Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop

Instructor's Manual

HACCP
Hazard Analysis
Critical Control Point

INSTITUTE OF
child nutrition
RESOURCES • TRAINING • RESEARCH

Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop

Instructor's Manual

PROJECT COORDINATOR
Liz Dixon, MS

EXECUTIVE DIRECTOR
Aleshia Hall-Campbell, PhD, MPH

Key Area: 2 Operations
USDA Professional Standards Code: 2600 Food Safety and HACCP

2022

Institute of Child Nutrition
The University of Mississippi

TABLE OF
CONTENTS

TABLE OF
CONTENTS

» BACKGROUND INFORMATION

Welcome to the Institute of Child Nutrition's (ICN) *Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop*. ICN and the U.S. Department of Agriculture, Food and Nutrition Services (USDA, FNS) developed this workshop in response to the need for school nutrition directors and food safety personnel to have time and resources to develop a school-specific, Hazard Analysis Critical Control Point (HACCP)-based food safety plan.

The purpose of a food safety plan is to ensure the food served to children in child nutrition programs is safe. By controlling hazards that may occur or may be introduced into foods, school nutrition employees can safeguard food. An effective food safety program will help control food safety hazards that might occur during all points in foodservice—receiving, storing, preparing, cooking, cooling, reheating, holding, packaging, transporting, and serving. A truly effective food safety plan needs to be developed for a specific school nutrition program (SNP). By developing a food safety plan for the specs of a school (equipment, staff, physical location, etc.), the number of hazards can be significantly reduced for that site.

The goal of this 2.5-day workshop is for participants to take a detailed draft of a school-specific, HACCP-based food safety plan back to their SNPs. It begins with a basic overview of HACCP principles and food safety. Next, it details how to design a school-specific, HACCP-based food safety plan. Participants will be provided with interactive templates and sample documents to help with development. They will have the opportunity to complete these templates for their SNPs during the workshop.

The *Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop* provides the time and resources needed to develop a school-specific, HACCP-based food safety plan. Participants will have access to an experienced trainer to help guide them through the development process. They will also be given the opportunity to network with other school nutrition directors and food safety personnel to help troubleshoot challenges. By incorporating an interactive experience, participants will create a school-specific HACCP-based food safety plan. This instructor-led workshop incorporates individual work, group discussion, partner work, pre-made templates, and other resources.

The instructor's script is written with the following prompts.

SAY: What the instructor is to say to participants. This is the content that teaches the learning objectives.

ASK: This prompt is used when the instructor should ask the participants a question.

FEEDBACK: This prompt is used to ensure certain elements are covered in discussions.

DO: This prompt is used to explain what the instructor/participants are to do. It may be used to lead to activities, do demonstrations, or show videos.

SHOW SLIDE: This prompt is used for showing slides. Each slide must have its own unique title. Slides should not be content heavy or contain content not covered in the Instructor's Manual.

» FUNCTIONAL AREA AND COMPETENCIES

Functional Area 4: Food Security, Sanitation, and Safety

Competency 4.1: Establishes policies and procedures to ensure food is prepared and served in a sanitary and safe environment.

Knowledge Statements:
- Knows basic principles and techniques of foodservice sanitation and food safety.
- Knows Federal, State, and local sanitation and food safety requirements.
- Knows principles of foodborne illness prevention.
- Knows fundamentals of Hazard Analysis Critical Control Point (HACCP)-based standard operating procedures.

Competency 4.2: Provides leadership in creating a safe work environment for school nutrition operations.

Knowledge Statements:
- Knows principles for selecting, storing, using, and maintaining chemical supplies and other hazardous materials.
- Knows principles of creating and maintaining a safe work environment.

Source: Institute of Child Nutrition. (2009). *Competencies, knowledge, and skills for district-level school nutrition professionals in the 21st century.* https://theicn.org/icn-resources-a-z/CKS-district-school-professionals

» PROFESSIONAL STANDARDS

FOOD SAFETY AND HACCP TRAINING – 2600
Employee will be able to effectively utilize all food safety program guidelines and health department regulations to ensure optimal food safety.

2610 – Practice a HACCP-based program.
2620 – Practice general food safety procedures.
2630 – Practice Federal, State, and local food safety regulations and guidance.
2640 – Promote a culture of food safety behaviors in the school community (includes training on food allergens).

Key Area: 2

» WORKSHOP OBJECTIVES

At the end of this workshop, participants will be able to accomplish the following objectives:
1. Explain HACCP.
2. Demonstrate the importance of a HACCP-based food safety plan for schools.
3. Evaluate prerequisite programs needed for developing and updating a HACCP-based food safety plan.
4. Compose the overview of the school nutrition program and a description of each school site.
5. Examine and construct the components of a food safety plan.
6. Investigate the current resources available to assist in developing and updating a HACCP-based food safety plan.
7. Integrate the HACCP-based food safety plan into your school nutrition program.
8. Write an action plan for training and implementing the food safety plan.
9. Create a plan for validating and updating your HACCP-based food safety plan in the future.

» GROUND RULES

The following are ground rules and expectations for this workshop:
1. Show up on time and come prepared.
2. Stay mentally and physically present.
3. Let everyone participate.
4. Listen with an open mind.
5. Think before speaking.
6. Attack the problem, not the person.

*Hang Ground Rules posters around room before class starts.

⟫ WORKSHOP-AT-A-GLANCE

TIME	TOPIC	WORK STYLE
DAY 1 (8 HOURS)		
15 minutes	Introduction	Trainer
1 hour, 30 minutes	Lesson 1 – Before You Get Started	Trainer
3 hours	Lesson 2 – Creating Your HACCP-Based Food Safety Plan	Trainer
2 hours, 45 minutes	Update HACCP-Based Food Safety Plan	Individual Work
30 minutes	Wrap Up	Trainer
DAY 2 (8 HOURS)		
15 minutes	Welcome	Trainer
40 minutes	District Size Challenges and Solutions	Group Work
40 minutes	School Location Challenges and Solutions	Group Work
40 minutes	Food Production Type Challenges and Solutions	Group Work
1 hour, 45 minutes	Edit Food Safety Plan from Group Work	Individual Work
60 minutes	Emergency Plan Challenges and Solutions	Group Work
60 minutes	Food Defense Challenges and Solutions	Group Work
1 hour, 45 minutes	Edit Food Safety Plan from Group Work	Individual Work
15 minutes	Wrap Up	Trainer
DAY 3 (4 HOURS)		
15 minutes	Welcome	Trainer
1 hour, 45 minutes	Validating the Food Safety Plan	Partner Work
1 hour, 30 minutes	Lesson 3 – Implementation of HACCP-Based Food Safety Plan	Trainer
30 minutes	Wrap Up	Trainer

❯❯ PREPARATION CHECKLIST

Instructions: The following tasks are necessary for presenting this lesson. Assign each task to a specific person and determine the date that each task must be completed. Keep track of the progress by checking off tasks as they are completed.

TASK	PERSON RESPONSIBLE	COMPLETION DATE	✓
Reserve equipment and gather supplies as needed for use on the day of class (6 weeks prior).			
Instructor's Manual Slide deck Computer to present slides and/or DVD Wireless presenter device and laser pointer Participant sign-in sheets	Trainer		
Participant's Workbook Agenda Participant roster ICN Ground Rules poster **List of equipment and supplies needed** Computer (one for each participant) 3 USB drives and link to file sharing folder* Internet available Microphone (optional, preferably wireless) Projector and screen Chart paper (self-adhesive strip sheets) Painter's tape Markers (for chart paper) Pens or pencils Highlighters (multiple colors) Self-adhesive notes Name tags Table tent	Site Coordinator		

*For ICN sponsored workshops, participants will be sent a file sharing link with the digital files of the templates. For any participants that do not download the files before coming to the workshop, provide one of the USB drives and have the participant copy the files over. Please return to USB to ICN.

DAY 1

TIME	TOPIC	WORK STYLE
15 minutes	Introduction	Trainer
1 hour, 30 minutes	Lesson 1 – Before You Get Started	Trainer
3 hours	Lesson 2 – Creating Your HACCP-Based Food Safety Plan	Trainer
2 hours, 45 minutes	Update HACCP-Based Food Safety Plan	Individual Work
30 minutes	Wrap Up	Trainer
8 hours		

⟫ INTRODUCTION-AT-A-GLANCE

TIME	TOPIC	ACTIVITY	MATERIALS
15 minutes	Introduction to the Lesson	Ice Breaker	› Participant's Workbook › Markers › Table tents
15 minutes			

❯❯ INTRODUCTION

SHOW SLIDE: _**Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop**_

SAY: Welcome to _Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop._ This workshop is provided today by (state the organization sponsoring the workshop). This is a 2.5-day workshop. The Institute of Child Nutrition designed the _Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop_ based on the recommendations from a focus group of school nutrition directors and food safety personnel. This workshop provides the foundational knowledge and skills for developing a school-specific, HACCP-based food safety plan. It also offers time to create or update your school's current food safety plan and the opportunity to network and problem solve with other directors and food safety personnel. A strong food safety plan provides the foundation for reducing the risk of foodborne illness outbreaks and food allergic reactions in school nutrition programs.

SHOW SLIDE: _**Overview**_

SAY: In this workshop, you will learn about Hazard Analysis Critical Control Point (HACCP) and develop a rough draft of a HACCP-based food safety plan for your specific school. This workshop will provide tools, templates, and resources for creating your food safety plan.

A Participant's Workbook has been provided, which has valuable take-home resources and the activities we will be doing together. You will also have a USB drive with templates, sample Standard Operating Procedures (SOPs), and sample logs to use and take with you.

SHOW SLIDE: _**Logistics**_

SAY: The restrooms are located (describe where the restrooms are located), and the emergency exits are located (describe where the emergency exits are located). If you have questions at any time, please write them on a sticky note and put them on the Bike Rack chart paper during the breaks.

DO: Write "Bike Rack" on top of a piece of chart paper and put it on a far wall.

ASK: Are there any questions I can answer for you at this time?

SHOW SLIDE: _**Warm Up Activity**_

<u>Activity: Warm Up</u>

Materials:
> Table tents
> Markers

Time: 10 minutes (5 minutes of mingling and 5 minutes of debriefing)

Instructions:
1. Have participants get their table tents and a marker.
2. On their table tents, participants will write their names on one side. On the other side, participants will list at least one way food safety practices prevented a problem or hazard in their school.
3. For about 5 minutes, have participants move around the room, introduce themselves, and share their food safety practice with two other people.
4. Have participants return to their seats and ask a few volunteers to share their food safety topics.

SAY: On your table tent, write your name on one side. On the other side, write at least one food safety practice that prevented a problem in your school. For example, the recorded refrigerator temperatures showed that the equipment was beginning to malfunction.

DO: Allow participants 30 seconds to do this independently.

SAY: Now I am going to give you about 5 minutes to take your table tent and move around the room. Find someone you do not know or do not know well. Introduce yourself and share your practice with this person, and then allow them to introduce themselves and share their practice. After a couple of minutes, move on to another person to share your name and practice.

DO: Allow 5 minutes of group mingling.

SAY: Okay, please return to your seats.

DO: Take about 5 minutes and have a few volunteers share their tips.

SAY: We can see how food safety practices prevent problems for our school nutrition programs.

LESSON-AT-A-GLANCE
LESSON 1— BEFORE YOU GET STARTED

TIME	TOPIC	ACTIVITY	MATERIALS
<5 minutes	Introduction to the Lesson		› Participant's Workbook
Objective: Explain HACCP.			
<5 minutes	What is HACCP?		› Importance of HACCP handout
Objective: Demonstrate the importance of a HACCP-based food safety plan for schools.			
10 minutes	Describe why having a HACCP plan is important.		› Temperatures Through Food Production handout
Objective: Evaluate prerequisite programs needed for developing and updating a HACCP-based food safety plan.			
25 minutes	Evaluate and list prerequisite programs needed before writing a HACCP-based food safety plan.	Prerequisite Program Checklist	› Preventative Maintenance Schedule sample › Cleaning Schedule sample › Prerequisite Program Checklist › Pen or pencil › Computer
Objective: Compose the overview of the school nutrition program and a description of each school site.			
55 minutes	Write school district overview and school site descriptions.	Overview and School Site Descriptions Activity	› Program Overview template › School Site Description template › Computer
1 hour, 30 minutes			

⟫ LESSON 1—BEFORE YOU GET STARTED

SHOW SLIDE: *Day 1*

SAY: For the first day, we will walk through the components of designing a school-specific, HACCP-based food safety plan. You will have the opportunity to work on different pieces of your plan throughout the day. After today, you will know the entire process of developing your food safety plan.

SHOW SLIDE: *Lesson 1 – Before You Get Started*

SAY: Before we jump into developing a school-specific, HACCP-based food safety plan, we will briefly discuss what HACCP is and discuss programs and processes that need to be in place before beginning development. Please turn in your Participant's Workbook to the **Importance of HACCP** handout. This handout contains the information we are about to discuss.

Instructor's Note: Content in the **Importance of HACCP** handout is covered in the instructor's script over the next several pages.

SHOW SLIDE: *Background*

SAY: According to the Centers for Disease Control and Prevention (CDC), each year, one in six Americans get sick (roughly 48 million people), 128,000 are hospitalized, and 3,000 die from foodborne illnesses (CDC, 2018). CDC data reveals that the incidence of many foodborne illnesses has not changed significantly in recent years. Half of the reported cases of foodborne illnesses occur in children under 15 years of age.

Looking at these statistics places emphasis on the importance of food safety in our jobs as school nutrition professionals. Food safety is a key responsibility of every school nutrition employee, manager, and director.

SHOW SLIDE: *Lesson 1 Objectives*

One in six
Americans to get sick (roughly 48 million people)

HOSPITAL

128,000
Americans to be hospitalized

3,000
Americans to die
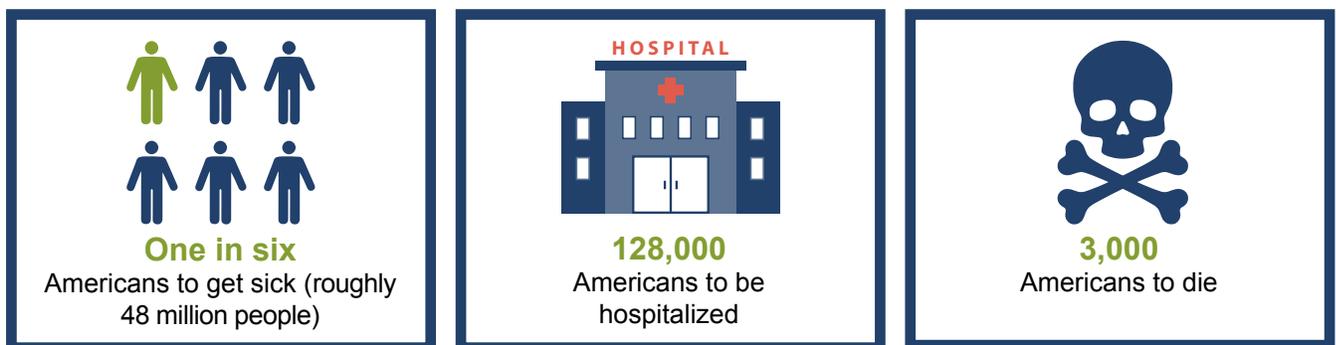
Half of the reported cases of foodborne illnesses occur in children **under 15 years of age**.

DO: Refer participants to the lesson objectives in the Participant's Workbook.

SAY: In this lesson, we will discuss:
> What is HACCP
> Why it is important to have a HACCP-based food safety plan for schools
> What prerequisite programs are needed when developing a food safety plan
> How to write an overview of the school nutrition program and a description of each school site

Objective: Explain HACCP.

SHOW SLIDE: *HACCP*

SAY: Hazard Analysis Critical Control Point, or HACCP, is a specific approach for identifying food safety hazards. It involves finding potential food safety issues in your program and implementing preventative measures. This is done through the seven HACCP Principles.
1. Conduct a hazard analysis.
2. Determine the critical control points (CCPs).
3. Establish critical limits.
4. Establish monitoring procedures.
5. Establish corrective actions.
6. Establish verification procedures.
7. Establish recordkeeping and documentation procedures.

To help implement a HACCP-based food safety plan, the Food and Drug Administration (FDA) developed the Process Approach. USDA adopted this modified form of HACCP when they developed the *Guidance for School Food Authorities: Developing a School Food Safety Program Based on the Process Approach to HACCP Principles*. We will go into detail about the Process Approach to HACCP Principles later in this course, but the main takeaway is that the Process Approach is a practical method for writing a HACCP-based food safety plan.

Objective: Demonstrate the importance of a HACCP-based food safety plan for schools.

SHOW SLIDE: *Population in Schools*

SAY: On an average day, over 30 million children are served school meals. Our school nutrition operations provide meals with the potential of affecting large numbers of children. Young children, especially those in elementary schools, are at risk for foodborne illness for many reasons. They are still developing immune systems, which lowers their ability to fight infection. Their lower body weight reduces the dose of a pathogen needed to sicken them. Children have limited control over their diet and related food safety risks. Finally, children have reduced stomach acid production, decreasing their capacity to kill harmful bacteria.

SHOW SLIDE: _**Food-Related Disabilities**_

SAY: Among the children we serve in our schools are those with food-related disabilities. Their young age and disabilities leave them particularly vulnerable to foodborne illness. These food-related disabilities could include food allergies and intolerances, celiac disease, diabetes, phenylketonuria (PKU), and the need for modified texture foods. A food safety plan that describes how to provide safe meals for these children is especially needed.

SHOW SLIDE: _**Child Nutrition Programs and HACCP**_

SAY: The Child Nutrition Reauthorization Act of 2004 implemented the requirement for a food safety program based on Hazard Analysis and Critical Control Point (HACCP) principles for school nutrition programs. In 2010, the Richard B. Russell National School Lunch Act was amended to include the food safety requirements established in the Healthy, Hunger-Free Kids Act of 2010 and the Child Nutrition and WIC Reauthorization Act of 2004. It requires School Food Authorities (SFAs) to implement a food safety program based on HACCP principles. This food safety program must apply to all locations where food is stored, prepared, or served throughout the school. The food safety principles outlined in the U.S. Department of Agriculture (USDA) guidance for implementing comprehensive food safety programs in schools need to be included in the food safety program.

SHOW SLIDE: _**Essential Point of HACCP**_

SAY: The basic idea behind HACCP is prevention. There are three main points essential to developing a HACCP plan.
> Sanitation
> Temperature Control
> Standard Operating Procedures (SOPs)

SHOW SLIDE: _**HACCP and Sanitation**_

SAY: Proper sanitation is important to prevent a foodborne illness outbreak. Washing, rinsing, and sanitizing all utensils, equipment, and food contact surfaces before and after use help eliminate microorganisms such as bacteria, viruses, mold, and fungus on that surface. Good sanitation practices and cleaning schedules need to be included in a HACCP-based food safety plan for a school.

SHOW SLIDE: _**HACCP and Personal Hygiene**_

SAY: Good personal hygiene practices are an important part of preventing foodborne illness. Employees can prevent the spread of foodborne illness by washing their hands properly, not touching ready-to-eat food with bare hands, and not coming to work sick. All of these circumstances need to be included in a HACCP-based food safety plan for a school.

SHOW SLIDE: _**HACCP and Temperature Control**_

SAY: Controlling the temperature of food helps prevent the growth of bacteria. This means keeping food out of the temperature danger zone (TDZ) (41 °F – 135 °F) where bacteria can grow rapidly, doubling in number every 20 minutes. Some foods such as meat, poultry, fish, cut tomatoes, cut melons, and leafy greens are particularly susceptible to foodborne illness. Make sure to check with your local health department about what temperature danger zone is used in your area. A stricter temperature danger zone may be used such as 40 °F – 140 °F.
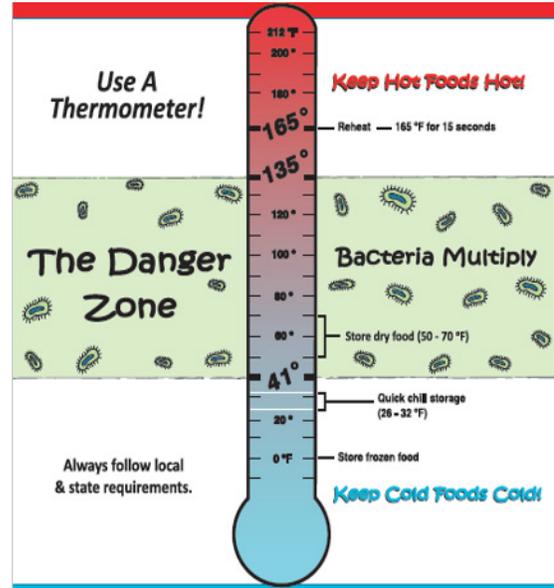
DO: Refer participants to the **Temperatures Through Food Production** handout in the Participant's Workbook.

