common Foodborne Illnesses</i>	

Sanitation and Food Handling

Sanitation Standards

Under terms of the School Lunch and Breakfast Agreement, districts agree to maintain proper sanitation and health standards in conformance with all applicable state and local laws. School districts participating in the National School Lunch and School Breakfast Programs are required to obtain a food safety inspection conducted by a state or local governmental agency responsible for such inspections at least twice a year. The most recent food safety inspection report must be posted in a visible location, and released to the public on request. The Department of State Health Services (DSHS) reports that a state mandate exists requiring a sanitation inspection for schools, but it does not stipulate the frequency. Local health department regulations supercede state guidelines, so school district staff should check with the local department to determine if local guidelines require inspections at a different frequency. The Texas Department of Agriculture (TDA) Food and Nutrition Division recommends that each school obtain a copy of any local or county health department rules in addition to the *Texas Food Establishment Rules* from DSHS.

Hazard Analysis Critical Control Point (HAACP)

In addition to the local health department regulations, school districts are encouraged to participate in one of the TDA Food and Nutrition Division's regional HACCP workshops. These trainings will assist school districts in understanding the concepts of HACCP and designing a HACCP Plan.

A HACCP Plan (Hazard Analysis Critical Control Point) is a food safety system that focuses on food. It is different from other food safety systems in a facility because of this focus. HACCP goes beyond sanitation and personal hygiene programs by preventing food safety problems before they happen.

The HACCP plan identifies and controls possible physical, chemical, and biological hazards that can contaminate food as it goes through a facility. These hazards can cause children you serve to become sick or injured. The critical control points of the HACCP Plan eliminates or reduces problems associated with potentially hazardous foods.

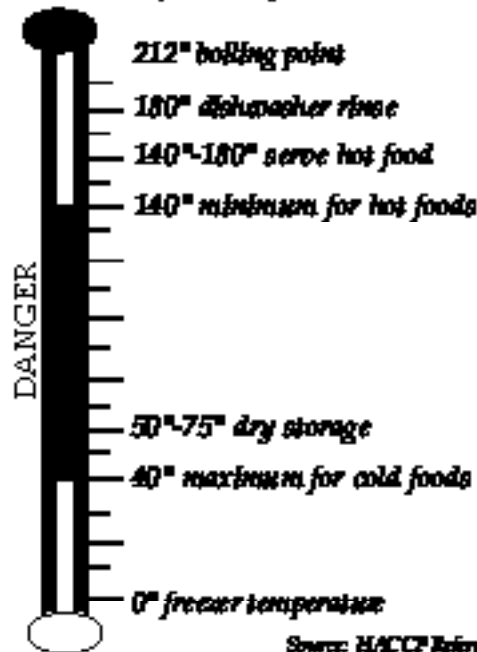
Reheating Potentially Hazardous Foods

From *Texas Food Establishment Rules* — Section 229.163, Food Care, page 7:

(6) Reheating. Potentially hazardous foods that have been cooked and then refrigerated, shall be reheated rapidly to 165 F. (74 C.) or higher throughout before being served or before being placed in a hot food storage facility. Steam tables, bainmaries, warmers, and similar hot food holding facilities are prohibited for the rapid reheating of potentially hazardous foods.

Temperature Chart

The danger zone favoring bacterial growth is the temperature range of 40° to 140° F. The length of time a food is allowed remain in this critical temperature zone largely determines rate and extent of bacterial growth that occurs.



Source: HACCP Reference Guide,
NSA Educational Foundation.

Handling Precooked Meat Patties

Precooked meat patties, such as “Charbroiled Beef Patties” and “Pre-Browned Fresh Pork Sausage Patties,” have caused outbreaks of foodborne illness from contamination with *Salmonella* or with a strain of *E.coli* bacteria. It is important to remember that many precooked patties are not ready to eat. With proper handling and heating to finish the cooking process, they are safe. The U.S. Department of Agriculture advises foodservice institutions and commercial kitchens to keep all meat patties refrigerated or frozen before use. Refrigerated patties should be used promptly, within 3 to 4 days of refrigerated storage. These practices will prevent the growth of harmful bacteria. The precooked patties must be thoroughly heated to eliminate any harmful bacteria that might be present.

E. coli

Escherichia coli are a group of bacteria normally found in the intestines of warm-blooded animals, such as food animals or humans, and in water contaminated by animal or human feces.

E. coli are most often associated with intestinal illness or diarrhea in infants and in travelers who have consumed impure water or unpasteurized milk. It is not known at what level or dose the pathogen becomes hazardous.