SAY: Please turn in your workbook to the **Temperatures Through Food Production** handout. This handout shows important food safety temperatures for your school nutrition program. For example, keep cold foods cold (41 °F or below) and hot foods hot (135 °F or above). Use a calibrated, sanitized food thermometer to ensure proper temperatures are reached. Record these temperatures.

Instructor's Note: Green boxes designate handouts and worksheets from the Participant's Workbook. Images and charts may be condensed.

❯TEMPERATURES THROUGH FOOD PRODUCTION

IMPORTANT TEMPERATURES	WHY IT IS IMPORTANT	BEST PRACTICES
PURCHASING		
❯ Cold food: 41 °F and below ❯ Hot food: 135 °F and above	Buy from vendors that have good food safety practices in place to ensure the food you purchase has not been temperature abused.	❯ Buy from reputable vendors. ❯ Include food safety standards in purchasing agreements.
RECEIVING		
❯ Refrigerated food: 41 °F and below ❯ Frozen food: at or below 32 °F ❯ Hot food: held at or above 135 °F	Cold foods must be received at 41 °F or below so that it is not in the temperature danger zone. Frozen food must be frozen and contain no ice crystals. Ice crystals are a sign that the food has been thawed and refrozen.	❯ Keep the receiving area clean. ❯ Inspect the delivery truck. Make sure it is clean and free of odors. Check food temperatures, paying particular attention to frozen and refrigerated products. ❯ Look for signs of contamination and container damage. Reject damaged packages; their contents may also be contaminated or damaged. ❯ Check for the separation of raw and ready-to-eat or prepared foods during transport. ❯ Store foods immediately.
STORING		
❯ Dry storage areas: between 50 °F and 70 °F ❯ Refrigerated storage areas: at or below 41 °F ❯ Deep chilling storage areas: between 26 °F and 32 °F ❯ Freezer storage areas: between -10 °F and 0 °F	Storing food out of the temperature danger zone assists in preserving food quality and decreases the likelihood of bacterial growth. However, dry storage items are shelf-stable in the temperature danger zone because bacteria present in the sealed container is eliminated during processing and because conditions in the food (like pH or water activity) do not support the growth of bacteria.	❯ Use the First-In, First-Out (FIFO) principle. Older products should be used first. ❯ Store products in original packaging. Label foods with the delivery date. ❯ Keep raw foods separate from cooked or ready-to-eat products. ❯ Store foods at least 6 inches off the floor and 6 inches away from the wall. ❯ Keep storage areas clean, dry, and pest-free. ❯ Store chemicals away from foods and food-related supplies. ❯ Maintain, monitor, and record refrigerator, freezer, and dry storage room temperatures.

IMPORTANT TEMPERATURES	WHY IT IS IMPORTANT	BEST PRACTICES
PREPARING		
❯ Pre-chill ingredients for cold foods to 41 °F or below before combining with other ingredients. ❯ Limit the preparation time of any ingredients to no more than 30 minutes at room temperature before cooking, serving, or returning to the refrigerator.	These methods prevent food from being in the temperature danger zone for too long.	❯ Wash hands frequently, properly, and at appropriate times. ❯ Avoid cross-contamination. ❯ Keep foods out of the temperature danger zone. ❯ Use batch cooking to limit the time between preparation and service. ❯ Thaw foods properly. ❯ Chill all cold foods as quickly as possible. ❯ Prepare foods as close to serving time as the menu will allow.
COOKING		
❯ 165 °F – poultry, stuffing, stuffed meats, stuffed pasta, casseroles, leftovers ❯ 155 °F – ground meats, such as hamburger, ground pork, sausage, eggs for hot holding ❯ 145 °F – beef roasts, pork roasts, beef steaks, ham, fish ❯ 135 °F – ready-to-eat foods taken from a commercially processed, hermetically sealed package; vegetables (frozen or canned)	Cooking foods to the correct internal temperature will destroy existing bacteria, even though it may not kill toxins or bacterial spores. Minimizing time in the TDZ will discourage the production of toxins and spores.	❯ Avoid cross-contamination. ❯ Cook foods to the proper internal temperature for the appropriate time. ❯ Use a clean, calibrated food thermometer. ❯ Record internal food temperature.
HOLDING AND SERVING		
❯ Cold food: held at or below 41 °F ❯ Hot food: held at or above 135 °F	These temperatures keep food out of the temperature danger zone and prevent pathogen growth.	❯ Avoid cross-contamination. ❯ Keep foods out of the temperature danger zone. ❯ Monitor and record food temperatures. ❯ Monitor the temperature of hot holding and cold holding equipment.

IMPORTANT TEMPERATURES	WHY IT IS IMPORTANT	BEST PRACTICES
COOLING		

› Hot food must be cooled from 135 °F to 70 °F within 2 hours. If not, the food must be reheated to 165 °F for 15 seconds or discarded.
› Food must be cooled within a total of 6 hours from 135 °F to 41 °F (if previous step is achieved).
› Foods that start at room temperature (70 °F) must be cooled to 41 °F within 4 hours.
	These are the time and temperature regulations specified by the *Food Code* to cool foods safely to prevent bacterial growth.	› Speed up cooling by using techniques such as:
		  • Stirring frequently
		  • Dividing food into small quantities
		  • Using shallow pans
		  • Using ice water baths or ice paddles whenever possible
		› Use a clean and calibrated food thermometer to check temperatures.
		› Monitor and record food temperatures during the cooling process.
		› Store foods appropriately – covered and labeled with product name and date prepared.

REHEATING		
165 °F for 15 seconds within 2 hours	This is the temperature and time required to kill any bacteria that may be present in the food.	› Reheat to an internal temperature of 165 °F for 15 seconds within 2 hours or less. › Monitor and record internal temperatures of foods. › Never reheat food in hot holding equipment. › Recommended to reheat food one time; quality diminishes each time.
TRANSPORTING		
Refer to temperatures for holding		

SHOW SLIDE: *HACCP and Standard Operating Procedures (SOPs)*

SAY: Standard Operating Procedures (SOPs) are step-by-step instructions for food safety practices. SOPs help everyone understand what is expected and how to do the task. SOPs incorporate many of the HACCP principles into one document, including critical control points, critical limits, monitoring procedures, corrective actions, and verification procedures. They are the foundation of a food safety program. We will discuss SOPs further in Lesson 2.

Objective: Evaluate prerequisite programs needed for developing and updating a HACCP-based food safety plan.

SHOW SLIDE: *HACCP Prerequisite Programs*

SAY: HACCP is a refined food safety plan that is built on the shoulders of some basic management pieces in your kitchen. The assumptions are the kitchen is clean, staff are clean and healthy, the equipment is in good repair, vendors have a strong food safety program, and no pests are scurrying around the storeroom. There are several programs to have in place before starting to write a HACCP-based food safety plan. These programs include:
› Cleaning schedule and Safety Data Sheets (SDS)
› Preventative maintenance plan
› Personnel policies
› Vendor letters of assurance of food safety standards
› Pest control contract

In your workbook, you will find some templates to help create some of the needed tools. These templates are also available on your USB drive so that you can adapt them to your HACCP-based food safety plan.

SHOW SLIDE: *Cleaning Schedule*

SAY: A cleaning schedule is an organized, deliberate plan to keep the kitchen clean. The schedule breaks down the responsibility for cleaning among all the staff. It describes what to clean, when to clean, what chemicals to use, and who is responsible. Paired with the schedule should be the Safety Data Sheets (SDS) for the chemicals used in the kitchen that explain how to use the chemicals safely and what to do in case of a chemical emergency. Management follow-up and enthusiasm for cleanliness keep a kitchen clean. This is one of the basic tools to have in place before starting your HACCP-based food safety plan.

DO: Tell participants to turn to the **Cleaning Schedule Sample** in their Participant's Workbook.

SAY: The templates provided to you, like the **Cleaning Schedule Sample**, can be adapted for your needs. Do not reinvent the wheel. Look online, ask other directors, talk to your State agency, and check the Institute's website for other sample templates.

ASK: Does anyone want to share any examples of cleaning schedules you may have?

DO: Allow a few minutes for participants to respond.

❯❯CLEANING SCHEDULE SAMPLE

AREA OR EQUIPMENT	HOW OFTEN	DAY TO CLEAN	CHEMICALS	DIRECTIONS	PERSONAL PROTECTIVE EQUIPMENT	CLEANING COMPLETED		MANAGER'S INSPECTION SIGNATURE
						DATE	INITIAL	
BACK DOCK/STOREROOM								
Floors	Weekly	Friday		Sweep and mop				
Doors								
Racks								
DISHROOM								
Dishwasher	Daily	M–F		Clean outside, wash tubes and jets				
3-compartment sink								
Hand sink								
Transport cart								
FOOD PREP								
Tabletops	Every 4 hours			Clean every 4 hours or when changing task				
Shelves								
Ovens					Eye protection			
Mixers								
Kettle								
Microwave								
Slicers								
Doors								
Refrigerator/freezer doors & handles								

AREA OR EQUIPMENT	HOW OFTEN	DAY TO CLEAN	CHEMICALS	DIRECTIONS	PERSONAL PROTECTIVE EQUIPMENT	CLEANING COMPLETED		MANAGER'S INSPECTION SIGNATURE
						DATE	INITIAL	
Refrigerator/freezer floors								
Refrigerator/freezer shelves								
Ice machine								
Lights								
Walls								
Service								
Serving line – front and glass								
Serving line – back								
Warming equipment								
Lights								
Walls								
Food Counter								

Adapted from: Pinterest. (n.d.). Kitchen cleaning schedule. https://www.pinterest.com/pin/388013324130811614/

SHOW SLIDE: *__Preventative Maintenance Plan__*

SAY: A second tool to have in place is a preventative maintenance plan. Taking good care of equipment ensures that it is working when needed. A refrigerator grill covered in "dust bunnies" makes the refrigerator struggle for air and work overtime to cool food. Regular cleaning, greasing, calibration, and service of mechanical equipment prolongs equipment life and keeps it running in peak condition. Regular cleaning can also help catch small problems before they become big problems. Refer to the manufacturer's recommendations for routine maintenance needed for equipment.

DO: Tell participants to turn to the **Prevention Maintenance Schedule** sample in their Participant's Workbook.

SAY: Schedules like the **Prevention Maintenance Schedule** sample help keep equipment in good, running condition by ensuring regular maintenance and cleaning.

ASK: What kind of preventative maintenance do you have in place?

DO: Allow a few minutes for participants to respond.

⟩⟩ PREVENTIVE MAINTENANCE SCHEDULE

It is highly recommended that schools have a preventive maintenance schedule – edit according to the operational needs of each school kitchen. Consult equipment vendors, flooring manufacturers, cleaning product vendors, facility staff, etc.

SCHOOL	WEEKLY	MONTHLY	3 MONTHS	6 MONTHS	YEARLY	VENDOR LIST	NOTES
Walk-in refrigerator: service compressor/condenser							
Walk-in freezer: service compressor/ condenser							
Milk cooler: service compressor/ condenser							
#1 Refrigerator: service compressor/ condenser							
Pump grease trap							
#1 Oven: calibrate							
Combi oven: delime, calibrate							
Hood: degrease interior, check exterior function							
Dishwasher: delime							
Dishwasher: calibrate							
Steam jacketed kettle: delime							
Hot holding equipment: calibrate							
Transport equipment: replace missing latches and worn gaskets, calibrate							
Department trucks: change oil, replace tires, lube lifts, replace worn latches and straps							
Scales: calibrate							
Ice machine: delime, clean bin							

SHOW SLIDE: _**Employee Policies**_

SAY: A third tool is personnel policies, such as employees wearing clean uniforms and not working when ill. A clean uniform reduces the chance of transferring bacteria, viruses, and allergens. Knowing when to exclude staff to prevent the spread of foodborne illness is essential. An ill employee could easily pass on the illness to children.

ASK: Does anyone want to share any examples of employee policies you may have?

DO: Allow a few minutes for participants to respond.

SHOW SLIDE: _**Vendor Food Safety**_

SAY: A fourth tool involves purchasing food and supplies from licensed vendors that strive for high levels of sanitation. Vendors can demonstrate their focus on food safety by sharing their food safety plan, sharing scores of recent inspections, and opening their doors for inspection of their facility.

ASK: How do you determine if a vendor is approved?

DO: Allow a few minutes for participants to respond.

SHOW SLIDE: _**Pest Control Contract**_

SAY: A contract with a licensed pest control operator is the last tool to have in place. Regular preventative service controls pests. Service may need to happen outside regularly scheduled visits when problems arise, so have the pest control company's contact information easily accessible. The idea is to have a pest-free building.

ASK: What pest control measures do you have in place?

DO: Allow a few minutes for participants to respond.

SHOW SLIDE: _**Prerequisite Program Checklist Activity**_

Activity: Prerequisite Program Checklist

Materials:
› **Prerequisite Program Checklist** (digital or paper)
› Pen or pencil
› Computer

Time: 20 minutes

Instructions:
1. Ask participants to turn to the **Prerequisite Program Checklist**. Participants can also use the digital version of the checklist on their computer.
2. Participants will use the checklist to evaluate their prerequisite programs. They should check "yes" if they have the program in place and check "no" if they need to develop the program.
3. Give participants 10–15 minutes to complete the checklist.
4. Ask some participants to share their list of programs; how they created them; and some tips, resources, challenges, and benefits. Allow 5 minutes for responses.

SAY: Please turn in your workbook to the **Prerequisite Program Checklist**. If you prefer, you can also use the digital version of the checklist on your computer. This checklist will help you evaluate your operation's readiness to start a HACCP-based food safety plan. Use it to evaluate your school nutrition program for prerequisite programs. Check "yes" if you have the program in place; check "no" if you need to develop the program. Take about 10–15 minutes. Please feel free to ask questions.

DO: Give participants 10–15 minutes to complete the checklist. Watch participants for signs if they need more time.

❯❯ PREREQUISITE PROGRAM CHECKLIST

Date_____ Observer_____

Directions: Use this checklist to evaluate your foodservice for prerequisite programs. Check "yes" if you have the program in place, check "no" if you need to develop the program.

	YES	NO
VENDOR EVALUATION		
Vendor licensed	☐	☐
Vendor provides letters of assurance of sanitation standards, or vendor warehouse visited	☐	☐
Dairy	☐	☐
Grocery	☐	☐
Produce	☐	☐
Bakery	☐	☐
PERSONNEL POLICIES	**YES**	**NO**
Uniform policy	☐	☐
Procedure for employee calling in due to illness	☐	☐
CLEANING SCHEDULE	**YES**	**NO**
A regular cleaning schedule is in place for all surfaces	☐	☐
PREVENTATIVE MAINTENANCE PROGRAM	**YES**	**NO**
Equipment in each school inventoried	☐	☐
Equipment regularly calibrated	☐	☐
Schedule of service for compressors and condensers of refrigerators, freezers, milk coolers	☐	☐
Schedule for cleaning hoods	☐	☐
Schedule for cleaning grease traps	☐	☐
PEST CONTROL	**YES**	**NO**
Licensed pest control operator contracted for regular service	☐	☐

ASK: Thinking about these programs and how you created them, would some of you be willing to share some tips, resources, challenges, and benefits?

FEEDBACK:
> Tip: Supervisors are the key to a clean kitchen! If they care, the staff cares.
> Resource: Many of the chemical companies have cleaning schedule templates and training that you can access.
> Challenge: Time to clean
> Benefits:
>> • Cleaning distributed to all staff
>> • Licensed pest control keeps the custodians from going rogue with ant killer

DO: Allow about 5 minutes for class discussion.

Objective: Compose the overview of the school nutrition program and a description of each school site.

SHOW SLIDE: *Program Overview Description*

SAY: A HACCP plan needs to include descriptions for both the district and specific school sites. The program overview description and school site description determine the Standard Operating Procedures and supporting logs needed for the HACCP plan.

DO: Tell participants to turn to the **Program Overview** in their Participant's Workbook or find the template on their USB. Tell them to follow along as you discuss district-wide policies.

≫ PROGRAM OVERVIEW

Directions: Complete the Program Overview chart based on the school nutrition program for your school district.

District name	
Location	
List of schools	
Average Daily Participation	
Food Code used	
Vendors	
Vendor assurance of food safety program	
Use of district or department warehouse	
Warehouse delivery: equipment and frequency	
Satellite delivery: equipment used	
Internal cooking temperature standards	
Use of leftovers	
Types of thermometers and temperature monitoring systems	
Laundry facilities or contract	
Pest control contract	Frequency of service

SAY: The district description looks at district policies for purchasing, leftover use, uniforms, training, and other district-wide policies. In a district description, include descriptions of contracted services and shared services. This description also notes the *Food Code* followed by the district (as determined by the version of *Food Code* adopted by your State). To determine what version of the FDA *Food Code* your State has adopted, contact your local environmental health specialist or research the internet for the FDA *Adoption of the FDA Food Code by State and Territorial Agencies Responsible for the Oversight of Restaurants and Retail Food Stores*.

ASK: What are some contracts in your district that would apply to the overall district and not just one school?

FEEDBACK:

> Vendor selections for groceries, produce, bakery, and dairy
> Food deliveries: milk, bread, etc.
> Pest control services
> Custodial services in the kitchen
> Laundry services

ASK: What are some policies that would apply to the overall district and not just one school?

FEEDBACK:

> Uniform policy and other personnel policies
> Internal cooking temperatures
> Use of disposable dishes
> Menu

SHOW SLIDE: *School Site Description*

DO: Tell participants to turn to the **School Site Description** in their Participant's Workbook or on their USB.

» SCHOOL SITE DESCRIPTION

Directions: Complete the chart based on the operation of one specific school.

Name of school	
Location of school	
Production type	
Vendors	
Vendor delivery schedule/time	
Hours open	
Meals served/time	
Staffing	
Food safety training for staff	
Equipment	
Condition of equipment	
Menu description	
Production type and satellite service to other schools	

SAY: The site description is very specific to each kitchen. They include detailed breakdowns of food safety concerns for that kitchen. The foodservice system describes the type of production. Consider whether your food production is a conventional full-service kitchen, a heat and serve system with pre-packed meals, a central production kitchen, or something else.

The meal delivery system describes where meals are served. Some questions to consider:
> Are meals served from a serving line, family style in a classroom, or other places in the school?
> How do you handle field trips?
> If used, how is breakfast-in-the-classroom served?

Equipment lists spell out the equipment available at the specific kitchen. List everything from storage, preparation, holding, service, and ware washing equipment. The key point for evaluation: does the equipment meet the needs of the school and keep the food safe? For example, does your refrigerator have adequate space to thaw food safely?

General conditions of the kitchen describe the need for repairs of equipment and the facility. For example, it is hard to keep flies out of the kitchen with holes in your window screens. Is the foundation old and cracked, allowing mice to come into the kitchen?

Menus and recipes will be categorized according to procedures and temperatures needed to keep them safe. Menus usually are different between elementary, middle, and high schools. The equipment needs to support the menu, customer size, and service type.

Clearly define the hours of operation to help with both food safety and food defense procedures. By clearly defining hours, any unusual activity may be easily noticed. Defined hours also help with planning deliveries.

Vendor delivery schedules describe what food is delivered directly to each kitchen or district warehouse and the usual time and date of delivery. This helps you know at-a-glance if school hours and delivery schedules overlap, so food is not left out on the delivery dock.

On-going staff training in food safety is essential to bring forward new concerns in food safety and remind staff of fundamental principles for keeping food safe. All staff, including kitchen supervisors, should have food safety training.

A good site description helps you see at-a-glance if you have potential problems at a school like:
> Are delivery companies dropping off when staff is not there to store food?
> Are deliveries of leafy greens being left on a hot dock at the warehouse?
> Is food being transferred to a school in a district van with no refrigeration?
> Is anyone trained in food safety in a kitchen?