Characteristics of *E. coli* 0157:H7

In 1982 a rare and more virulent strain, *E. coli* 0157:H7, was identified as the cause of two outbreaks of human gastrointestinal illness. *E. coli* 0157:H7 is a pathogen that can survive refrigeration and freezer storage. If present, the bacterium can multiply very slowly at 44 degrees Fahrenheit. Low numbers of *E. coli* 0157:H7 could produce infections in infants and the elderly or immune-compromised. However, the infectious dose for humans has not been determined. While *E. coli* 0157:H7 can be a severe contaminant, it can be easily controlled by thorough cooking.

The Centers for Disease Control (CDC) first reported cases of hemolytic uremic syndrome (HUS), a urinary tract infection, linked to *E. coli* 0157:H7 in ground beef in 1982. Since then, 16 deaths have been reported to CDC.

E. coli 0157:H7 are found in intestines of animals and humans and can be transmitted through contact with fecal matter during the slaughtering process and unsafe food handling. Person-to-person transmission has been documented. The majority of foodborne outbreaks recorded since 1982 have either implicated or associated undercooked ground beef as the primary source of infection.

CDC notes that food obtained from an unsafe source was the least reported factor in foodborne illness between 1983 and 1987. Ninety-two percent of the cases where causes could be traced were due to poor food handling practices, mostly storing at improper temperatures, and poor personal hygiene of food handlers.

For additional information call USDA’s Meat and Poultry Hotline, 1-800-535-4555. For information about *E. coli* 0157:H7, call FSIS Information, (202) 720-9113.

Safe Food Handling Practices Prevent Foodborne Illnesses

Preparation and Storage Rules

- Start with clean, wholesome food from reliable sources. Wash all raw fruits and vegetables before using.
- Hold frozen food at 0° F or lower during delivery and storage.
- Scrub and sanitize all cutting boards, knives and electric slicers immediately after contact with raw or cooked meats, fish or poultry.
- Hold all potentially hazardous foods out of the danger zone, 40°—140° F. Keep hot foods hot and cold foods cold.
- Reach an internal temperature of 165° to 170° F for foods to be held for serving. Maintain a minimum temperature of 140° F during the serving period.
- Re-pan in shallow containers any cooked food to be held at refrigerated temperatures. Refrigerate immediately. Center of the food should reach 40° F within 4 hours. To hasten cooling, space pans in the cooler to allow for adequate air circulation.
- Never serve questionable food. If in doubt, throw it out.
- Avoid cross-contamination of foods during preparation, storage, and service.

Personnel

- Wash hands with soap and water. Hands must be washed when reporting to work, after handling raw poultry and meat, smoking, sneezing, use of handkerchief, and after using the toilet.
- Keep all work surfaces clean and organized.
- Keep the work area clean and all spills wiped up immediately.
- Refrigerate promptly all unused foods.
- Use clean equipment in preparing, cooking and serving food.
- Avoid touching food as much as possible. Use the proper utensils.
- Handle all utensils and serving equipment by handles and bases to avoid touching areas that will later come in contact with the food.
- Use a clean spoon to taste food.
- Keep fingernails trimmed and clean. Scrub nails with a nail brush after a visit to the toilet and after handling raw meat, poultry, and fish.
- Keep hair clean and use a hair net or other restraint.
- Reassign employees with infected cuts or burns. These employees should not prepare food or handle equipment that will come in contact with food.

Source: National Food Service Management Institute (1995), *Healthy Cuisine for Kids Workshop Trainer's Manual*.
The University of Mississippi: NFSMI.

Characteristics of Common Foodborne Illnesses					
Illness	Cause	Onset	Symptoms	Spread	Foods Involved
Salmonellosis	Infection with <i>Salmonella</i> species	12-24 hours	Nausea, diarrhea, 2-7 days	Eating contaminated food; contact with infected persons	Meat, poultry and egg products
<i>Staphylococcus</i> poisoning	Toxin produced by certain strains of <i>Staphylococcus</i>	1-6 hours	Severe vomiting, diarrhea, abdominal cramping, 1-2 days	Food handlers who carry the bacteria on skin in pimples or cuts; who cough or sneeze on food	Custard- and cream-filled baked goods, ham, poultry, egg, potato salad, cream sauces, fillings
<i>Cl perfringens</i> poisoning	Toxin released in the intestine	8-24 hours	Diarrhea, abdominal cramps, headache, 1 day	Eating contaminated food	Meat, poultry and other foods held at warm temperatures
<i>Campylobacter jejuni</i>	Infection, even with low numbers	1 hour	Nausea, diarrhea, abdominal cramps, headache, 1-10 days	Contaminated drinking water, eating contaminated food, infected handlers, rodents, insects	Raw milk, eggs, raw beef, poultry, cake icing, water
<i>E coli</i> 0157:H7	Strains of <i>E coli</i>	2-4 days	Hemorrhaging in the colon	Eating contaminated foods	Ground beef, raw milk, chicken
Listeriosis	Infection with <i>Listeria monocytogenes</i>	2-3 days -3 weeks	Meningitis, 2-7 days	Eating contaminated foods	Milk, vegetables, cheese, meat, seafood

Source: National Food Service Management Institute (1995), *Healthy Cuisine for Kids Workshop Trainer's Manual*. The University of Mississippi: NFSMI.