SHOW SLIDE: *__Program Overview and School Site Descriptions Activity__*

Activity: Program Overview and School Site Descriptions

Materials:
- ❯ **Program Overview** template
- ❯ **School Site Description** template
- ❯ Pen or pencil
- ❯ Computer

Time: 45 minutes

Instructions:
1. Ask participants to turn to the **Program Overview** template in their Participant's Workbook or on their computer.
2. Give participants 15 minutes to complete the **Program Overview** template. Participants should think about their district and fill in the boxes with needed descriptions.
3. Then, have participants turn to or find the **School Site Description** templates.
4. Give participants 20 minutes to complete them.
5. For 10 minutes, discuss descriptions and ask participants if they have any general questions.

SAY: Please turn in your workbook to the **Program Overview** template or find the template of your computer. Think about your district and take a few minutes to fill in the boxes with needed descriptions.

DO: Give participants 15 minutes to fill out the Program Overview template. Make sure to walk around the room and be available to answer questions.

SAY: Once you have the information, you can turn it into a narrative cover page for your HACCP-based plan. A HACCP-based plan has a central office copy starting with a program overview and then a copy of each of the schools' HACCP-based plans. The school HACCP-based plan starts with a program overview followed by the school description, menu categorization, Standard Operating Procedures, and logs.

ASK: Are there important pieces missing in your description?

SAY: Please find the **School Site Description** templates in your Participant's Workbook or USB. Go through the first chart and fill it in for one of your schools. Do not worry if you do not have the details exactly right. Write a school description for each school. You can leave the information in a chart form for the school plans. You will have 20 minutes to fill in a couple of the school descriptions.

To help save time, copy and paste information from form to form on your USB. For example, if a district uses all the same vendors with the same delivery days for all sites, you could fill out the information on one site form then copy and paste the vendors for all the other schools in the district.

DO: Give participants 20 minutes to fill out the templates. Make sure to walk around to room and be available to answer questions.

SAY: Now, you have written out the broad scope of the district program description as well as the school site description, there may be some challenges you have noticed.

ASK:
> Do you think you can be off-site and complete the school description forms?
> Who could help you with this task?
> Any ideas for making this task accurate and easy?
> Any concerns or challenges you can think of with this task?

DO: Allow participants to ask questions; answer to the best of your ability. If you are unable to answer a question, write it down to submit to ICN.

ASK: Do you have any other time-saving tips you would like to share with the class?

SHOW SLIDE: *Lesson 1 Review*

SAY: We are now finished with the first lesson. We have covered:
> What is HACCP
> Why it is important to have a HACCP-based food safety plan for schools
> What prerequisite programs are needed when developing a food safety plan
> How to write an overview of the school nutrition program and a description of each school site

ASK: What questions do you have before we proceed?

LESSON-AT-A-GLANCE
LESSON 2 — CREATING YOUR FOOD SAFETY PLAN

TIME	TOPIC	ACTIVITY	MATERIALS
Objective: Examine and construct the components of a food safety plan.			
2 hours	› Develop, document, and implement SOPs › Identify and document all menu items › Identify and document control measures and critical limits › Establish monitoring procedures › Establish corrective actions › Keep records › Review and revise	› Adapting a Standard Operating Procedure › Standard Operating Procedure Checklist › Identify Critical Control Points in Recipe › Sorting Recipes into Process Approach Categories	› Personal Hygiene SOP (Sample) › Pen or pencil › Standard Operating Procedure Checklist › Computer › SOPs Needed for Food Safety Plan worksheet › The Process Approach handout › Chicken Alfredo with a Twist recipe › Identify Critical Control Points in Recipe Answer Key › Highlighter › Process Approach Category worksheet › Menus and recipes from school › Cooking and Reheating Temperature Log
Objective: Investigate the current resources available to assist in developing and updating a HACCP-based food safety plan.			
1 hour	› Select SOPs and logs to support HACCP-based plan › Create a Table of Contents	Organizing a Table of Contents	› Standard Operating Procedure Checklist › Computer › Sample Standard Operating Procedures and Logs List › Table of Contents worksheet › Pen or Pencils
3 hours			

» LESSON 2 — CREATING YOUR FOOD SAFTY PLAN

Instructor's Note: This lesson has a lot of content. Be mindful of participants sitting too long. Incorporate stretch breaks often to increase attention span and decrease fatigue.

SHOW SLIDE: *Lesson 2 – Creating Your Food Safety Plan*

SAY: In Lesson 1, we discussed the programs and processes that need to be in place before starting the development of a school-specific, HACCP-based food safety plan. For Lesson 2, we are going to walk through developing your plan. You will have several opportunities to build parts of your plan in this lesson. You will have a chance to complete any missed sections tomorrow.

SHOW SLIDE: *A HACCP-Based Food Safety Plan*

SAY: To create a HACCP-based food safety plan, a school nutrition program needs a written document for each site that includes methods to:
1. Develop, document, and implement SOPs
2. Identify and document all menu items
3. Identify and document control measures and critical limits
4. Establish monitoring procedures
5. Establish corrective actions
6. Keep records
7. Review and revise

All of these elements are required for the development of a complete HACCP-based food safety plan.

SHOW SLIDE: *Lesson 2 Objectives*

DO: Refer participants to the lesson objectives in the Participant's Workbook.

SAY: After this lesson, you will be able to:
> Write the components of a food safety plan.
> Review and discuss the current resources available to assist in developing and updating a HACCP-based food safety plan.

Objective: Examine and construct the components of a food safety plan.

SHOW SLIDE: *Hazard Analysis*

SAY: The first step is to thoroughly inspect your school nutrition operation and analyze it for hazards that are present in your operation. These hazards could be biological, such as bacteria from raw meat; chemical, such as sanitizer being stored above food in the dry storage; and physical, such as fingernail polish from an employee. It is important to consider your entire foodservice production from delivery to service for any potential hazards.

SHOW SLIDE: *1. Develop, Document, and Implement SOPs*

SAY: Standard Operating Procedures (SOPs) are written practices and procedures for producing safe food. They address basic sanitation procedures for each step in the foodservice process (purchasing, receiving, storing, preparing, cooking, serving and holding, cooling, reheating, and transporting). Standard Operating Procedures provide the foundation for the food safety program and include the following information:
- Title
- Purpose of SOP
- Instructions
- Temperature control points
- Monitoring procedures
- Corrective actions
- Suggested recordkeeping documents
- Verification procedures

They cover daily, routine foodservice tasks such as personal hygiene, dishwashing, and cooking procedures. Each SOP includes instructions, monitoring and documentation procedures, corrective actions, verification, and date implemented. Schools need to tailor SOPs to individual sites; otherwise, SOPs may not match the aspects of the school nutrition program, such as equipment and supplies available. Staff should be trained on SOPs and follow them to help reduce the risk of foodborne illness.

SHOW SLIDE: *Adapting a Standard Operating Procedure Activity*

Activity: Adapting a Standard Operating Procedure

Materials:
• **Personal Hygiene SOP (Sample)**
• Pens or pencils

Time: 15 minutes

Instructions:
1. Have participants turn to the **Personal Hygiene SOP (Sample)** in their Participant's Workbook.
2. Walk participants through the different sections of the SOP.
3. When prompted by the script, ask participants to review a section to see if it would need to be adapted for their school site. Have a few participants share their adaptions.

SAY: Please turn to the **Personal Hygiene SOP (Sample)** in the Participant's Workbook. We will use this SOP as a reference to discuss the different sections of information needed in a SOP.

❯❯ PERSONAL HYGIENE SOP (SAMPLE)

PURPOSE: To prevent the contamination of food by school nutrition employees.

SCOPE: This procedure applies to school nutrition employees who handle, prepare, or serve food.

KEY WORDS: Personal Hygiene, Cross-Contamination, Contamination

INSTRUCTIONS:
1. Train school nutrition employees on using the procedures in this SOP.
2. Follow State or local health department requirements.
3. Follow the Employee Health Policy. (Employee Health Policy is not included in this resource.)
4. Report to work in good health, clean, and dressed in clean attire. Report any illnesses to your manager.
5. Change apron when it becomes soiled.
6. Wash hands properly, frequently, and at the appropriate times.
7. Keep fingernails trimmed, filed, and maintained.
8. Do not wear artificial fingernails and fingernail polish.
9. Wear single-use gloves if artificial fingernails or fingernail polish are worn.
10. Do not wear any jewelry except for a plain ring, such as a wedding band.
11. Treat and bandage wounds and sores immediately. When hands are bandaged, single-use gloves must be worn.
12. Cover a lesion containing pus with a bandage. If the lesion is on a hand or wrist, cover with an impermeable cover such as a finger cot or stall and a single-use glove. Show a supervisor any lesion before working.
13. Eat, drink, or chew gum only in designated break areas where food or food contact surfaces may not become contaminated.
14. Taste food the correct way:
    - ❯ Place a small amount of food into a separate container.
    - ❯ Step away from exposed food and food contact surfaces.
    - ❯ Use a teaspoon to taste the food. Remove the used teaspoon and container to the dish room. Never reuse a spoon that has already been used for tasting.
    - ❯ Wash hands immediately.
15. Wear suitable and effective hair restraints while in the kitchen.

MONITORING:
1. The kitchen supervisor will inspect employees when they report to work to be sure that each employee is following this SOP.
2. The kitchen supervisor will monitor that all school nutrition employees are adhering to the personal hygiene policy during all hours of operation.

CORRECTIVE ACTION:
1. Retrain any school nutrition employee found not following the procedures in this SOP.
2. Discard affected food.

RECORDKEEPING AND VERIFICATION:
The school nutrition manager will verify that school nutrition employees are following this SOP by visually observing the employees during all hours of operation. The school nutrition manager will complete the Food Safety Checklist daily. School nutrition employees will record any discarded food on the Damaged or Discarded Product Log. The Food Safety Checklist and Damaged or Discarded Product Logs are to be kept on file for a minimum of 1 year. Contact your State agency for retention guidelines specific to your state.

DATE IMPLEMENTED: _____ BY: _____

DATE REVIEWED: _____ BY: _____

DATE REVISED: _____ BY: _____

SAY: The purpose statement indicates why the Standard Operating Procedure is important and how it fits into the food safety program. On the **Personal Hygiene SOP (Sample)**, you can see that the purpose of this SOP is to prevent contamination of food by school nutrition employees.

The *scope* of the SOP details people, activities, and equipment to which the SOP would pertain.

The *key words* provide an at-a-glance idea of the topics covered in the SOP.

The *instructions* provide a step-by-step description of procedures that should be followed. As you can see with the **Personal Hygiene SOP (Sample)**, 15 detailed steps describe different procedures for effective personal hygiene in a school nutrition operation.

ASK: It is important to tailor SOPs for your school's nutrition program. Is there anything in the instructions that your school would need to add or take off this list?

FEEDBACK:
  › District uniform policy
  › Food code to follow

DO: Give participants a couple of moments to think and answer.

SAY: Good answers! This is a place where you pull in your district uniform policy and edit the SOP for your operation.

Monitoring is the process of ensuring an operation is following Standard Operating Procedures and meeting important times and temperatures for food. Documenting times and temperatures is part of the monitoring process. For personal hygiene, the manager, supervisor, or appointed leader is responsible for checking to make certain the operation is following personal hygiene instructions throughout the workday.

ASK: Are there any monitoring procedures that your school would need to add or take off this list?

FEEDBACK:
> Scheduled and unscheduled visits to observe practices
> Self-reporting on needed training

DO: Give participants a couple of moments to think and answer.

SAY: Good answers! *Corrective actions* are specific, pre-planned actions that must be taken if a Standard Operating Procedure is not followed or if a time/temperature is not met. For example, if a cooking temperature is not met, additional cooking would be needed. For personal hygiene, corrective action may include retraining an employee who is out of compliance and/or discarding food that was handled by an employee not following correct personal hygiene procedures. Make sure your employees know the corrective actions for each procedure.

ASK: Are there any corrective actions that your school would need to add or take off this list?

FEEDBACK: Train employees for incorrect personal hygiene observed.

DO: Give participants a couple of moments to think and answer.

SAY: Good answers! *Recordkeeping* is needed to document monitoring and corrective actions taken. Refer to your State agency for retention timeframes for recordkeeping. Make a plan for organizing and storing records. Let's return to the SOP for personal hygiene; recordkeeping can be accomplished using a log or employee training sign-in sheet.

ASK: Are there any recordkeeping procedures that your school would need to add or take off this list?

FEEDBACK: Training record for employees who were retrained

DO: Give participants a couple of moments to think and answer.

SAY: Good answers! *Verification* is the procedure that confirms that a food safety program is working according to plan. The supervisor or kitchen manager plays an important role in verification by checking and ensuring that monitoring and documentation are done. The verification process will identify changes that need to be made in the food safety program so that it will be effective. For personal hygiene, the school nutrition manager or director verifies that all employees are following good personal hygiene practices.

ASK: Are there any verification procedures that your school would need to add or take off this list?

FEEDBACK: Make sure supplies are available to practice good personal hygiene, such as hand soap, paper towels, single-use gloves, etc.

DO: Give participants a couple of moments to think and answer.

SAY: The Institute of Child Nutrition provides a variety of sample SOPs like the **Personal Hygiene SOP (Sample)**. To find them on the ICN website, visit the Food Safety Resources page (www.theicn.org/foodsafety). As we have mentioned, it is essential to tailor SOPs to your school nutrition program and specific school. For example, if your operation has only had a three-compartment sink, it would not be necessary to have information on using a dishmachine in your cleaning and sanitizing SOP. ICN makes them available in Word for this purpose. You also need to revisit your food safety plan regularly to verify that the components are still relevant to your school nutrition program. Train all school employees on SOPs annually to help them understand their responsibilities in maintaining a safe food environment.

SHOW SLIDE: ***Standard Operating Procedure Checklist Activity***

Activity: Standard Operating Procedure Checklist

Materials:
> **Standard Operating Procedure Checklist**
> **SOP Needed for Food Safety Plan** worksheet
> Pens or pencils
> Computer

Time: 20 minutes

Instructions:
1. Have participants find the **Standard Operating Procedure Checklist**.
   > Participants were asked to complete this checklist before attending the workshop.
   > For those who have completed it, have them review the list for hazards and confirm whether they have an SOP in place for that hazard.
   > If a participant did not complete the checklist, allow them to fill it out during this time. They will have time in the afternoon to complete this activity.
2. Give participants 20 minutes to make a list of all the SOPs needed for their program on the **SOPs Needed for Food Safety Plan** worksheet.

SAY: Please find the **Standard Operating Procedure Checklist**. You were sent this checklist to complete before attending the workshop. If you did not complete the checklist, please take this time to complete it. You will have time this afternoon to finish this activity. A copy is also in your Participant's Workbook and on your computer.

The checklist walks you through your school nutrition operation, looking for potential hazards. To complete your checklist, please read each step and determine if you have a SOP to cover this hazard or process. Place a check next to the hazards where you are missing a SOP. Create a list of all the SOPs needed for your food safety plan on the **SOPs Needed for Food Safety Plan** worksheet.

DO: Give participants 20 minutes to write their SOPs list on the **SOPs Needed for Food Safety Plan** worksheet or fill out the **Standard Operating Procedure Checklist**. Be sure to walk around the room to be available for questions.

❯❯ STANDARD OPERATING PROCEDURE CHECKLIST

Date: _____ Observer: _____

Directions: Use this checklist to evaluate your foodservice for potential hazards. Check "yes" if you have a Standard Operating Procedure to address the hazard; check "no" if you need to add a Standard Operating Procedure to your food safety plan.

PURCHASING	YES	NO	N/A	SOP NEEDED
Purchased food only from licensed vendors	☐	☐	☐	_____
When purchasing from local growers, producers are providing food safety assurance	☐	☐	☐	_____
Meat and poultry inspected by USDA or appropriate State agencies	☐	☐	☐	_____
	☐	☐	☐	_____
Purchased only pasteurized milk, juice, and cider	☐	☐	☐	_____
Inspected food delivery trucks for cleanliness and temperature control	☐	☐	☐	_____
Written specifications used to determine the quality, packaging, and quantity of products	☐	☐	☐	_____

RECEIVING	YES	NO	N/A	SOP NEEDED
Products evaluated to ensure they match order specifications and quality	☐	☐	☐	_____
The temperature of refrigerated and frozen foods taken and recorded	☐	☐	☐	_____
Packaging checked for damage and protection of the food	☐	☐	☐	_____
Rejected any food that does not meet quality or temperature standards	☐	☐	☐	_____
Time and temperature control for food safety (TCS) foods are stored immediately and kept out of the temperature danger zone	☐	☐	☐	_____
All food or food packaging dated with the date received	☐	☐	☐	_____

STORAGE

REFRIGERATORS, FREEZERS, MILK COOLERS

	YES	NO	N/A	SOP NEEDED
Thermometers are available and accurate	☐	☐	☐	_____
Temperature is appropriate for pieces of equipment	☐	☐	☐	_____
Food is stored at least 6 inches above the floor or in walk-in cooling equipment	☐	☐	☐	_____
Refrigerator and freezer units are clean and neat	☐	☐	☐	_____
All food is properly wrapped, labeled, and dated	☐	☐	☐	_____
Using FIFO (First-In, First-Out) method of inventory management	☐	☐	☐	_____
The ambient air temperature of all refrigerators and freezers monitored and documented at least at the beginning and end of each shift	☐	☐	☐	_____

FOOD STORAGE AND DRY STORAGE

	YES	NO	N/A	SOP NEEDED
The temperature of the dry storage area is between 50 °F and 70 °F or state public health department requirement	☐	☐	☐	_____
All food and paper supplies stored at least 6 inches above the floor	☐	☐	☐	_____
All food labeled with name and received date	☐	☐	☐	_____
Open bags of food stored in containers with tight-fitting lids and labeled with the common name; TCS and ready-to-eat (RTE) foods date-marked	☐	☐	☐	_____
Using FIFO (First-In, First-Out) method of inventory management	☐	☐	☐	_____
There are no bulging or leaking canned goods	☐	☐	☐	_____
Food protected from contamination	☐	☐	☐	_____
All food surfaces are clean	☐	☐	☐	_____
Chemicals clearly labeled and stored away from food and food-related supplies	☐	☐	☐	_____
There is a regular cleaning schedule for all food surfaces	☐	☐	☐	_____
Food stored in the original container or a food-grade container	☐	☐	☐	_____

FOOD PRODUCTION

	YES	NO	N/A	SOP NEEDED
All food stored or prepared in the facility is from approved sources	☐	☐	☐	_____
Food equipment, utensils, and food contact surfaces are properly washed, rinsed, and sanitized before every use	☐	☐	☐	_____

	YES	NO	N/A	SOP NEEDED
Frozen food thawed under refrigeration, cooked to proper temperature from a frozen state, or thawed in cold running water	☐	☐	☐	_____
Food preparation planned, so ingredients are kept out of the temperature danger zone to the extent possible	☐	☐	☐	_____
Food tasted using the proper procedure	☐	☐	☐	_____
Procedures are in place to prevent cross-contamination	☐	☐	☐	_____
Food handled with suitable utensils, such as single-use gloves or tongs	☐	☐	☐	_____
Food is prepared in small batches to limit the time it is in the temperature danger zone	☐	☐	☐	_____
Clean reusable towels used only for sanitizing equipment and surfaces and not for drying hands, utensils, or floor	☐	☐	☐	_____
Food cooked to the required safe internal temperature for the appropriate time; test temperature with calibrated food thermometer	☐	☐	☐	_____
The internal temperature of cooking food is monitored and documented	☐	☐	☐	_____

HOLDING

HOT HOLDING

	YES	NO	N/A	SOP NEEDED
Hot holding unit is clean	☐	☐	☐	_____
Heat food to the required safe internal temperature before placing it in hot holding	☐	☐	☐	_____
Hot holding units are not used to reheat time/temperature control for safety foods	☐	☐	☐	_____
Hot holding unit is pre-heated before hot food placed in the unit	☐	☐	☐	_____
The temperature of hot food held is at or above 135°F	☐	☐	☐	_____
Food protected from contamination	☐	☐	☐	_____

COLD HOLDING

	YES	NO	N/A	SOP NEEDED
Refrigerators kept clean and organized	☐	☐	☐	_____
The temperature of cold food held is at or below 41 °F	☐	☐	☐	_____
Food protected from contamination	☐	☐	☐	_____

TRANSPORTING FOOD

	YES	NO	N/A	SOP NEEDED
Truck used for transporting food is neat and clean	☐	☐	☐	_____
Evaluated transported food for tampering at the pickup and delivery site	☐	☐	☐	_____
Covered food during transport	☐	☐	☐	_____
Food transported in equipment to maintain temperature and prevent cross-contamination and cross-contact	☐	☐	☐	_____
The temperature recorded at loading	☐	☐	☐	_____
The temperature recorded at delivery	☐	☐	☐	_____
Hot food temperature maintained at 135 °F or higher	☐	☐	☐	_____
Cold Food temperature maintained at 41 °F or lower	☐	☐	☐	_____
Separated chemicals transported to sites from food and paper goods	☐	☐	☐	_____

SERVING FOOD

	YES	NO	N/A	SOP NEEDED
Use of disposable dishes	☐	☐	☐	_____
Temperature of food recorded before service	☐	☐	☐	_____
Temperature of food recorded during service	☐	☐	☐	_____
No bare hand contact with food during service	☐	☐	☐	_____
Hot food served at 135 °F or higher	☐	☐	☐	_____
Cold food served at 41 °F or lower	☐	☐	☐	_____
Monitored temperature of TCS foods for field trips	☐	☐	☐	_____
Monitored temperature of TCS foods served in the classroom	☐	☐	☐	_____
Monitored food returned for a share table for temperature and cross-contamination	☐	☐	☐	_____

COOLING FOOD

	YES	NO	N/A	SOP NEEDED
Cooled leftover food to 70 °F within 2 hours, and less than 41 °F in an additional 4 hours	☐	☐	☐	_____
All leftover food is covered, dated, and labeled	☐	☐	☐	_____
A policy for reserving leftover food is in place	☐	☐	☐	_____

REHEATING FOOD

	YES	NO	N/A	SOP NEEDED
Reheated hot food to 165 °F for 15 seconds in less than 2 hours	☐	☐	☐	_____
Policy for discarding reheated food is in place	☐	☐	☐	_____

CLEANING AND SANITIZING

UTENSILS AND EQUIPMENT	YES	NO	N/A	SOP NEEDED
Three-compartment sink is properly set up for ware washing	☐	☐	☐	_____
Dishmachine is working properly (gauges and chemicals are at recommended levels and checked for accuracy)	☐	☐	☐	_____
Water is clean and free of grease and food particles	☐	☐	☐	_____
Water temperatures are correct for washing and rinsing	☐	☐	☐	_____
All small equipment and utensils, including cutting boards and knives, are cleaned, sanitized, and allowed to air dry before use	☐	☐	☐	_____
For heat sanitizing, the utensils are immersed in 171 °F water for 30 seconds	☐	☐	☐	_____
For chemical sanitizing, sanitizer mixed correctly, and a sanitizer strip used to test chemical concentration	☐	☐	☐	_____
Stored wiping cloths in sanitizing solution while in use	☐	☐	☐	_____
Work surfaces cleaned and sanitized before use	☐	☐	☐	_____
Thermometers cleaned and sanitized before and after each use	☐	☐	☐	_____
Thermometers calibrated on a routine basis	☐	☐	☐	_____
Cleaned and sanitized the can opener before use	☐	☐	☐	_____
Cleaned and sanitized drawers and racks before use	☐	☐	☐	_____
Clean utensils handled in a manner to prevent contamination of areas that will be in direct contact with food or a person's mouth	☐	☐	☐	_____

LARGE EQUIPMENT	YES	NO	N/A	SOP NEEDED
Cleaned and sanitized the food slicer after every use	☐	☐	☐	_____
Exhaust hoods and filters are clean	☐	☐	☐	_____

GARBAGE STORAGE AND DISPOSAL	YES	NO	N/A	SOP NEEDED
Kitchen garbage cans are clean and kept covered	☐	☐	☐	_____
Emptied garbage cans as necessary, at least daily	☐	☐	☐	_____
Removed boxes and containers from the site	☐	☐	☐	_____
Loading dock and area around dumpster are clean and dumpsters have tight-fitting lids	☐	☐	☐	_____

PEST CONTROL	YES	NO	N/A	SOP NEEDED
Outside doors (1) have screens, (2) are well sealed, and (3) are equipped with self-closing devices	☐	☐	☐	_____
No evidence of pests is present	☐	☐	☐	_____

PERSONAL HYGIENE	YES	NO	N/A	SOP NEEDED
Employees wear clean and proper uniform, including shoes	☐	☐	☐	_____
Effective hair restraints are properly worn	☐	☐	☐	_____
Fingernails are short, unpolished, and clean (no artificial nails)	☐	☐	☐	_____
Jewelry is limited to a plain ring, such as a wedding band	☐	☐	☐	_____
Hands are washed properly, frequently, and at appropriate times	☐	☐	☐	_____
Burns, wounds, splints, sores, scabs, and waterproof bandages on hands are bandaged and completely covered with a single-use glove while handling food	☐	☐	☐	_____
Eating, drinking, and chewing gum allowed only in designated areas	☐	☐	☐	_____
Employees use disposable tissues when coughing or sneezing and then immediately wash their hands	☐	☐	☐	_____
Employees appear in good health	☐	☐	☐	_____
Hand sinks are unobstructed, operational, and clean	☐	☐	☐	_____
Stocked hand sinks with soap, disposable towels, and warm water	☐	☐	☐	_____
Posted a handwashing reminder sign	☐	☐	☐	_____
Employee restrooms are operational and clean	☐	☐	☐	_____
Policy for visitors in the kitchen	☐	☐	☐	_____

OTHER	YES	NO	N/A	SOP NEEDED
Procedures for a food recall	☐	☐	☐	_____
Emergency meal plan	☐	☐	☐	_____
Procedures in the event of foodborne illness	☐	☐	☐	_____
Special dietary needs (ex. food allergies)	☐	☐	☐	_____
Food defense (different plan but incorporate basics)	☐	☐	☐	_____
Facility security	☐	☐	☐	_____
Securing prepared food	☐	☐	☐	_____
Securing stored food				

⏩ SOPS NEEDED FOR FOOD SAFETY PLAN

Instructions: Write down the food safety topics for which you need to find and/or create an SOP.

1.

2.

3.

SAY: In your plan, you can use SOPs you already have in use, write missing SOPs, or use SOPs from ICN, State agencies, or extension services. To help identify SOPs that control various hazards, a second **Standard Operating Procedure Checklist** is included in your Participant's Workbook. A list of resources with school nutrition services SOPs is also available.

At the end of the checklist, you will notice the mention of an emergency plan, food defense plan, and special dietary needs. We will discuss emergency and food defense plans tomorrow and how you can use your food safety plan to help build them. ICN has several trainings and educational resources available about food allergies and how to create a food allergy action plan. All food allergy resources, including face-to-face trainings for directors and managers/ staff, self-paced online courses, fact sheets, videos, and posters, can be found at theicn.org/foodsafety web page.

SHOW SLIDE: *2. Identify and Document All Menu Items*

SAY: The Food and Drug Administration (FDA) developed the Process Approach for implementing HACCP programs. USDA adopted the Process Approach for school nutrition programs. Since Federal law requires school nutrition programs to have in place a written food safety plan based on HACCP principles, the Process Approach can help determine where hazards may exist.

SHOW SLIDE: *Process Approach Categories*

SAY: The Process Approach categorizes menu items into three broad preparation processes based on the number of times food passes through the temperature danger zone. The three categories are No Cook, Same Day Service, and Complex. No Cook menu items never pass through the temperature danger zone. Same Day Service items pass through the temperature danger zone once. Complex food items pass through the temperature danger zone at least twice but may pass through it more. School nutrition employees must monitor and control food temperatures at various steps in the foodservice process to ensure food safety. We will now take a more in-depth look at the different categories of menu items.

DO: Refer participants to **The Process Approach** handout.

SAY: Please turn to **The Process Approach** handout in your Participant's Workbook. Please follow along as we discuss the different categories of the Process Approach.

THE PROCESS APPROACH

PROCESS APPROACH CATEGORY	TEMPERATURE DANGER ZONE (TDZ)	IMPORTANT TEMPERATURES	SPECIFIC BEST PRACTICES	GENERAL BEST PRACTICES
No Cook	Food does not go through the TDZ.	Food must be kept at or below 41 °F.	› Follow standardized recipes. › Verify food temperatures during cold holding.	› Purchase foods from approved sources. › Receive foods properly. › Store foods properly, including separating food from chemicals. › Use good personal hygiene. › Follow proper handwashing practices. › Prevent cross-contamination. › Limit time food is held in the temperature danger zone. › Use a sanitized, calibrated thermometer to take food temperatures. › Serve food so that there is no bare hand contact. Use appropriate utensils, deli paper, or single-use gloves. › Restrict ill employees from working with food.
Same Day Service	Food goes through the TDZ once.	› Heat food to the required internal temperature.	Verify food temperatures during cooking and hot holding.	
Complex	Food goes through the TDZ two or more times.	*Two times through TDZ* › Cook food to the required internal temperature. › Cool food using proper cooling methods. *Three times through TDZ* › Cook food. › Cool food. › Reheat food to 165 °F for at least 15 seconds. › Hold food at 135 °F or above.	Verify food temperatures during cooking, cooling, reheating, and hot holding.	

SAY: No Cook menu items do not enter the temperature danger zone. As you can see on the slide, leafy greens salad would be an example of a No Cook category item. Lettuce salad is not cooked, and, therefore, does not pass through the temperature danger zone. The CCP for the leafy greens salad would be at the holding step, where the temperature needs to be kept at 41 °F or below. Another example of this would be cut tomatoes for a salad bar. The cut tomatoes are stored and served cold. It is essential to keep No Cook food items at 41 °F or below.

Menu items in the No Cook process do not go through the temperature danger zone. These are items such as deli sandwiches and salads that are prepared and served cold. It is important to follow standardized recipes and good food safety practices to keep food safe.

ASK: What menu items in your school nutrition program are classified as No Cook foods?

FEEDBACK:
›Cold sandwiches
›Romaine salad
›Cut melon

SAY: Same Day Service menu items enter the temperature danger zone one time. These foods are prepared hot and served hot on the same day. They pass through the temperature danger zone while they are being prepared. An example of a Same Day Service food item would be baked chicken breast. There would be two CCPs. They are cooked to 165 °F, passing through the temperature danger zone. The chicken would then be held for serving at 135 °F or above to make sure they do not fall into the temperature danger zone.

Menu items in the Same Day Service process go through the temperature danger zone one time as they are cooked and served on the same day. These are items such as hamburgers, pizza, chicken nuggets, and scrambled eggs.

ASK: What are some menu items in your school nutrition program that would be classified as Same Day Service foods?

FEEDBACK:
›Hamburgers
›Hot sandwiches
›Pizza

SAY: Complex menu items pass through the temperature danger zone at least twice but possibly more times depending on how the food is prepared. These food items may be prepared hot and then cooled, but they may also be reheated, which would take them through the temperature danger zone a third time. An example would be beef and bean tamale pie. This food item travels through the temperature danger zone three times as it is cooked, cooled, and reheated. There are four CCPs for this food item at the cooking, cooling, reheating, and holding steps.

Menu items in the complex process go through the temperature danger zone two or more times. These menu items may be cooked and cooled but may also be reheated and held hot. Examples of these items will vary in different schools but may include turkey roasts, taco meat, chili, and leftovers.

It is important to note that the same menu items may be grouped into different processes, depending on how the item is prepared and the available equipment. For example, chili can be a Complex process item in one school nutrition program and a Same Day Service process item in another program.

ASK: What are some menu items in your school nutrition program that would be classified as Complex Process foods?

FEEDBACK:
> Lasagna
> Turkey roast that is cooled and used on sandwiches
> Leftovers

SAY: Depending on your school nutrition program, the same recipe may fall into different categories. Preparation steps or equipment used may change the process for foods considered Same Day Service in some schools and Complex in other schools. For example, chili prepared with dried beans that are cooked the day before, cooled, and then reheated the next day for service would be considered a Complex food. However, if the chili recipe uses canned beans and everything is cooked for service the same day, it would be considered a Same Day Service process food item.

SHOW SLIDE: *3. Identify and Document Control Measures and Critical Limits*

SAY: Measures are put into place to address the hazards determined in the hazard analysis and to prevent them. Each step has key points that, if properly controlled, will prevent a hazard(s). The key point is called a critical control point. A critical control point (CCP) is a crucial point to prevent, eliminate, or reduce a food safety hazard and is one of the key applications of HACCP principles. An example would be checking the final internal cooking temperature of ground beef.

A critical limit (CL) is a minimum or maximum limit that must be met to prevent or eliminate the hazard. For example, you identify that a recipe contains raw ground beef; this means there is a potential bacterial hazard from undercooked meat, causing a foodborne illness. This becomes a critical control point for this recipe. The critical limit for this recipe is that ground beef must be cooked to a minimum of 155 °F to ensure it reaches the appropriate internal temperature to kill the bacterial hazard. Multiple CCPs and CLs may be in different parts of the same recipe.

Sorting menu items into the Process Approach Categories assists in determining the CCPs for that item. Instead of determining CCPs and CLs for each food, there are CCPs and CLs for each Process Approach Category. All menu items in the Process Approach Category will have similar CCPs and CLs.

SHOW SLIDE: *Control Measures – No Cook*

SAY: The critical control point for No Cook menu items is cold holding. The critical limit is keeping food at 41 °F or colder.

SHOW SLIDE: *Process 1: No Cook – Fruit Salad*

SAY: As you can see on the slide, the temperature control for the fruit salad is cold holding it at 41 °F or below.

SHOW SLIDE: <u>***Control Measures – Same Day Service***</u>

SAY: For Same Day Service menu items, there are two critical control points: cooking and hot holding.

SHOW SLIDE: <u>***Process 2: Same Day – Baked Chicken***</u>

SAY: As you can see on the slide, temperature control is marked for both cooking and holding the baked chicken. Cook food to its proper internal temperature. This temperature will change depending on the food. It is determined by the temperature needed to eliminate bacteria commonly associated with that food item. For hot holding, hold hot food at 135 °F or higher to keep food out of the temperature danger zone.

SHOW SLIDE: <u>***Control Measures – Complex***</u>

SAY: For Complex menu items, there can be four possible critical control points: cooking, cooling, reheating, and hot holding.

SHOW SLIDE: <u>***Process 3: Complex – Beef and Bean Tamale Pie***</u>

SAY: As you can see on the slide, temperature controls for beef tamale pie are cooking, cooling, reheating, and hot holding.

Another example could be turkey roasts that are cooked and then cooled and sliced to put on sandwiches. The turkey passes through the temperature danger zone twice – once during cooking and once during cooling. Each step has a critical limit on keeping the food safe. Cook food to its proper internal temperature. Cool food safely to 70 °F in 2 hours and then to 41 °F within an additional 4 hours. When reheating food, food must reach 165 °F for at least 15 seconds within 2 hours of starting the reheating process. This is to get food through the temperature danger zone safely. Once again, hold hot food at or above 135 °F.

SHOW SLIDE: <u>***Identify Critical Control Points in Recipe Activity***</u>

Activity: Identify Critical Control Points in Recipe

Materials:
> **Chicken Alfredo with a Twist** recipe
> **Identify Critical Control Points in Recipe Answer Key**
> Highlighter

Time: 5 minutes

Instructions:
   1. Have participants turn to the **Chicken Alfredo with a Twist** recipe in the Participant's Workbook.
   2. Take 2–3 minutes to talk through the recipe; point out the Process Approach category, then identify the critical control points (CCP). Have participants highlight the CCPs.
   3. Ask volunteers to explain why each CCP is there.
      > The answers are in the **Identify Critical Control Points in Recipe Answer Key**.

SAY: Please turn in your Participant's Workbook to the **Chicken Alfredo with a Twist** recipe. We are going to take a moment and identify the critical control points. Highlight the ones that you find. In the top right corner, it says the Process Approach Category is Same Day Service. As we have learned, this means the food is cooked and served in one day, meaning it will go through the temperature danger zone one time.

DO: Take 1–2 minutes to identify CCPs for the **Chicken Alfredo with a Twist** recipe.

CHICKEN ALFRADO WITH A TWIST

INGREDIENTS	50 SERVINGS		100 SERVINGS		PROCESS #2: SAME DAY SERVICE
DIRECTIONS	WEIGHT	MEASURE	WEIGHT	MEASURE	
Water		6 gal		12 gal	1. Heat water to a rolling boil.
Rotini pasta, whole grain, dry	4 lb	5 qt 1½ cups	8 lb	2 gal 2¾ qt	2. Slowly add pasta. Stir constantly until water boils again. Cook about 8 minutes or until al dente; stir occasionally. DO NOT OVERCOOK. Drain well. 3. Pour into steam table pans (12" x 20" x 4"). For 50 servings, use 2 pans. For 100 servings, use 4 pans.
					Critical Control Point: Hold pasta at 135 °F or higher.
Low-fat, reduced-sodium cream of chicken soup, condensed	9 lb 6 oz	1 gal ¾ qt (3 No. 3 cans)	18 lb 12 oz	2 gal 1½ qt (6 No. 3 cans)	4. Combine soup, half and half, pepper, garlic, Parmesan cheese, and chicken. Cook over medium heat for 5–10 minutes, stirring often.
					Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.
Fat-free half and half		3 qt		1 gal 2 qt	
Ground white pepper		2 tsp		1 Tbsp 1 tsp	
Garlic powder		1 tsp		2 tsp	
Parmesan cheese, grated	1 lb 1 oz	1½ qt	2 lb 2 oz	3 qt	
Frozen, cooked diced chicken, thawed, ½" pieces	6 lb 8 oz	1 gal 1¼ qt	13 lb	2 gal 2½ qt	5. Combine noodles and sauce immediately before serving.
					6. Critical Control Point: Hold for hot service at 135 °F or higher.
					7. Portion with 8 fl oz spoodle (1 cup).

SAY: Good job finding all three CCPs.

ASK: Can someone explain why each of these CCPs is necessary for this recipe?

DO: Use the **Identify Critical Control Points in Recipe Answer Key** to provide answers.

➤ IDENTIFY CRITICAL CONTROL POINTS IN RECIPE ANSWER KEY

STEP	CCP	WHY CCP IS NEEDED
3	Critical Control Point: Hold pasta at 135 °F or higher.	Keep pasta out of the temperature danger zone after cooking.
4	Critical Control Point: Heat to 165 °F or higher for at least 15 seconds.	Cook chicken to proper internal temperature.
6	Critical Control Point: Hold for hot service at 135 °F or higher.	Keep food hot to hold food out of the temperature danger zone.

ASK: What are some potential critical control points you can think of in your school nutrition program? What are some critical limits you would put into place to eliminate them?

FEEDBACK:
> Delivered cold food:
  • CCP: If cold food is delivered in the temperature danger zone, there is the potential for bacterial growth.
  • Critical limit: Cold food must be delivered at 41 °F or below.
> Hot holding foods before service:
  • CCP: Food held in the temperature danger zone allows bacterial growth.
  • Critical limit: Keep hot food at 135 °F or higher to keep it out of the temperature danger zone.

SHOW SLIDE: *Sorting Recipes into Process Approach Categories Activity*

Activity: Sorting Recipes into Process Approach Categories

Materials:
> **Process Approach Category** worksheet
> Menus/recipes from participant's school
> Pens or pencils
> Computer

Time: 35 minutes

Instructions:
1. Participants will use their menus and recipes brought from their schools and the **Process Approach Category** worksheet for this activity. Participants can use their workbook or computer.
2. Participants will decide based on the processes used in their school nutrition operation which Process Approach Category each menu item should be categorized. Examples are provided on the handout.
3. Participants will have 30 minutes to complete this activity.
4. Ask for volunteers to share a menu item and its Process Approach Category.

❯❯ PROCESS APPROACH CATEGORY

Instructions: Using your school menus, decide, based on the processes used in your school nutrition operation, which Process Approach Category the food item should be categorized. Examples are provided to get you started.

MENU ITEM	NO COOK	SAME DAY SERVICE	COMPLEX FOOD
Peas and Carrots		X	
Romaine Salad	X		
Lasagna			X
Spaghetti w/ Meat Sauce		X	X

SAY: Please turn in your Participant's Workbook to the **Process Approach Category** worksheet. You will need your school menu and recipes for this activity. You will have 30 minutes to sort each menu item into a Process Approach Category based on the processes used in your school nutrition operation. A few examples are provided for you on the handout. Please let me know if you have any questions about which menu category to use for your items.