FOOD SAFETY QUESTIONS AND ANSWERS

I. Food Safety Inspections

1. Will USDA define what the food safety inspections must include? Will the food safety inspection cover the HACCP Plan that schools are required to have in place?

USDA does not have the authority to define the content of the food safety inspections. The State or local public health agency is responsible for the content of the food safety inspections. State or local authorities responsible for such inspections adopt standards, such as the *Food Code*, to guide their inspection process.

2. Is the expectation that school food authorities will solicit the health department to do the additional inspection, or will the State agency who oversees the local health departments inform the health departments that a second inspection is needed?

We encourage State agencies to contact their State and/or local agencies responsible for food safety inspections to help facilitate schools' compliance with the new requirements. At the Federal level, FNS has sent letters to the associations representing State and local food safety regulators and inspectors to inform them about the new requirements and to seek their cooperation. Ultimately, it is each school food authority's responsibility to obtain the required inspections.

3. Must the two inspections be done at school kitchens that are production facilities or at all schools, including satellite kitchens where foods are only served but not prepared?

Inspections must be conducted at any school that participates in the school lunch program or school breakfast program.

4. There is a new requirement for inspection reports. Who will do the inspection reports, the State Department of Education or State Department of Health? Does USDA have a required form for the report? Should schools report directly to FNS or to the State first?

State agencies that administer the school meal programs, most often the State Department of Education but sometimes the State Department of Agriculture, are required to monitor the number of inspections completed in each school food authority and report the data to USDA. Food safety regulators are not responsible for filing the reports with USDA. At present we plan to use the Child Nutrition Programs Information Management System (CNPIMS). At this time, USDA does not have a required form for the report. The first report will be due to USDA from States in November 2006.

5. Most schools have a good food safety record; why is it necessary to increase the number of food safety inspections? Shouldn't we make the requirement for inspections risk-based rather than simply setting a mandatory number per year?

There is increasing media and public interest in the safety of school meals. In response, Congress established this statutory requirement. USDA has no discretion to change it.

6. What are the ramifications of non-compliance with the inspection requirement?

We anticipate that State agencies that administer the school meal programs will work closely with schools that have difficulty meeting this requirement. In addition, we expect that State agencies will work with the food safety regulators to remove barriers that may hinder school compliance with the inspection requirement. Although there might be a transition period during which some schools develop mechanisms to obtain two inspections, we anticipate that schools and State agencies will do their best to meet program requirements.

7. Is the State agency required to monitor the results of the school food safety inspection?

States are not expected to monitor or track the results and required follow-up of every food safety inspection. However, during regularly scheduled monitoring visits, State agencies should assess whether school food authorities are meeting the food safety inspection requirements for all schools under their jurisdiction, and ensure that schools are taking corrective action based on findings in their inspections.

8. May schools do a self-inspection and comply with the law?

The National School Lunch Act requires that food safety inspections be conducted by the State or local governmental agency responsible for inspections.

9. Does the Local Education Agency (LEA) qualify as the State or local government agency responsible for food safety inspections?

No. The Reauthorization Act requires that the food safety inspections be conducted by the State or local governmental agency responsible for food safety inspections. “Local educational agency” has the meaning given the term in section 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

10. May a school or school food authority with a strong HACCP plan obtain only one food safety inspection per year?

No. The law does not exempt schools or school food authorities with effective HACCP plans from complying with the food safety inspection requirement.

11. Are schools offering the Special Milk Program (SMP) required to have two food safety inspections annually?

No. The SMP is for institutions that do not participate in the school lunch or breakfast programs. Since the language in section 9(h) of the National School Lunch Act refers to schools participating in the school lunch or breakfast programs, SMP-only schools are not required to comply with the provision.

12. Must schools that contract with a Food Service Management Company (FSMC) to manage food service operations comply with the requirement of two food safety inspections per year?

Yes. A school that contracts with an FSMC retains control of the quality and general nature of the food service operation. A school that has entered into an agreement to participate in the NSLP or SBP must abide by all program requirements.

13. May a school count a food safety inspection conducted as part of the Summer Food Service Program or the Child and Adult Care Food Program as part of the two food safety inspections required per school year?

Yes, as long as the inspection covers the same preparation facilities and similar food services.

II. Hazard Analysis and Critical Control Point (HACCP) Requirement

14. Who must have a food safety program based on HACCP principles? Schools? Summer food service sites? Child care and adult care sites? Head Start sites?