DO: Allow participants 30 minutes to sort their menu items. Walk around the room to be available to answer questions. After 30 minutes, ask for volunteers to share a food item and its Process Approach category.

SAY: Good job on this activity! Regardless of what category the food item falls into, it is important to follow standardized recipes and monitor and control food temperatures to maintain food safety. Remember to modify instructions for recipes to incorporate the HACCP plan by including critical control points. The CCPs should be obvious so that employees can easily identify them.

SHOW SLIDE: *4. Establish Monitoring Procedures*

SAY: Established critical control points and critical limits reduce or eliminate the time and temperature hazards. After figuring out where hazards exist and how to control them, it is essential to create a monitoring program. Monitoring helps you follow through on CCPs and SOPs. It involves procedures such as taking temperatures and doing observations to see that the food safety plan is being followed.

Returning to our earlier example of raw ground beef in a recipe, an employee should monitor the food during cooking by using a thermometer to ensure that the temperature reaches 155 °F. Another example would be the CCP for a No Cook menu item, cold holding. A monitoring procedure could read:
> How will you monitor?
> > • Check that the refrigerator temperature is 41 °F or lower
> When and how often will you monitor?
> > • Two times daily; at the beginning of the workday before meal prep and after serving the meal and putting away leftovers
> Who will be responsible for monitoring?
> > • Cafeteria manager

SHOW SLIDE: *5. Establish Corrective Procedures*

SAY: When a CCP is not met, corrective action must be done immediately. This preventative approach is the heart of HACCP. Corrective action is a procedure that will correct a process that monitoring has found to be out of compliance. The corrective action will prevent the food safety hazard. Employees need to know what these corrective actions are.

An example of corrective action would be employees checked a milk cooler, and the temperature was 46 °F. Coolers need to be 41 °F or below, and the cooler temperature log said that the last temperature was recorded the day before at the end of the day. The log had CCPs and a corrective action written on the form. If the temperature is above 41 °F, take the following corrective action:
1. Check a carton of milk, and if it registers 42 °F or above, do not serve the milk.
2. Call the manager for replacement milk and equipment repair.
3. Mark all the milk in the cooler as BAD, do not use, or discard as instructed.

Another example: if during the monitoring process it is determined that the ground beef has only reached 145 °F during cooking, the corrective action is to return the food to the oven to continue cooking until it has reached the required temperature.

SHOW SLIDE: *6. Keep Records*

SAY: Keeping and reviewing records of your food safety plan provides a method for checking or verifying that the food safety plan is working. It is vital to write down all monitoring performed and corrective actions that are taken. Documentation of food safety practices is important. In the case of a foodborne illness outbreak, if it is not recorded, it did not happen. Documentation of procedures also helps when trying to determine the cause of foodborne illness or allergic reaction.

Keep documentation as simple as possible. For example, have a place to record receiving temperatures on food delivery invoices. Make a section on the food production log to record final cooking temperatures. If your school nutrition program is implicated in a foodborne illness outbreak, records of monitoring and corrective actions can provide proof that reasonable care was taken in the operation of your kitchen.

SHOW SLIDE: *Using Logs*

SAY: The HACCP-based food safety plan will contain logs that help document food safety procedures in a school nutrition program. These logs are used throughout the foodservice process from receiving, storage, preparation, service, and more. Logs document other food safety procedures as well as thermometer calibration, sanitizer concentration, and staff training. Most states require you to keep records for a minimum of one year, but your local health department and State agency may require longer.

Please turn in your workbook to the **Cooking and Reheating Temperature Log**. You can use logs like these to help monitor and document your food safety practices. Notice that this log provides instructions for monitoring and recording food temperature as you cook or reheat it. The log records the date and time, food item, internal cooking temperatures, corrective actions, employee initials, and verifying person. This is important information to have in the case of a foodborne illness outbreak.

Returning to our earlier example of the ground beef recipe and using this log, the employee should record the time and date they took the temperature and the food item they were checking. The employee would also record the temperature reading (145 °F), along with the corrective action of placing the food back into the oven for further cooking when it was determined that the food did not meet the correct critical limit. The employee would then initial the log and follow up with their manager or director.

ASK: What other types of logs do you need for your program?

FEEDBACK:
> Cleaning and Sanitizing Log
> Reheating Foods Log
> Cooling Foods Log
> Damaged or Discarded Product Log
> Hot and Cold Holding Temperature Log
> Production Log
> Receiving Log
> Refrigeration Log
> Dishmachine Log
> Thermometer Calibration Log

SAY: SOPs and logs work hand in hand with HACCP principles to maintain food safety in your school nutrition program.

COOKING AND REHEATING TEMPERATURE LOG

Instructions: Record product name, time, food temperatures, and any corrective action taken on this form. The school nutrition manager will verify that school nutrition employees have taken the required cooking temperatures. By visually monitoring school nutrition employees and preparation procedures during the shift and reviewing, initialing, and dating this log daily, it will ensure all procedures are done. Maintain this log for a minimum of 1 year but refer to your State agency or local health department for retention guidelines specific for your state.

DATE AND TIME	FOOD ITEM	INTERNAL TEMPERATURE	INTERNAL TEMPERATURE	CORRECTIVE ACTION TAKEN	INITIALS	VERIFIED BY DATE

SHOW SLIDE: *7. Review and Revise*

SAY: The final step for using HACCP principles in your food safety program is to review and verify that the procedures are working. Review and revise the food safety plan at least annually or when there are changes in your facility. These changes may include new equipment, new menu items, new laws and regulations, or correcting procedures that do not work. Routinely verifying that your food safety program is working is important. This could include talking to staff, checking logs, and testing established food safety best practices. This step helps identify any problems or practices that may need to be revised. Employees can also communicate if a procedure is not working or needs to be updated. Reviewing logs can show what processes might not be working properly.

The HACCP-based food safety plan is a living document that changes as the needs in your school nutrition program change. Once you create your plan, it is important to train your staff on it. From there, make sure the plan is being followed and validate that it is working. If it is not working, or if something changes, update the plan and train your staff on the changes.

> **Objective:** Investigate the current resources available to assist in developing and updating a HACCP-based food safety plan.

SHOW SLIDE: *Selection of SOPs*

SAY: We have walked through developing your HACCP plan. To wrap up the development of your HACCP plan, you need to select SOPS with supporting logs and organize the manual with a table of contents. As previously mentioned, the selection and incorporation of needed SOPs and logs that cover all aspects of your operation are key to the thoroughness of a food safety plan. If a school has breakfast-in-the-classroom, you need a SOP that specifically addresses the unique food safety issues for this style of service. If a school transports food to satellite locations, a SOP for transporting food is needed. The **Standard Operating Procedure Checklist** and the **SOPs Needed for Food Safety Plan** worksheets provide a snapshot of SOPs that you need for your plan. Although this list can be overwhelming, there is no reason to start from scratch with your SOPs and logs.

Many HACCP resources developed specifically for schools are available. ICN now hosts the Child Nutrition Sharing Site (https://theicn.org/cnss/). This site is a resource bank for materials developed by USDA, university extensions, State agencies, and other approved sources. Save time, browse around, and use approved SOPs that are already developed. Make sure to adapt SOPs and logs to your school foodservice.

DO: Refer participants to the **Sample Standard Operating Procedures and Logs List**.

SAY: Please turn to the **Sample Standard Operating Procedures and Logs List** in your Participant's Workbook. This resource list includes links to banks of SOPs and logs, along with some references on emerging food safety issues in schools. You will have an opportunity to use this list to find SOPs and logs for the ones written on your **SOPs Needed for Food Safety Plan** worksheet.

≫ SAMPLE STANDARD OPERATING PROCEDURES AND LOGS LIST

The Standard Operating Procedures (SOPs) and logs included on this list are samples that can be found on the ICN website (www.theicn.org/foodsafety). Some SOPs are in more than one category as the employees may use the same food safety practices throughout foodservice. Samples must be adapted to each facility.

SOP	CORRESPONDING LOGS
RECEIVING	
Receiving Deliveries	› Receiving Log
STORING	
Date Marking and Ready-to-Eat, Time/Temperature Control for Safety Foods	› Food Safety Checklist
Preventing Cross-Contamination During Storage and Preparation	› Damaged or Discarded Product Log › Food Safety Checklist › Refrigeration Log
Storing and Using Poisonous or Toxic Chemicals	› Damaged or Discarded Product Log › Food Safety Checklist › Safety Data Sheets
PREPARATION	
Controlling Time and Temperature During Preparation	› Food Safety Checklist › Production Log
Preventing Cross-Contamination During Storage and Preparation	› Damaged or Discarded Product Log › Food Safety Checklist
Using Suitable Utensils When Handling Ready-to-Eat Foods	› Damaged or Discarded Product Log › Food Safety Checklist
Washing Fruits and Vegetables	› Food Safety Checklist
COOKING	
Cooking Time/Temperature Control for Safety Foods	› Cooking and Reheating Temperature Log
Reheating Time/Temperature Control for Safety Foods	› Cooking and Reheating Temperature Log
Using and Calibrating Thermometers	› Food Safety Checklist › Thermometer Calibration Log
HOLDING	
Hot and Cold Holding for Time/Temperature Control for Safety Foods	› Hot and Cold Holding Temperature Log › Refrigeration Log

SOP	CORRESPONDING
TRANSPORTING	
Transporting Food to Remote Sites (Satellite Kitchens)	› Food Safety Checklist › Hot and Cold Holding Temperature Log › Receiving Log
SERVICE	
Preventing Contamination at Food Bars	› Damaged or Discarded Product Log › Food Safety Checklist › Hot and Cold Holding Temperature Log
Serving Food	› Food Safety Checklist
Serving Safe Food to Students with Food Allergies	
Using Suitable Utensils When Handling Ready-to-Eat Foods	› Damaged or Discarded Product Log › Food Safety Checklist
Using Time Alone as a Public Health Control to Limit Bacteria Growth in Time/Temperature Control for Safety Foods	› Food Safety Checklist
COOLING	
Cooling Time/Temperature Control for Safety Foods	› Food Safety Checklist › Production Log
CLEANING AND SANITIZING	
Assembling a Body Fluid Cleanup Kit	› Damaged or Discarded Product Log › Employee Food Safety Training Record
Cleaning and Disinfecting Body Fluid Spills	› Damaged or Discarded Product Log › Employee Food Safety Training Record
Cleaning and Sanitizing Food Contact Surfaces	› Damaged or Discarded Product Log › Food Contact Surfaces Cleaning and Sanitizing Log › Food Safety Checklist
PERSONAL HYGIENE	
Communicating Norovirus Prevention Methods	› Employee Food Safety Training Record
Personal Hygiene	› Damaged or Discarded Product Log › Employee Food Safety Training Record › Food Safety Checklist
Washing Hands	› Employee Food Safety Training Record › Food Safety Checklist
OTHER	
Communicating During a Foodborne Illness Outbreak	› Employee Food Safety Training Record
Handling a Food Recall	› Damaged or Discarded Product Log

SHOW SLIDE: *Organize Your HACCP Plan*

SAY: A district HACCP plan is a manual that includes all the school site plans and a site manual for each school. For example, a district with 14 schools will need one district manual and 14 unique school site manuals. Using the material created in the workshop, you will need to organize it in a table of contents. Consider organizing SOPs and logs by the flow of food as it is easier to think through the food safety needs of your operation. However, there are other ways to organize your food safety plan, such as by sections of the kitchen. Whatever you choose, make sure you explain it to others.

SHOW SLIDE: *Table of Contents Activity*

Activity: Table of Contents

Materials:
> **Standard Operating Procedure Checklist**
> **Sample Standard Operating Procedures and Logs List**
> **Table of Contents** worksheet
> Pen or pencils
> Computer

Time: 20 minutes

Instructions:
1. Have participants turn to the **Table of Contents** worksheet in the Participant's Workbook or on their computer.
2. For 15 minutes, instruct participants to organize their SOPs and logs into a table of contents.
3. The **Table of Contents** worksheet provides an example template that participants can use to adapt and build a table of contents. Participants will use the blank template to decide how they will organize their food safety plans.
4. Then, have the participants use their **Standard Operating Procedure Checklist** and **Sample Standard Operating Procedures and Logs List** to begin drafting an outline of their HACCP plan by creating a table of contents.

SAY: Please turn to the **Table of Contents** worksheet in your Participant's Workbook or find it on your computer. We are going to take some time thinking about how you are going to organize your food safety plan. Then, we are going to create an outline of your food safety plan by creating a table of contents. This worksheet provides an example of how you could organize your plan, but you can adapt it to your specific food safety program.

Please turn to the **Standard Operating Procedure Checklist** in your Participant's Workbook. Take some time to think through how you can best organize your food safety plan. Then begin drafting your table of contents on the **Table of Contents** worksheet. Use the **Sample Standard Operating Procedures and Logs List** to help fill in any missing SOPs (for example, bus/field trips, loading dock procedures, etc.).

TABLE OF CONTENTS

Food Code

Program Overview

Site Descriptions

School: Rock Island High School

School: Edison Junior High

School: Thomas Jefferson Elementary

School 4:

School 5:

Menu

Menu Categorization

No Cook Process

Same Day Process

Complex Process

Standard Operating Procedures (select the SOPs describing your operation)

Purchasing

Receiving

Storage

Food Production

Service

Cleaning and Sanitizing

Cleaning and Sanitizing Food Contact Surfaces

Personal Hygiene

Washing Hands

Other

Communicating During a Foodborne Illness Outbreak

Logs (select logs documenting your SOPs)

Appendix

DO: Allow participants 20 minutes to complete this activity. Walk around the room and offer assistance when requested.

SAY: Now that you have written out the **Table of Contents** for your HACCP-based food safety plan, you have a strong outline for all the pieces that need to be included. This outline will help you determine what pieces you already have and what pieces you need to write.

SHOW SLIDE: *Lesson 2 Review*

SAY: We are now finished with Lesson 2. We have covered how to:
› Work on the components of a food safety plan
› Review and discuss the current resources available to assist in developing and updating a HACCP-based food safety plan

Thank you for participating in the class discussion and activities today. You now have several of the pieces of your school nutrition program HACCP plan started. You will now have the opportunity work on writing your school's plan using what you have developed today.

ASSIGNMENT-AT-A-GLANCE
UPDATE A HACCP-BASED FOOD SAFETY PLAN

TIME	TOPIC	ACTIVITY	MATERIALS
2 hours, 45 minutes	Individual Work	Developing the HACCP-Based Plan	› Computer › Table of Contents › Prerequisite Program Checklist › Prevention Maintenance Schedule Sample › Cleaning Schedule Sample › Program Overview › School Site Descriptions › SOPs Needed for Food Safety Plan › Standard Operating Procedure Checklist › Sample Standard Operating Procedures and Logs List › School recipes › Process Approach Category › The Process Approach › HACCP Plan Creation handout
2 hours, 45 minutes			

❯❯ UPDATE HACCP-BASED FOOD SAFETY PLAN

SHOW SLIDE: *__Individual Work: Writing Your HACCP-Based Food Safety Plan__*

SAY: You will now have an opportunity to apply all the information we learned today and begin working on your school-specific, HACCP-based food safety plan. As mentioned earlier, the goal of this workshop is for participants to leave with a solid draft of their food safety plan. You will have the rest of the day, about 2 hours and 45 minutes, to work individually creating and organizing your food safety plan. Use all the worksheets, templates, and resources from Lessons 1 and 2, which are also provided on the USB drive.

Activity: Updating Your HACCP-Based Food Safety Plan

Materials:
> Computer
> **Table of Contents** worksheet
> **Prerequisite Program Checklist**
> **Prevention Maintenance Schedule Sample**
> **Cleaning Schedule Sample**
> **Program Overview** template
> **School Site Descriptions** template
> **Standard Operating Procedure Checklist**
> **SOPs Needed for Food Safety Plan**
> **Sample Standard Operating Procedures and Logs List**
> School recipes
> **Process Approach Category** worksheet
> **The Process Approach** handout
> **HACCP-Based Plan Creation** handout

Time: 2.75 hours

Instructions:
1. Give participants 2 hours and 45 minutes to work individually on developing their school-specific, HACCP-based food safety plans. Using the lessons and worksheets from Day 1, participants will create the parts of their food safety plan. The **HACCP-Based Plan Creation** handout matches the food safety topic areas with its corresponding worksheet/ handout in the Participant's Workbook.
2. Be available to answer questions. Walk around the room periodically.

Instructor's Note: Stop halfway through and allow participants to stand and stretch. This section involves a significant amount of time sitting and writing. Providing a reminder to stretch and move can promote attention and reduce fatigue.

» HACCP-BASED PLAN CREATION

Instructions: Use the next 2 hours and 45 minutes to work individually on developing your school-specific, HACCP-based food safety plans. Using the lessons and worksheets from Day 1, work on creating the following parts of your food safety plan. The **HACCP-Based Plan Creation** handout matches the food safety topic areas with its corresponding worksheet or handout in the Participant's Workbook.

HACCP PLAN ITEM	DAY 1 WORKSHEET
Table of Contents	Table of Contents
Prerequisite Program List	› Prerequisite Program Checklist › Prevention Maintenance Schedule Sample › Cleaning Schedule Sample
District Description	Program Overview
School Site Descriptions	› School Site Description 1 › School Site Description 2 › School Site Description 3 (One School Site Description per school in the district)
Standard Operating Procedures	› Standard Operating Procedure Checklist › SOPs Needed for Food Safety Plan › Sample Standard Operating Procedures and Logs List
Logs	› Standard Operating Procedure Checklist › Sample Standard Operating Procedures and Logs List
Recipes	Participant Provided Recipes
Separate recipes into Process Approach Categories	› The Process Approach › Process Approach Category

SHOW SLIDE: _**End Day 1**_

SAY: Thank you for participating in the class discussion today. I hope you got a good start on your HACCP-based food safety plan. You will have the opportunity tomorrow to write more and also to network with each other.

ASK: Do you have any questions before we break for the day?

DO: Give participants a chance to think of questions and respond to them. Answer any questions asked.

SAY: Thank you for joining us today!

DAY 2

TIME	TOPIC	WORK STYLE
15 minutes	Welcome	Trainer
40 minutes	District Size Challenges and Solutions	Group Work
40 minutes	School Location Challenges and Solutions	Group Work
40 minutes	Food Production Type Challenges and Solutions	Group Work
1 hour, 45 minutes	Edit Food Safety Plan from Group Work	Individual Work
60 minutes	Emergency Plan Challenges and Solutions	Group Work
60 minutes	Food Defense Challenges and Solutions	Group Work
1 hour, 45 minutes	Edit Food Safety Plan from Group Work	Group Work
15 minutes	Wrap Up	Trainer
8 hours		

» WELCOME

SHOW SLIDE: *Day 2*

SAY: Welcome back to the *Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop*. This morning, we will work in groups to discuss and help problem-solve common food safety issues related to district size, school location, and food production types. Then you will have the opportunity to individually update your food safety plans based on what you discussed in your groups. We will repeat this activity this afternoon, except groups will be broken up by emergency situations and food defense. Once again, you will have time afterward to update your food safety plan from your group discussion. Feel free to ask questions at any time or save your questions for the group discussion.

ASK: Do you have any questions before we get started?

BREAKOUT-AT-A-GLANCE
GROUP BREAKOUT 1

TIME	TOPIC	ACTIVITY	MATERIALS
DISTRICT SIZE			
40 minutes	Special Considerations due to District Size	Group Breakout Session Discussion	› Chart paper › Markers › Group Breakout Session 1 Discussion Topics – District Size handout › District Size Challenges and Solutions worksheet
SCHOOL SETTING			
40 minutes	Special Considerations due to School Location	Group Breakout Session Discussion	› Chart paper › Markers › School Location handout › School Location Challenges and Solutions worksheet
FOOD PRODUCTION TYPE			
40 minutes	Special Considerations due to Food Production Types	Group Breakout Session Discussion	› Chart paper › Markers › Food Production Type handout › Food Production Type Challenges and Solutions worksheet
2 hours			

❯❯ GROUP BREAKOUT SESSION 1

SHOW SLIDE: *Group Breakout Session 1*

SAY: Not all schools are alike; therefore, not all HACCP-based food safety plans are alike. Due to the variety of child nutrition programs, different factors must be taken into account when creating your food safety plan. These differences create unique problems or food safety hazards. We are going to focus on differences in district size, school location, and food production types. This afternoon, we will discuss emergency situations and food defense. This breakout session will allow time to talk about unique challenges and possible solutions for each of these areas. For the next 40 minutes, we will break into discussion groups based on district size.

SHOW SLIDE: <u>District Size</u>

SAY: School districts are various sizes. ICN categorizes school district size into four categories: small, medium, large, and major.
  ❯ Small: < 5,000 students
  ❯ Medium: 5,001–10,000 students
  ❯ Large: 10,001–49,999 students
  ❯ Major: 50,000 students

<u>Activity: Group Breakout Session Discussion – District Size</u>

Materials:
  ❯ **Group Breakout Session 1 Discussion Topics – District Size** handout
  ❯ **District Size Challenges and Solutions** worksheet
  ❯ Chart paper
  ❯ Markers

Time: 40 minutes

Instructions:
  1. Divide participants into groups based on their district size: small, medium, large, and major.
  2. Have participants turn to the **Group Breakout Session 1 Discussion Topics – District Size Challenges** handout in their Participant's Workbook. They will talk through the discussion points. Participants are encouraged to discuss any issues they may have, regardless if they are listed on the handout.
  3. Have participants divide the chart paper into three columns. See the **District Size Challenges and Solutions** worksheet for how to set up the chart paper.
     ❯ In the first column, they will list the challenges they encounter operating their school nutrition program. They can use the topics on the handout and add their own experience.
     ❯ In the second column, they will write the challenges that can create a food safety hazard.
     ❯ In the third column, participants are to list possible solutions.

⟫ DISTRICT SIZE CHALLENGES AND SOLUTIONS

CHALLENGES THAT OCCUR IN SNP	FOOD SAFETY HAZARDS	POSSIBLE SOLUTIONS

4. Give participants 25 minutes to discuss.
5. Instruct participants to post the results of the discussion on the wall. Give participants 5 minutes to read the challenges of other groups.
6. Take 10 minutes to discuss any questions or possible solutions one group may have for another.
7. Have participants write down ideas on the **District Size Challenges and Solutions** worksheet.

SAY: Please break into groups based on the size of your school district.

Instructor's Note: If you have only one participant in a group, suggest they pick a group to join.

SAY: Turn in your Participant's Workbook to the **Group Breakout Session 1 Discussion Topics – District Size** handout. Find the topics relating to your program. The topics are a starting point for discussion. The questions are meant to be a guide for your discussion, but your group can discuss any issues relevant to food safety and district size.

DO: Distribute chart paper to each group.

SAY: At the top of the paper, write the school district size. Divide the chart paper into three columns. In the first column, write, "Challenges That Occur in SNP." List challenges you encounter operating your school nutrition program. In the second column, write "Food Safety Hazards" at the top. Write out the food safety hazards you experience in your school nutrition program. In the third column, write "Possible Solutions" at the top. Discuss and list possible solutions for different challenges and hazards. Use the topics on the handout to guide your discussion but also add your own experience. Focus your discussion on solutions to issues of food safety.

DO: Give participants 25 minutes to discuss and write.

Instructor's Note: If there is a noticeable lull in the group conversation, ask the group questions.

SAY: Post the results of your discussion on the wall. Take some time, walk around, and read the challenges of other groups. Write down ideas on your **District Size Challenges and Solutions** worksheet.

DO: Give participants 5 minutes to walk around and read the challenges of the other groups.

ASK: Do you have any suggestions for any of the other groups?

DO: Allow the class to discuss challenges and solutions for about 10 minutes.

❯❯ DISTRICT SIZE

Instructions: Below are some food safety issues to consider that are meant to help spark conversation. The discussion is not limited to these items. These groups provide the opportunity to learn from peers and problem-solve similar challenges. Be open-minded, ask questions, and take notes.

> Procuring Foods
>   • Are a sufficient number of vendors available for the procurement process to handle the capacity of your business?
>   • Is the delivery frequency adequate?
>   • What are the benefits and limitations of state and district cooperatives?
>   • Number of deliveries to meet the needs of all schools
>   • Packaging size
> Food Preparation
>   • How are you preparing food?
> Staff Training
>   • What are the challenges in maintaining staff training?
>   • Is the availability of skilled staff a concern?
>   • Is turnover an issue in keeping staff trained and following procedures?
>   • Are employees serving in different roles within the district?
>   • Are opportunities for professional development/training limited, particularly in the area of food safety?
> Food transportation
>   • What obstacles are created with the use of a district warehouse?
>   • What issues exist in packing transported food?
> Equipment
>   • Is equipment adequate for food safety needs and in good repair?
>   • Is equipment used properly?
>   • Is industrial equipment used? What are some of the unique food safety issues? (Some sanitarians request a variance when non-porous film is used for individual packaging per 2017 *Food Code*)

SHOW SLIDE: *School Location*

SAY: Schools are in different city locations throughout the U.S. Today we will break these environments into:

› Rural
› Urban
› Suburban
› Remote

Activity: Group Breakout Session Discussion – School Locations

Materials:
› **School Locations** handout
› **School Locations Challenges and Solutions** worksheet
› Chart paper
› Markers

Time: 40 minutes

Instructions:

1. Divide participants into groups based on their school location: rural, urban, suburban, or remote.
2. Have participants turn to the **School Locations** handout in their Participant's Workbook. They will talk through the discussion points. Participants are encouraged to discuss any issues they may have, regardless if they are listed on the handout.
3. Have participants divide the chart paper into three columns. See the **School Locations Challenges and Solutions** worksheet for how to set up the chart paper.
   › In the first column, they will list the challenges they encounter operating their school nutrition program. They can use the topics on the handout and add their own experience.
   › In the second column, they will write the challenges that can create a food safety hazard.
   › In the third column, participants are to list possible solutions.

›› SCHOOL LOCATIONS CHALLENGES AND SOLUTIONS

CHALLENGES THAT OCCUR IN SNP	FOOD SAFETY HAZARDS	POSSIBLE SOLUTIONS

4. Give participants 25 minutes to discuss.
5. Instruct participants to post the results of the discussion on the wall. Give participants 5 minutes to read the challenges of other groups.
6. Take 10 minutes to discuss any questions or possible solutions one group may have for another.
7. Have participants write down ideas on the **School Locations Challenges and Solutions** worksheet.

SAY: Please break into groups based on the location of your school nutrition program.

Instructor's Note: If you have only one participant in a group, suggest they pick a group to join.

SAY: Turn in your Participant's Workbook to the **School Location** handout. Find the topics relating to your school location. The topics are a starting point for discussion.

DO: Distribute chart paper to each group.

SAY: At the top of the paper, write the school location. Divide the chart paper into three columns. In the first column, write, "Challenges That Occur in SNP." List challenges you encounter operating your school nutrition program (SNP). In the second column, write "Food Safety Hazards" at the top. Write out the food safety hazards you experience in your school nutrition program. In the third column, write "Possible Solutions" at the top. Discuss and list possible solutions for different challenges and hazards. Use the topics on the handout to guide your discussion but also add your own experience. Focus your discussion on solutions to issues of food safety.

DO: Give participants 25 minutes to discuss and write.

Instructor's Note: If there is a noticeable lull in the group conversation, ask the group questions.

SAY: Post the results of your discussion on the wall. Take some time, walk around, and read the challenges of other groups. Write down ideas on your **School Location Challenges and Solutions** worksheet.

DO: Give participants 5 minutes to walk around and read the input of the other groups.

ASK: Do you have any suggestions for any of the other groups?

DO: Allow the class to discuss challenges and solutions for about 10 minutes.

⟫ SCHOOL LOCATION

Instructions: Below are some food safety issues to consider that are meant to help spark conversation. The discussion is not limited to these items. These groups provide the opportunity to learn from peers and problem-solve similar challenges. Be open-minded, ask questions, and take notes.

› Vendors
   • What are the food safety risks with utilizing Farm to School (food safety aspects such as Good Agricultural Practices/Good Handling Practices [GAP/GHPs])?
   • Are a sufficient number of vendors available for the procurement process?
   • Are your schools in an area inaccessible to vendors and contractors?
› Deliveries
   • What are the food safety risks created with satellite sites and long routes?
   • Is the delivery frequency adequate?
   • Are you in a food desert?
   • Is it difficult to get delivery trucks on-site?
› Is your district in a high poverty area? What are the added food safety risks?
› What are the unique problems of very small/large school districts and schools?
   • Are lunchrooms crowded and multiple lunch service times required?
   • Are food-related disability meal modifications and special food requests creating food safety challenges?

SHOW SLIDE: *Food Production Type*

SAY: There are different ways to prepare food in a school, depending on factors such as equipment available, amount of staff, and budget. Food production types may include:
› Scratch cooking
› Central kitchen
› Heat and serve
› Satellite site
› Combination of different food production types

Activity: Group Breakout Session Discussion – Food Production Type

Materials:
› **Food Production Type** handout
› **Food Production Type Challenges and Solutions** worksheet
› Chart paper
› Markers

Time: 40 minutes

Instructions:

1. Divide participants into groups based on their school production type: scratch cooking, central kitchen, heat and serve, satellite site, or combination of different food production types.
2. Have participants turn to the **Food Production Type** handout in their Participant's Workbook. They will talk through the discussion points. Participants are encouraged to discuss any issues they may have, regardless if they are listed in the handout.
3. Have participants divide the chart paper into three columns. See the **Food Production Type Challenges and Solutions** worksheet for how to set up the chart paper.
   > In the first column, they will list the challenges they encounter operating their school nutrition program. They can use the topics on the handout and add their own experience.
   > In the second column, they will write the challenges that can create a food safety hazard.
   > In the third column, participants are to list possible solutions.

> ## FOOD PRODUCTION TYPE CHALLENGES AND SOLUTIONS

CHALLENGES THAT OCCUR IN SNP	FOOD SAFETY HAZARDS	POSSIBLE SOLUTIONS

4. Give participants 25 minutes to discuss.
5. Instruct participants to post the results of the discussion on the wall. Give participants 5 minutes to read the challenges of other groups.
6. Take 10 minutes to discuss any questions or possible solutions groups may have.
7. Have participants write down ideas on the **Food Production Type Challenges and Solutions** worksheet.

SAY: Please break into groups based on the food production type.

Instructor's Note: If you have only one participant in a group, suggest they pick a group to join.

SAY: Turn in your Participant's Workbook to the **Food Production Type** handout. Find the topics relating to your food production type. The topics are a starting point for discussion.

DO: Distribute chart paper to each group.

SAY: At the top of your paper, write your food production type. Divide the chart paper into three columns. In the first column, write, "Challenges That Occur in SNP." List challenges you encounter operating your school nutrition program. In the second column, write "Food Safety Hazards" at the top. Write out the food safety hazards you experience in your school nutrition program. In the third column, write "Possible Solutions" at the top. Discuss and list possible solutions for different challenges and hazards. Use the topics on the handout to guide your discussion but also add your own experience. Focus your discussion on solutions to issues of food safety.

DO: Give participants 25 minutes to discuss and write.

Instructor's Note: If there is a noticeable lull in the group conversation, ask the group questions.

SAY: Post the results of your discussion on the wall. Take some time, walk around, and read the challenges of other groups. Write down ideas on your **Food Production Type Challenges and Solutions** worksheet.

DO: Give participants 5 minutes to walk around and read the challenges of the other groups.

ASK: Do you have any suggestions for any of the other groups?

DO: Allow the class to discuss challenges and solutions for about 10 minutes.

⟫ FOOD PRODUCTION TYPE

Instructions: Below are some food safety issues to consider that are meant to help spark conversation. The discussion is not limited to these items. These groups provide the opportunity to learn from peers and problem-solve similar challenges. Be open-minded, ask questions, and take notes.

> What food safety challenges are created by using ***scratch cooking***?
  - What are the unique concerns in time management for food safety?
  - Is there adequate equipment for thawing, cooking, cooling, etc.?
  - Do employees have the necessary skills for safely preparing food?
  - How is food handled outside the cafeteria?
    - Field trips
    - Breakfast-in-the-classroom
    - Correct equipment
    - Time and temperature control
  - How is food served to child care? What are the unique food safety problems?
    - Correct equipment
    - Time and temperature control
    - Correct food size/texture to prevent choking

> What food safety problems are created with the use of a ***central kitchen***?
  - Do employees have the necessary skills for safely preparing food?
  - Are staff adequately trained on larger equipment?
  - What concerns are created when transporting food?
    - Proper transporting equipment – trucks, packing, carriers?
    - Are foods date-marked?
    - How are time and temperature controlled? How is it monitored?
    - Is there adequate space in the kitchen and dock for transporting carriers and coolers?
  - What are the temperature controls?
    - Cooking – final temp
    - Cooling
  - Do portioning and sealing packages require a variance?
  - How is food handled outside the classroom?
    - Field trips
    - Breakfast-in-the-classroom
  - How is food served to child care? What are the unique food safety problems?
    - Correct equipment
    - Time and temperature control
    - Correct food size/texture to prevent choking

> What food safety issues are created with the ***heat and serve*** production system?
  - Do employees have the necessary skills for safely preparing food?
  - Is food reheated properly? How do you monitor reheating?
  - Do you have the proper equipment for a heat and serve production system?
    - No reheating in the hot holder

- Cold holding equipment
- Thawing
- Does portioning and sealing packages require a variance?
- How is food handled outside the classroom?
    - Field trips
    - Breakfast-in-the-classroom
- How is food served to child care? What are the unique food safety concerns?
    - Correct equipment
    - Time and temperature control
    - Correct food size/texture to prevent choking

› What food safety issues are created with a ***satellite system***?
- Do employees have the skill for safely preparing food?
- Is food reheated properly?
- Do you have the proper equipment for transporting, holding, and reheating food?
    - No reheating in the hot holder
    - Cold holding equipment
    - Hot holding equipment
    - Thawing
- How is food handled outside the classroom?
    - Field trips
    - Breakfast-in-the-classroom
- How is food served to child care? What are the unique food safety concerns?
    - Correct equipment and food size
    - Time and temperature control

ASSIGNMENT-AT-A-GLANCE
EDITING A HACCP-BASED PLAN 1

TIME	TOPIC	ACTIVITY	MATERIALS
1 hour, 45 minutes	Individual Work	Editing the HACCP-Based Plan	› Computer › Draft of HACCP-based plan from Day 1 › District Size Challenges and Solutions worksheet › School Location Challenges and Solutions worksheet › Food Production Type Challenges and Solutions worksheet › HACCP-Based Plan Creation handout
1 hour, 45 minutes			

⏩ EDITING A HACCP-BASED PLAN 1

SHOW SLIDE: *__Individual Work: Editing Your HACCP-Based Plan 1__*

Activity: Editing Your HACCP-Based Plan 1

Materials:
> Computer
> Draft of HACCP plan from Day 1
> **District Size Challenges and Solutions** worksheet
> **School Location Challenges and Solutions** worksheet
> **Food Production Type Challenges and Solutions** worksheet
> **HACCP-Based Plan Creation** handout

Time: 1 hour, 45 minutes

Instructions: Participants will take 1 hour and 45 minutes to work individually on updating their school-specific, HACCP-based food safety plans based on the group discussions from the morning of Day 1. Be available to answer questions. Walk around the room periodically.

SAY: You will have an hour and 45 minutes to work individually to update your school-specific, HACCP-based food safety plans based on the group discussions from this morning. Refer to the Challenges and Solutions sheets and any materials you may have shared. I will be available to answer any questions.

DO: Allow participants to work on their HACCP-based food safety plans. Be available to answer questions. Walk around the room periodically.

Instructor's Note: Stop at the 1 hour interval and allow participants to stand and stretch. Providing a reminder to stretch and move can promote attention and reduce fatigue.

BREAKOUT-AT-A-GLANCE
GROUP BREAKOUT 2

TIME	TOPIC	ACTIVITY	MATERIALS
EMERGENCY SITUATIONS			
60 minutes	Emergency Situations	Group Breakout Session Discussion	› Chart paper › Markers › Group Breakout Session 2 Discussion Topics – Emergency Situation handout › Emergency Situation Challenges and Solutions worksheet
FOOD DEFENSE			
60 minutes	Food Defense	Group Breakout Session Discussion	› Chart paper › Markers › Food Defense handout › Food Defense Challenges and Solutions worksheet
2 hours			

⏩ GROUP BREAKOUT 2

SAY: We are going to break out into groups again, this time focusing on emergency situations and food defense. Later this afternoon, we will spend time updating your HACCP-based food safety plan based on these discussions. This session will allow time to talk about unique challenges and possible solutions for each of these areas.

SHOW SLIDE: *<u>Emergency Situations</u>*

SAY: According to the National Center for Education Statistics, there are about 98,000 schools all over the United States (2019). These schools have to handle different emergency situations, including internal threats like water interruption, external threats like food recalls, and natural disasters. Schools are encouraged to have emergency plans written for their relative emergency situations. Although an emergency plan is different from a food safety plan, emergency plans often incorporate pieces of the food safety plan. To reduce the work needed, think of what pieces of your food safety plan can be used to assist in emergency situations.

Activity: Group Breakout Session Discussion – Emergency Situations

Materials:
> **Group Breakout Session 2 Discussion Topics – Emergency Situation** handout
> **Emergency Situation Challenges and Solutions** worksheet
> Chart paper
> Markers

Time: 60 minutes

Instructions:
1. Divide participants into groups based on their chosen emergency situation: internal threats, external threats, and natural disasters.
2. Have participants turn to the **Group Breakout Session 2 Discussion Topics – Emergency Situation** handout in their Participant's Workbook. They will talk through the discussion points. Participants are encouraged to discuss any issues they may have, regardless if they are listed in the handout.
3. Have participants divide the chart paper into three columns. See the **Emergency Situation Challenges and Solutions** worksheet for how to set up the chart paper.
   > In the first column, they will list the challenges they encounter operating their school nutrition program. They can use the topics on the handout and add their own experience.
   > In the second column, they will write the challenges that can create a food safety hazard.
   > In the third column, participants are to list possible solutions.

⟩⟩ EMERGENCY SITUATION CHALLENGES AND SOLUTIONS

CHALLENGES THAT OCCUR IN SNP	FOOD SAFETY HAZARDS	POSSIBLE SOLUTIONS

4. Give participants 40 minutes to discuss.
5. Instruct participants to post the results of the discussion on the wall. Give participants 10 minutes to read the challenges of other groups.
6. Take 10 minutes to discuss any questions or possible solutions one group may have for another.
7. Have participants write down ideas on the **Emergency Situation Challenges and Solutions** worksheet.

SAY: Please break into groups based on your chosen emergency situation: internal threats, external threats, or natural disasters.

Instructor's Note: If you have only one participant in a group, suggest they pick a group to join.

SAY: Turn in your Participant's Workbook to the **Group Breakout Session 2 Discussion Topics – Emergency Situation** handout. Find the topics relating to your emergency situation. The topics are a starting point for discussion.

DO: Distribute chart paper to each group.

SAY: At the top of your paper, write which emergency situation your group will discuss: internal, external, or natural disaster. Divide the chart paper into three columns. In the first column, write, "Challenges That Occur in SNP." List problems you encounter running your school nutrition program. In the second column, write "Food Safety Hazards" at the top. Write out the food safety hazards you experience in your school nutrition program. In the third column, write "Possible Solutions" at the top. Discuss and list possible solutions for different challenges and hazards. Use the topics on the handout to guide your discussion but also add your own experience. Focus your discussion on problems and solutions to issues of food safety.

DO: Give participants 40 minutes to discuss and write.

Instructor's Note: If there is a noticeable lull in the group conversation, ask the group questions.

SAY: Post the results of your discussion on the wall. Take some time, walk around, and read the challenges of other groups. Write down ideas on your **Emergency Situation Challenges and Solutions** worksheet.

DO: Give participants 10 minutes to walk around and read the challenges of the other groups.

ASK: Do you have any suggestions for any of the other groups?

DO: Allow the class to discuss challenges and solutions for about 10 minutes.

⟫ EMERGENCY SITUATION

Instructions: Below are some food safety issues to consider that are meant to help spark conversation. The discussion is not limited to these items. These groups provide the opportunity to learn from peers and problem-solve similar challenges. Be open-minded, ask questions, and take notes.