Schools participating in the National School Lunch and/or School Breakfast Programs are required to implement a food safety program based on HACCP principles.

15. Why are HACCP-based programs being required for schools?

The Reauthorization Act requires that school food safety programs be based on HACCP principles. Food safety regulators view HACCP as a food safety management system that effectively prevents food safety hazards.

16. What are the elements of a school food safety program based on HACCP principles?

In accordance with USDA guidance issued June 10, 2005, a school food safety program must include the following elements: documented standard operating procedures and a written plan at each school food preparation and service site for applying HACCP principles. The written plan must include methods for documenting menu items in the appropriate HACCP process category; documenting critical control points of food production; monitoring; establishing and documenting corrective actions; record keeping; and reviewing and revising the overall food safety program.

17. Who is responsible for implementing the school food safety program based on HACCP principles in schools?

School food authorities must develop the food safety program for the food preparation and service sites under their jurisdiction. Food service managers/cafeteria managers at each school are responsible for implementation at their food service and preparation sites.

18. When must a HACCP program be implemented?

The food safety provisions of Reauthorization are effective July 1, 2005. Therefore, schools should be implementing their HACCP programs during School Year 2005-2006.

19. What if my district already has HACCP plans in place?

School food authorities that currently have food safety programs based on HACCP principles may retain their existing program after consultation with the State agency to ensure that they meet all requirements.

20. I use the USDA recipes which include HACCP Critical Control Points. Isn't that my HACCP plan?

No. Recipes that include critical control points are one valuable component of a food safety program. In accordance with USDA guidance issued June 10, 2005, a complete food safety program must also include documented standard operating procedures, documentation of menu items in the appropriate HACCP process category, monitoring, establishment and documentation of corrective actions, record keeping and review and revision of the program on a regular basis.

21. Must I use recipes that have HACCP Critical Control Points? Must I use standardized recipes as part of my HACCP plan?

There is no requirement to use recipes with critical control points identified. The USDA guidance issued on June 10, 2005, provides a method (the process approach) to identify critical control points. USDA does, however, encourage the use of standardized recipes as good management practice.

22. Where can I go for information? Who will provide training and technical assistance?

As with any program questions, you should go first to your State agency. Other resources and links can be found on the USDA Food and Nutrition Service web site at: www.fns.usda.gov/cnd. The National Food Service Management Institute (NFSMI) also provides training and technical assistance. For more information you can visit the NFSMI web site at: www.nfsmi.org or call the NFSMI Help Desk at: 800-321-3054.

23. What is the role of my health inspector? Will the food safety inspection cover our HACCP plans?

Your health inspector continues in the role that he/she currently fills. He/she is the authority responsible for providing food safety inspections for your operation. The Reauthorization Act of 2004 does not require inspectors to approve, evaluate, monitor or validate the HACCP Plans, though we anticipate that the food safety inspections already cover some HACCP-related elements.

24. Who will assure my compliance with the requirement? What happens if I don't meet the requirement?

State agencies that administer the school meals programs provide compliance assistance and ensure that school food authorities and program operators meet program requirements. Whenever there are compliance problems, State agencies will assess the need for technical assistance or other measures.

25. May food safety regulators provide HACCP training to schools?

Schools are free to determine the source of the training they receive. USDA issued guidance on June 10, 2005, listing the specific elements required in the HACCP programs that schools must develop. The school should ensure that training is consistent with USDA guidance. As an example, NFSMI is a reliable source for training and technical assistance to program operators.

26. Who will validate the HACCP plans developed by each school--the local health department or would an independent company be hired to do this validation procedure?

School food authorities must conduct periodic assessments of their food safety program based on HACCP principles to ensure that it is working according to the written plan. USDA does not require that school food authorities use State or local departments of health or hire independent organizations to validate the program. The State agency that administers the school meal programs is available to assist with implementation.

27. Are districts required to conduct annual HACCP training for all child nutrition staff at all meal service sites?

Yes, the district must conduct annual HACCP training for all child nutrition staff at locations where meals are prepared and served. Districts may document annual training on a log that includes the date, HACCP topic, participants names and signatures of participants. Documentation of annual HACCP training is required and will be verified at the CRE.

28. Are districts required to carry out their implemented HACCP Plan, as written, at all school sites?

Yes, the district must implement all Standard Operating Procedures (SOPs) as written in their HACCP Plan.

III. Funding

29. Is there any additional funding to cover the expenses involved with implementing either the inspection or HACCP requirements?

Schools may use the foodservice account to pay for costs related to the new food safety requirements. The increases in the fees related to the food safety inspections and other costs related to the HACCP requirement are legitimate costs of managing the school lunch program.