What kind of threats do you need to prepare for?
- External threats
  - Community health crisis
  - Food recalls
  - Food supply delivery disruption
  - Bioterrorism
  - Labor disputes
- Internal threats
  - Interruption of service
    - Water outage
      - Construction
      - Boil water
    - Power outage
    - Internet/phone breakdown
  - Hostile school environment
    - Facility lockdown (i.e., angry parent)
    - Active shooter (i.e., person in building)
    - Disruptive students
  - Unsafe school location
    - Crime in surrounding area
  - Aging infrastructure
    - Power
    - Sewage
    - Water pipes and purity
  - Foodborne illness outbreak
  - Equipment failure (i.e., freezer goes down)
  - Sewage backup
- Natural Disasters
  - What are some unique weather conditions your school may handle?
    - Hurricanes
    - Tornadoes
    - Flooding
    - Wildfires
    - Earthquakes
    - Blizzards
    - Etc.

Are emergency meals needed?

What food safety plans do you have in place?

SHOW SLIDE: *Food Defense*

SAY: Food defense involves the protection of the food supply from <u>deliberate</u> or <u>intentional</u> acts of contamination or tampering from biological, chemical, physical, or radiological agents. The Food and Drug Administration (FDA) *Food Safety Modernization Act* (FSMA) final rule aimed to prevent the intentional contamination and adulteration of food in the U.S. food supply. It requires that food companies prepare and implement a food defense plan. The final rule requires the "…written plan must identify vulnerabilities and actionable process steps, mitigation strategies, and procedures for food defense monitoring, corrective actions and verification." Although a food safety plan and a food defense plan are different, food defense plans can be integrated into existing food safety plans to help with ease of implementation.

Activity: Group Breakout Session Discussion – Food Defense

Materials:
> **Food Defense** handout
> **Food Defense Challenges and Solutions** worksheet
> Chart paper
> Markers

Time: 60 minutes

Instructions:
1. Divide participants into four groups.
2. Have participants turn to the **Food Defense** handout in their Participant's Workbook. They will talk through the discussion points. Participants are encouraged to discuss any issues they may have, regardless if they are listed in the handout.
3. Have participants divide the chart paper into three columns. See the **Food Defense Challenges and Solutions** worksheet for how to set up the chart paper.
   > In the first column, they will list the challenges they encounter operating their school nutrition program. They can use the topics on the handout and add their own experience.
   > In the second column, they will write the challenges that can create a food safety hazard.
   > In the third column, participants are to list possible solutions.

❯❯ FOOD DEFENSE CHALLENGES AND SOLUTIONS

CHALLENGES THAT OCCUR IN SNP	FOOD SAFETY HAZARDS	POSSIBLE SOLUTIONS

4. Give participants 40 minutes to discuss.
5. Instruct participants to post the results of the discussion on the wall. Give participants 10 minutes to read the challenges of other groups.
6. Take 10 minutes to discuss any questions or possible solutions one group may have for another.
7. Have participants write down ideas on the **Food Defense Challenges and Solutions** worksheet.

SAY: Please break into the groups you were in for emergency situations. Turn in your Participant's Workbook to the **Food Defense** handout. The topics are a starting point for discussion.

DO: Distribute chart paper to each group.

SAY: Divide the chart paper into three columns. In the first column, write, "Challenges That Occur in SNP." List problems you encounter running your school nutrition program. In the second column, write "Food Safety Hazards" at the top. Write out the food safety hazards you experience in your school nutrition program. In the third column, write "Possible Solutions" at the top. Discuss and list possible solutions for different challenges and hazards. Use the topics on the handout to guide your discussion but also add your own experience. Focus your discussion on problems and solutions to issues of food safety.

DO: Give participants 40 minutes to discuss and write.

Instructor's Note: If there is a noticeable lull in the group conversation, ask the group questions.

SAY: Post the results of your discussion on the wall. Take some time, walk around, and read the challenges of other groups. Write down ideas on your **Food Defense Challenges and Solutions** worksheet.

DO: Give participants 10 minutes to walk around and read the challenges of the other groups.

ASK: Do you have any suggestions for any of the other groups?

►► FOOD DEFENSE

Instructions: Below are some food safety issues to consider that are meant to help spark conversation. The discussion is not limited to these items. These groups provide the opportunity to learn from peers and problem-solve similar challenges. Be open-minded, ask questions, and take notes.

FOOD DEFENSE	FOOD SAFETY
Protection of the food supply from <u>deliberate</u> or <u>intentional</u> acts of contamination or tampering from biological, chemical, physical, or radiological agents	Protection of food products from <u>unintentional</u> contamination by agents

> Which group could potentially cause intentional food contamination/food terrorism for a school nutrition program?
  - Terrorists
  - Activists
  - Disgruntled employees
  - Students
> Where might your school be vulnerable to food terrorism?
  - Central kitchen or school kitchen
    - Processing
    - Distribution
  - Storage
    - School warehouse
  - Transportation
    - Receiving product
  - Foodservice
> What are some countermeasures to deter food terrorism?
  - Central kitchen or school kitchen
  - Receiving
  - Storage/Access
> How can your school prepare for food defense?
  - Train
  - Plan
  - Drill
  - Repeat
> Where can you incorporate food defense into your food safety plan?
  - Add identification verification for a delivery driver to the instructions on your receiving deliveries SOP.
  - Write instructions into the serving food SOP to limit access to cooked food to only the school nutrition staff.
  - Have instructions in the food storage SOP for securing food at the end of the work day.

ASSIGNMENT-AT-A-GLANCE
EDITING A HACCP-BASED PLAN 2

TIME	TOPIC	ACTIVITY	MATERIALS
1 hour, 45 minutes	Individual Work	Editing the HACCP-Based Plan	› Computer › Draft of HACCP-based plan from Day 1 › Emergency Situation Challenges and Solutions worksheet › Food Defense Challenges and Solutions worksheet › HACCP-Based Plan Creation handout
1 hour, 45 minutes			

EDITING A HACCP-BASED PLAN 2

SHOW SLIDE: _Individual Work: Editing Your HACCP-Based Food Safety Plan 2_

Activity: Editing Your HACCP-Based Plan 2

Materials:
> Computer
> Draft of HACCP-based food safety plan from Day 1
> **Emergency Situation Challenges and Solutions** worksheet
> **Food Defense Challenges and Solutions** worksheet
> **HACCP-Based Plan Creation** handout

Time: 1 hour, 45 minutes

Instructions: Participants will take an hour and 45 minutes to work individually on updating their school-specific, HACCP-based food safety plans based on the group discussions. Be available to answer questions. Walk around the room periodically.

SAY: This afternoon, you will have an hour and 45 minutes to update your school-specific, HACCP-based food safety plans based on the group discussions from this morning. Refer to the Challenges and Solutions sheets and any materials you may have shared. I will be available to answer any questions.

DO: Allow participants to work on their HACCP-based food safety plans. Be available to answer questions. Walk around the room periodically.

Instructor's Note: Stop at the 1 hour interval and allow participants to stand and stretch. Providing a reminder to stretch and move can promote attention and reduce fatigue.

SHOW SLIDE: _End Day 2_

SAY: Thank you for participating in the class discussion today. I hope that some of you now have solutions to some of your challenges. You will have the opportunity tomorrow to learn and discuss how to implement your updated plan and train your staff.

ASK: Before we break for the day, do you have any additional questions?

DO: Wait for at least 30 seconds to give participants a chance to think of questions and respond. Answer any questions asked.

SAY: Thank you for joining us today!

DAY 3

TIME	TOPIC	WORK STYLE
15 minutes	Welcome	Trainer
1 hour, 45 minutes	Validating a HACCP Plan	Partner Work
1 hour, 30 minutes	Lesson 3 – Implementation of HACCP-Based Food Safety Plan	Trainer
30 minutes	Wrap Up	Trainer
4 hours		

≫ WELCOME

SHOW SLIDE: _**Day 3**_

SAY: Welcome to the last day of the _Writing, Revising, and Updating a HACCP-Based Food Safety Plan for Schools Workshop_. Today, we will be validating our school-specific, HACCP-based food safety plans. We will also discuss and plan how to implement our completed plans.

You will have an hour and 15 minutes in the morning to work with a partner and review each other's plans individually on your computer. The aim of collaborating is to help each other validate the other's plan. You will also be checking your food safety plan against a validation checklist to ensure all components have been included.

We will discuss implementing your food safety plan and methods for getting staff buy-in to follow the plan. The goal is by the end of the workshop, you will have a solid school-specific, HACCP-based food safety plan draft that has been validated by your peer; a scheduled plan for implementing it; and some tips for encouraging staff buy-in to your food safety plan.

ASK: Do you have any questions before we get started?

LESSON-AT-A-GLANCE
VALIDATING A HACCP PLAN

TIME	TOPIC	ACTIVITY	MATERIALS
1 hour, 15 minutes	Partner Work	Validating a Partner's HACCP Plan	› Computer › Participants' HACCP-based food safety plan › Food Safety Plan Validation Checklist
30 minutes	Individual Work	Validating Your HACCP Plan	› Computer › Internet › Food Safety Plan Validation Checklist › Chart paper › Marker
1 hour, 45 minutes			

⟫ VALIDATING A HACCP PLAN

SHOW SLIDE: *Food Safety Plan Validation*

SAY: Validating your food safety plan is an important step in having an effective HACCP-based food safety plan. Validation shows that the plan is properly preventing food safety hazards and that it is being used by staff.

Food safety plan validation occurs both internally and externally. A manager finds the milk cooler running at 56 °F and reviews a temperature log. The log states that the staff took corrective action to check the milk temperature, moved the milk that was still below 41 °F to a working cooler, and requested a maintenance order. This is an example of internal validation. External validation of your plan would be a review of the plan by an outside expert such as your environmental health specialist/health inspector. The reviewer checked for items such as correct categorization of menu items, accurate description of your operation, and the use of the proper SOPs and logs to meet the food safety needs of your operation.

Questions to consider when validating your plan may include:
> Is the plan inclusive of all hazards?
> Does the plan prevent hazards in your school nutrition program?
> Is the plan being used?

SHOW SLIDE: *Validating Your Partner's Food Safety Plan Activity*

Activity: Validating Your Partner's Food Safety Plan

Materials:
> Computer
> Participants' HACCP-based food safety plan
> **Food Safety Plan Validation Checklist** (digital or paper version)

Time: 1 hour and 15 minutes

Instructions:
1. Partner up all the participants. Have them trade food safety plans to review.
2. Allow 1 hour and 15 minutes for partners to review each other's plan and complete a copy of the **Food Safety Plan Validation Checklist** to provide feedback on their partner's food safety plan.
3. Be available to answer questions. Walk around the room periodically.

SAY: Please partner up with someone at your table. You are going to trade food safety plans and take an hour to review and edit each other's plans. Partners can use the digital version or partner's paper copy of the **Food Safety Plan Validation Checklist** to provide feedback on their partner's food safety plan. This activity gives you the opportunity to have your peer validate that your plan is efficient.

DO: Allow participants 1 hour and 15 minutes to review each other's HACCP-based plans.

Instructor's Note: Stop at different intervals and allow participants to stand and stretch. This section involves a significant amount of time sitting and reading. Providing a reminder to stretch and move can promote attention and reduce fatigue.

SAY: You had the opportunity to have an outside peer review of your HACCP-based food safety plan; this is considered an external validation review. Since this opportunity may not always be available, you can validate your food safety plan using the Food Safety Plan Validation Checklist. We are going to take some time to check your food safety plan against this checklist to confirm that your food safety plan contains all the needed components.

SHOW SLIDE: *Validating Your Food Safety Plan Activity*

Activity: Validating Your Food Safety Plan

Materials:
> Computer
> Internet
> **Food Safety Plan Validation Checklist** (Smartsheet link)
> Chart paper
> Marker

Time: 30 minutes

Instructions:
1. If not previously done, send participants the Smartsheet link for the **Food Safety Plan Validation Checklist**.
2. Allow 30 minutes for participants to complete the **Food Safety Plan Validation Checklist** to check their food safety plan.
   > Participants will check either "yes" or "no" to determine if they have at least started each section of the food safety plan.
   > In the "Notes" section, the participant can write down any ideas or reminders that are relevant for that section.
3. Participants will have the ability to email themselves a copy of the checklist. A copy of the checklist for participants to use after the workshop is available in their Participant's Workbook and on their computer.
4. Be available to answer questions. Walk around the room periodically.
5. Ask participants to volunteer responses to the final three questions on the Food Safety Plan Validation Checklist. Write down responses for "Gaps," "Lessons Learned," and "Ah-Ha Moments" on chart paper.

SAY: Please open the email sent to you this morning and click on the Smartsheet link. This will send you to the **Food Safety Plan Validation Checklist**. You will check your food safety plan against the checklist. Check either "yes" or "no" for each section of the food safety plan. If you have at least started a section, check "yes" and use the "Notes" section to write down any ideas or reminders for that section. You will have 25 minutes to complete the checklist. After you complete the checklist, you will have the ability to email a copy to yourself. A copy for you to use after the workshop is available in your Participant's Workbook and on the computer.

DO: Allow participants 25 minutes to validate their HACCP-based food safety plan. Assist participants with accessing and using the Smartsheet form. Take 5 minutes to ask participants to provide their answers the three questions at the end of the **Food Safety Plan Validation Checklist**. Write answers down on a sheet of chart paper.

FOOD SAFETY PLAN VALIDATION CHECKLIST

Instructions: This checklist is a tool that can be used to assist in validating a food safety plan for a school. It provides general important food safety plan components but is not a comprehensive list.

Check either "yes" or "no" for each section of the food safety plan. If you have at least started that section, check "yes" and use the "Notes" section to write down any ideas or reminders for that section.

PROCEDURE	YES	NO	NOTES
Have all food safety hazards been identified prior to starting the food safety plan? (A) Critical control points (CCP) been identified for each hazard? (B) Critical limits identified for each CCP?			
Are specific food safety procedures addressed? Ex. Receiving food, cooking TCS foods, cooling complex foods, etc.			
Do the monitoring procedures ensure that the CCPs are met? Ex. Must take temperatures			
Do the corrective actions ensure that no harmful food is served? Ex. Continue heating food to the correct temperature or discard the food			
Can the food safety plan adequately control hazards? Is it consistently followed? (A) Do verification procedures ensure adequate control of hazards? Ex. Temperature recording of cooked, cooled, and reheated food shows proper internal food temperatures are reached at appropriate times (B) Does the recordkeeping system provide adequate documentation that the critical limits are met, and corrective actions are taken when needed?			
Are general food safety procedures covered? Ex. Personal hygiene, general cleaning, etc.			
Are the prerequisite programs listed? Ex. Cleaning schedules, preventative maintenance, pest control, etc.			

What are one to two gaps in your food safety plan that you identified?

What were some lessons learned from the workshop?

What was your biggest "ah-ha" moment?

Adapted from: U.S. Department of Health and Human Services, U.S. Food and Drug Administration, and Center for Food Safety and Applied Nutrition. (2006, April). Managing food safety: A Manual for the voluntary use of HACCP principles for operators of food service and retail establishments. https://www.fda.gov/media/71976/download

LESSON-AT-A-GLANCE
LESSON 3 — IMPLEMENTATION OF A HACCP-BASED FOOD SAFETY PLAN

TIME	TOPIC	ACTIVITY	MATERIALS
5 minutes	Introduction		❯ Participant's Workbook
Objective: Integrate the HACCP-based food safety plan into your school nutrition program.			
45 minutes	Engagement and Buy-in	Manager and Staff Buy-In and Engagement	❯ Manager and Staff Buy-In and Engagement worksheet ❯ Markers ❯ Chart paper ❯ Tips for Creating a Food Safety Culture handout
Objective: Write an action plan for training and implementing the food safety plan.			
35 minutes	❯ Implementing the HACCP-based food safety plan – Development ❯ Implementing the HACCP-based food safety plan – Training	Implementation Calendar	❯ HACCP Implementation Planner worksheet ❯ HACCP Planning Calendar ❯ Pen or pencil ❯ Highlighters (various colors)
Objective: Create a plan for validating and updating your HACCP-based food safety plan in the future.			
5 minutes	❯ Validating HACCP-based food safety plan ❯ Updating the HACCP-based food safety plan	Discussion	
1 hour, 30 minutes			

≫ LESSON 3 – IMPLEMENTATION OF A HACCP-BASED FOOD SAFETY PLAN

SHOW SLIDE: *Lesson 3 – Implementation of a HACCP-Based Food Safety Plan*

SAY: We have worked hard during this workshop to develop your school-specific, HACCP-based food safety plan. We are now going to discuss how to implement your plan and engage and train your staff.

SHOW SLIDE: *Lesson 3 Objectives*

SAY: By the end of this lesson, you will be able to:
› Encourage staff to adopt the food safety plan
› Write an action plan for training staff and implementing the food safety plan
› Create a plan for validating and updating your food safety plan in the future

Objective: Integrate the HACCP-based food safety plan into your school nutrition program.

SHOW SLIDE: *Engagement and Buy-In*

SAY: A significant part of your implementation plan is generating enthusiasm and buy-in with your staff. According to the *Engage for Success* organization, employee engagement is "a workplace approach resulting in the right conditions for all members of an organization to give of their best each day, committed to their organization's goals and values, motivated to contribute to organizational success, with an enhanced sense of their own well-being." Making sure everyone is on board with your plan can be the difference between success and failure. Engaging school managers and staff will be key to the result you want for your program.

Merriam-Webster defines "buy-in" as the acceptance of and willingness to actively support and participate in something (such as a proposed new plan or policy). Your managers are core implementers of your HACCP-based food safety plan: they train staff, implement procedures, and follow through to verify that monitoring and corrective actions were taken. Staff are the day-to-day operators of the HACCP plan. They are the ones carrying out the procedures and processes outlined. Getting managers and staff involved in the creation and implementation of the plan can provide buy-in for the food safety plan.

ASK: What methods do you use to build engagement and buy-in from managers and staff?

FEEDBACK:
› Involve the managers and staff in the creation of the plan.
› Form a "HACCP" planning or review team.
› Talk about how other districts have found value in their program.
› Educate managers and staff about the HACCP plan. This knowledge helps them know what to expect and how it will impact their job.
› Offer food safety classes to heighten awareness of food safety.

SAY: To expand ideas, let's do an activity to brainstorm. We want to create ideas for engaging and encouraging managers and staff to adopt the procedures and behaviors of our food safety plans.

SHOW SLIDE: *Manager and Staff Buy-In and Engagement Activity*

Activity: Manager and Staff Buy-In and Engagement

Materials:
> Markers
> Chart paper
> **Manager and Staff Buy-In and Engagement** worksheet

Time: 35 minutes

Instructions:
1. Divide participants into 5 groups for this activity. Give each group a piece of chart paper and a marker.
2. Give participants 15 minutes to work together to develop a list of action items for engaging managers and staff to buy-in to the district HACCP-based food safety plan.
3. Have participants write the actions on the chart paper and attach the list to the wall.
4. Give participants 20 minutes to present and discuss their ideas.
5. Encourage participants to write down ideas they like on the Manager and Staff Buy-In and Engagement worksheet.

>> # MANAGER AND STAFF BUY-IN AND ENGAGEMENT

Instructions: List methods and activities you can do to get manager and staff buy-in and engagement with implementing your food safety plan. Put a star next to the ideas you want to implement first.
1.
2.
3.

SAY: You will work in a group for this activity. Together you will develop a list of ideas and action items for engaging managers and staff to buy-in to a district's HACCP-based food safety plan. You will have 15 minutes to write your list on the chart paper. Also, write your list on the **Manager and Staff Buy-In and Engagement** worksheet in your Participant's Workbook.

DO: Allow participants 15 minutes to write out their lists.

SAY: Please post your list on the wall. Take about 20 minutes to walk around the room and read the ideas from the other groups. Write down a few ideas that you would like to incorporate on your **Manager and Staff Buy-In and Engagemen**t worksheet.

DO: Allow participants 20 minutes to report out. Encourage expanding on good ideas. Make sure the following ideas are mentioned.
> Tell the employees the "why" behind the "what." Explain why certain procedures and processes are needed and what they do to prevent food safety hazards.
> Follow up with your staff to see if they have questions or feedback on procedures.
> Show care and model behavior for staff.
> Actually listen to staff and incorporate useful feedback.
> Provide positive feedback to staff.

ASK: Did you find an idea you might try in your district?

DO: Request some participants to share ideas they are excited about.

SHOW SLIDE: *Creating a Culture of Food Safety*

SAY: Schools are required to have a food safety program based on HACCP principles if they participate in the USDA, Food Nutrition Service (FNS) Child Nutrition Programs. However, to keep children safe, schools need to emphasize the importance of food safety. A culture of food safety weaves food safety into all aspects of the school nutrition program and involves much more than just following procedures. It is the conversations that take place in the school boardrooms, the hallways, the kitchen, and the breakroom. It also includes the conversations that do not take place: the job-well-dones, the need-to-improves, and the disciplinary actions that never happen.

A well-written and carefully implemented HACCP-based food safety plan can help organize and support a culture of food safety. Creating a culture of food safety is about making food safety a priority for employees. A food safety culture is how everyone thinks and acts in their daily job to make sure that the food they make and serve is safe. It's about having pride in producing safe food every time. An organization with a strong food safety culture demonstrates to its employees and customers that making safe food is an important commitment. We want our staff to let parents, students, teachers, and administrators know, "This is how we do food safety around here, and it is important."

SHOW SLIDE: *Food Safety Advocate*

SAY: Some tips for creating a culture of food safety are included in a handout in the Participant's Workbook: **Tips for Creating a Food Safety Culture**. Let's talk about some of the ideas the industry is using for creating a culture of food safety.

DO: Refer participants to the **Tips for Creating a Food Safety Culture** handout and read over the recommendations. To change the pace of the class, ask participants to read out the bullets.

TIPS FOR CREATING A FOOD SAFETY CULTURE

> Create buy-in from the top down.
>   • Make food safety your priority too!
>   • Let your school board know about your HACCP-based plan.
> Make food safety part of the daily conversation.
>   • Create open dialogue where questions can be asked.
>   • Make good food safety practices a habit.
> Purchase equipment for staff to follow food safety procedures successfully.
>   • Cleaning equipment, hot and cold holding equipment, etc.
> Be consistent in training on current and new food safety practices and procedures.
>   • Food safety culture begins with new hire orientation and never goes away.
>   • Continuous training is needed to keep managers and staff up to date on the best food safety practices.
> Involve staff in the creation of the plan.
>   • An example process could be:
>   1. Director describes the goal of where to be.
>   2. Director distributes the draft plan to managers and staff.
>   3. Managers and staff are given a chance to edit and voice concerns.
>   4. Director addresses concerns and incorporates edits.
>   • This creates buy-in and a stronger program.
> Revisit the process regularly to make sure it is working.
> Create a peer-based food safety awareness.
>   • Mentor employees and have them mentor each other.
> Empower frontline employees to make decisions about food safety.
>   • Take corrective actions when needed.
>   • Ask questions when they have a food safety concern.
>   • Recognize employees' food safety accomplishments.

Every employee has the opportunity to be a food safety advocate for his or her school!

Source: Safe Food Alliance. (n.d.). The importance of food safety culture. https://safefoodalliance.com/management/the-importance-of-food-safety-culture/

ASK: What are some additional tips you can add to create a culture of food safety at your school?

DO: Allow a few moments for participants to respond.

Objective: Write an action plan for training and implementing the food safety plan.

SHOW SLIDE: *Implementing the Food Safety Plan – Before You Begin*

SAY: Once you create your HACCP-based food safety plan, it is important that you create a plan to implement it. Your goal is to have your food safety plan fully alive (living, breathing, growing, and changing) and integrated into your school nutrition operation. One way to do this is to work backward. Determine the date you want to start your plan, then list what needs to be done to get your schools ready for the food safety plan implementation. Think of steps like:
  › Prerequisite programs
  › Introduction of the plan to staff
  › Program editing
  › Equipment purchase
  › Training
  › SOP and log adoption

Think through some questions that you may need to answer.
  › Are you going to purchase a continuous temperature monitoring system for your freezers and coolers?
  › How long will it take to bid, purchase, and install the system?
  › Do you need to rewrite a new employee orientation?
  › Do you need to create a preventative maintenance plan and have all your ovens calibrated?

ASK: What are some other items you may need to consider before implementing your food safety plan?

SHOW SLIDE: *Implementing the Food Safety Plan – Training*

SAY: It is vital that current staff be carefully trained on all aspects of the food safety program: SOPs, logs, corrective actions, and other recordkeeping procedures. It is equally important that employee orientation includes the same information. Train current staff regularly on the food safety plan. If there are any changes to the plan, make sure all managers and staff are aware of the change.

SHOW SLIDE: *Implementation Calendar Activity*

DO: Refer participants to **HACCP-Based Food Safety Implementation Planner** in the Participant's Workbook.

SAY: The Implementing the **HACCP-Based Food Safety Implementation Planner** in the Participant's Workbook will help you plan out your implementation. The form is also on your computer. Work backward from your starting date to develop a calendar for implementation.

Activity: Implementation Calendar

Materials:
> **HACCP-Based Food Safety Implementation Planner** worksheet
> **HACCP-Based Food Safety Planning Calendar**
> Pen or pencil
> Highlighters (multiple colors)
> Computer

Time: 30 minutes

Instructions:
1. Have participants find the **HACCP-Based Food Safety Implementation Planner** worksheet and **HACCP-Based Food Safety Planning Calendar** in either the Participant's Workbook or on the computer. Participants will create an implementation plan using these documents.
2. Give participants 2–3 minutes to fill out the **HACCP-Based Food Safety Planning Calendar** with current dates. Then, have them determine the date that they want to start their food safety plan.
3. Give participants 10 minutes to list all the action items required to get the school nutrition program ready for the HACCP-based plan implementation on the **HACCP-Based Food Safety Implementation Planner** worksheet. The worksheet has listed a few tasks needed for plan implementation, but there are blank spaces for participants to add their own.
4. After completing the action item list, give participants 5 minutes to work backward from the starting date and develop a calendar for implementation filling in the dates.
5. Once participants have completed the **HACCP-Based Food Safety Implementation Planner** worksheet, give them 10 minutes to transfer the dates to the HACCP-Based Food Safety Planning Calendar. For the full visual effect, participants can color-code the calendar for the dates in the project phase using highlighters.
6. For 5 minutes, ask a few participants to share their action items and implementation calendars.

≫ HACCP-BASED FOOD SAFETY IMPLEMENTATION PLANNER

Instructions: Determine the date you want to start the district HACCP program. List all the action items required to get the school nutrition program ready for the HACCP plan implementation. The worksheet has listed a few tasks needed for program implementation, but there are blank spaces to add your own. Once this worksheet is completed, transfer the dates to the **HACCP-Based Food Safety Planning Calendar**.

School Year:

Director:

School District:

PROJECT PHASE	STARTING DATE	ENDING DATE
Create HACCP team		
Prerequisite programs		
Write HACCP plan draft		
Review and revise the plan		
Purchase equipment		
Develop a training plan		
Orient staff		
Start the HACCP program		
Review program implementation		
Revise plan		
Yearly plan update		

➤➤ HACCP-BASED FOOD SAFETY PLANNING CALENDAR

S	M	T	W	T	F	S

S	M	T	W	T	F	S

S	M	T	W	T	F	S

S	M	T	W	T	F	S

S	M	T	W	T	F	S

S	M	T	W	T	F	S

SAY: Please find the **HACCP-Based Food Safety Implementation Planner** worksheet and **HACCP-Based Food Safety Planning Calendar** in your Participant's Workbook or on the USB. We will use these pages to create an implementation plan. Take 2–3 minutes to fill out the **HACCP-Based Food Safety Planning Calendar** with current dates.

DO: Give participants about 2–3 minutes to fill out the current dates. Have the current day of the week and date ready to provide if asked.

SAY: Now, determine the date you want to start your food safety plan. On the **HACCP-Based Food Safety Implementation Planner** worksheet, list all the action items required to get the school nutrition program ready for the HACCP plan implementation. The worksheet has listed a few tasks needed for plan implementation, but there are blank spaces for you to add your own.

DO: Give participants 10 minutes to write their list of action items. Walk around the room and answer questions as needed.

SAY: After completing your action item list, work backward from the starting date, and develop a calendar for implementation by filling in the dates on the **HACCP-Based Food Safety Implementation Planner** worksheet.

DO: Give participants about 5 minutes to develop the calendar. Walk around the room and answer questions as needed.

SAY: Once you have completed the **HACCP-Based Food Safety Implementation Planner** worksheet, transfer the dates to the **HACCP-Based Food Safety Planning Calendar**. For the full visual effect, use the highlighters to color-code the calendar for the dates in the project phase.

DO: Give participants about 5 minutes to transfer and color-code the calendar. Walk around the room and answer questions as needed.

SAY: Having a planned-out schedule will be very helpful with implementation.

ASK: Would anyone like to share your action items and implementation calendars?

DO: Allow 5 minutes for participants to share.

Objective: Create a plan for validating and updating your HACCP-based food safety plan in the future.

SHOW SLIDE: *Validating the Food Safety Plan*

SAY: As we mentioned earlier, validating your HACCP-based food safety plan is very important. Validation is one of the last steps of a HACCP-based food safety plan. Whether done externally or internally, it is vital that all processes and procedures in the food safety plan work and that they are being implemented and followed. When processes change, new equipment is purchased, or new menu items are added, it is important to validate any new procedures or processes added for them.

SHOW SLIDE: *Updating the Food Safety Plan*

SAY: Review and update your HACCP-based food safety plan annually, or when there are changes in the facility. The HACCP-based food safety plan is a living document that changes as the needs in your school nutrition program change. These changes may include new equipment, new menu items, new laws and regulations, or correcting procedures that do not work.

Staff should be encouraged to speak up if they notice that changes may need to be made to ensure food is safe. Have an open-door policy for staff to ask any questions they may have concerning the food safety plan for your school. Keep a copy of all the documents of the site plan in the manager's office. It offers a complete explanation of the HACCP-based food safety plan for your school nutrition program and provides a place to make notes. Reviewing logs can also show what processes might not be working properly.

ASK: What are some things that change in your district from year to year that would affect your food safety plan?

FEEDBACK:
> Employee turnover
> Equipment changes
> Regulation changes
> New menu items
> Breakfast-in-the-classroom

ASK: How will you keep track of needed changes?

FEEDBACK:
> Reminder in electronic calendar
> Note page in HACCP workbook

ASK: What changes in your school nutrition program will impact food safety?

FEEDBACK:
> New equipment
> Remodeled school
> New employee

ASK: Who will be responsible for updating the plan?

FEEDBACK: HACCP team

ASK: Who will be responsible for training staff?

FEEDBACK: Train the trainer

DO: Allow participants time to answer.

SHOW SLIDE: _Lesson 3 Review_

SAY: We are now finished with **Lesson 3 – Implementation of a HACCP-Based Food Safety Plan**. We have covered methods for successfully implementing and maintaining a HACCP-based food safety plan, creating staff engagement and buy-in, planning a training program, and validating and updating the plan.

LESSON-AT-A-GLANCE
WRAP UP

TIME	TOPIC	ACTIVITY	MATERIALS
15 minutes	Wrap Up	ABC Review	› Chart paper › Markers
15 minutes		Evaluation and Certificates	› Training evaluation › Certificates
30 minutes			

>> WRAP UP

SAY: We are going to wrap up the training with an activity.

SHOW SLIDE: *ABC Review Activity*

Activity: ABC Review

Materials:
> Chart paper
> Markers

Time: 15 minutes

Instructions:
1. Write the alphabet on two pieces of chart paper. There should be enough room beside each letter to write a word.
2. Split the class into two groups and have them line up single file in front of the chart paper.
3. Give the person in the front of the line the marker.
4. The two teams will race against each other to fill out the chart paper with ideas and concepts from the training next to each letter.
   > For example, participants may put the word "cleaning" for the letter "C" or "temperatures" for the letter "T."
   > For tough letters like "X" and "Z," participants can use a word that incorporates that letter such as "taxes" and "analyze."
   > They do not have to fill it out in alphabetical order, and they will continue to fill out the chart paper until the alphabet is complete. The first team to complete the alphabet wins. Participants can use any charts on the walls, the Participant's Workbook, and each other for help.
5. This activity will take about 10 minutes.

Instructor's Note: Depending on the class size, another team and piece of chart paper may be needed. Groups should be no larger than 6–8 people. Make sure to check your roster before class to determine how many teams you will need for this activity.

SAY: I am going to count you off into two groups. Ones, please line up single file at the front of the chart paper on the left, and Twos, please line up on the right. I am going to give a marker to the person in the front of each line. When I say, "Go," write a word next to any letter that relates to a concept learned in this training. For example, you may put the word "cleaning" for the letter "C" or "temperatures" for the letter "T." For tough letters like "X" and "Z," you can use a word that incorporates that letter such as "taxes" and "analyze." You do not have to go in alphabetical order. The front person will then pass the marker to the next person in line and go to the back of the line. The person with the marker will write the next word, pass the marker to the person behind them, and go to the back of the line, and so on until the alphabet is complete. The two teams will race against each other to fill out the chart paper first with concepts from the training. You can use any charts on the walls, the Participant's Workbook, and each other for help.

DO: Allow 15 minutes to complete the wrap-up activity.

SAY: That was challenging and fun! You had to think back over the last few days to remember some of the words and concepts. Are there any questions?

DO: Answer all questions and review questions submitted on the Bike Rack.

SHOW SLIDE: *ICN on Social Media*

SAY: Thank you for attending today's workshop. The Institute of Child Nutrition partners with USDA's Food and Nutrition Service (FNS) to develop and support training events like our session today. You can find out about our newest resources on our different social media profiles. We would like your feedback on this workshop.

DO: Provide participants the training evaluation form. Make sure all participants have signed the Attendee Roster. Make sure everyone has signed the sign-in sheet.

SHOW SLIDE: *Thank You!*

SAY: I have a Certificate of Completion for each of you for completing *Writing, Revising, and Updating a HAACP-Based Food Safety Plan for Schools* workshop. Keep this record in your files.

Watch for more chances to take classes through ICN, work, and local school nutrition organizations. Congratulations, and thank you so much for attending this workshop!

DO: Provide attendees a Certificate of Completion.

KEY TERMS

KEY TERMS	DEFINITIONS
Critical control point	The point in the flow of food where a hazard can be prevented, eliminated, or reduced to a safe level
Critical limits	Minimum or maximum limits that must be met to prevent the hazard or reduce it to a safe level
Internal cooking temperature	The recommended final internal cooking temperature for time and temperature control for safety foods such as meat, poultry, eggs, and fish
Flow of food	Path food takes through a kitchen beginning with purchasing through receiving, storage, production, holding, serving, cooling, and reheating
Hazard Analysis Critical Control Point (HACCP)	A specific approach for identifying food safety hazards that involves finding potential food safety issues in your program and implementing preventative measures
National School Lunch Program (NSLP)	A federally assisted meal program operating in public and nonprofit private schools and residential child care institutions; established under the National School Lunch Act, signed by President Harry Truman in 1946
Prerequisite food safety programs	Necessary food safety programs to have in place to address operational and sanitation conditions
Risk factor	A hazard that increases a person's chances of developing a disease
Standard Operating Procedure (SOP)	Written best practices and procedures for producing safe food that addresses basic cleaning and sanitation programs and each step in the foodservice process (purchasing, receiving, storing, preparing, cooking, serving and holding, cooling, reheating, and transporting)
Safety Data Sheet (SDS)	Documents produced by a chemical manufacturer that contain information about the chemical such as physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical
School Food Authority (SFA)	The governing body responsible for the administration of one or more schools; has the legal authority to operate the program therein, or be otherwise approved by FNS, to operate the program
Time/Temperature Control for Safety (TCS) Foods	Foods that require control of time and temperature to limit pathogenic microorganism growth or toxin formation

►► RESOURCES

Iowa State University Extension. (2019). *School foodservice HACCP resources*. https://www.extension.iastate.edu/foodsafety/haccp-school-foodservice

Kim, S. A., Yun, S. J., Lee, S. H., Hwang, I. G., & Rhee, M. S. (2013). *Temperature increase of foods in car trunk and the potential hazard for microbial growth*. Food Control, 29, 66-70.

Kwon, J., Roberts, K. R., Sauer, K., Cole, K. B., & Shanklin, C. W. (2014). *Food safety risks in restaurants and school foodservice establishments: Health inspection reports*. Food Protection Trends, 34(1), 25-35.

Martins, M., & Rocha, A. (2014). *Evaluation of prerequisite programs implementation at school's foodservice, Food control*. 39, 30-33. https://doi.org/10.1016/j.foodcont.2013.10.040

Mortimore, S. & Wallace, C. (2013). *HACCP: a practical approach*, 3rd Edition. New York: Springer.

Roberts, K. R., Sauer, K., Sneed, J., Kwon, J., Olds, D., Cole, K., & Shanklin, C. (2014). *Analysis of school food safety programs based on HACCP principles. Journal of Child Nutrition & Management,* 38(1). http://schoolnutrition.org/JCNM/

Sneed, J., & Patten, E. (2015). *Current practices for providing school field trip meals: Perspectives of school nutrition managers and teachers.* Journal of Child Nutrition & Management, 39(1). http://schoolnutrition.org/JCNM/

U.S. Food and Drug Administration. (2018). *Adoption of the FDA Food Code by State and Territorial agencies responsible for the oversight of restaurants and retail food stores.* https://www.fda.gov/media/107543/download

Venuto, M., Garcia, K., & Halbrook, B. (2015). A*nalyses of the contributing factors associated with foodborne outbreaks in school settings* (2000-2010). Journal of Environmental Health, 77(7), 16-20. https://www.fns.usda.gov/ofs/analyses-contributing-factors-associated-foodborne-outbreaks-school-settings-2000-2010

Wang, C. Van Fleet, D., & Van Fleet, W. (2014). *Social networking as a strategy for improving food safety: a pilot study*. Journal of Business Strategies. 31(2), 357-378.

➤➤ REFERENCES

Centers for Disease Control and Prevention. (2018, November 5). *Burden of foodborne illnesses in the United States*. https://www.cdc.gov/foodborneburden/burden/index.html

Engage for Success. (n.d.). *What is employee engagement?* https://engageforsuccess.org/what-is-employee-engagement

Food Research and Action Center. (n.d.). *National school lunch program*. http://frac.org/programs/national-school-lunch-program

Institute of Child Nutrition. (2017, February). *Food safety fact sheet: Complex process*. www.theicn.org/foodsafety

Institute of Child Nutrition. (2017, February). *Food safety fact sheet: No cook process*. www.theicn.org/foodsafety

Institute of Child Nutrition. (2017, February). *Food safety fact sheet: Same day service process.* www.theicn.org/foodsafety

Institute of Child Nutrition. (2015). *Food safety in schools.* www.theicn.org/foodsafety

Institute of Child Nutrition. (2016). *HACCP-based standard operating procedures.* www.theicn.org/foodsafety

Institute of Child Nutrition. (2017). *Keep it clean* [poster]. www.theicn.org/foodsafety

Institute of Child Nutrition. (2017). *Personal hygiene* [poster]. www.theicn.org/foodsafety

Institute of Child Nutrition. (2017). *Temperature* [mini-poster]. www.theicn.org/foodsafety

Merriam-Webster. (n.d.). *Buy-in*. https://www.merriam-webster.com/dictionary/buy-in

PEW Charitable Trust. (2014, November 10). *Young children and foodborne illness*. https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2014/11/young-children-and-foodborne-illness

Pinterest. (n.d.). *Kitchen cleaning schedule*. https://www.pinterest.com/pin/388013324130811614/

Safe Food Alliance. (2019). *The importance of food safety culture*. https://safefoodalliance.com/management/the-importance-of-food-safety-culture/

Template.net. (n.d.). 39+ *Preventive maintenance schedule templates – Word, Excel, PDF*. https://www.template.net/business/schedule-templates/preventive-maintenance-schedule-template/

U.S. Department of Agriculture, Food and Nutrition Service. (2005). *Guidance for school food authorities: Developing a school food safety program based on the Process Approach to HACCP principles*. https://www.fns.usda.gov/guidance-school-food-authorities-developing-school-food-safety-program-based-process-approach-haccp

U.S. Department of Education, National Center for Education Statistics. (2021). *Digest of education statistics, 2019*. https://nces.ed.gov/fastfacts/display.asp?id=84

U.S. Food and Drug Administration. (2017, December 19). *HACCP principles & application guidelines*. https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines#princ

U.S. Food and Drug Administration. (2019, December 23). *Food code* 2017. https://www.fda.gov/food/fda-food-code/food-code-2017

U.S. Food and Drug Administration. (2020, October 21). *FSMA Final Rule for Mitigation Strategies to Protect Food Against Intentional Adulteration*. https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-mitigation-strategies-protect-food-against-intentional-adulteration

The University of Mississippi

School of Applied Sciences

800-321-3054

www.theicn.org