HACCP

Hazard Analysis
Critical Control
Point

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

Overview

- Learn Hazard Analysis Critical Control Point (HACCP)
- Develop a rough draft of a food safety plan
- Take home tools, templates, and resources

Logistics

AGENDA – DAY 1

TIME	TOPIC	PRESENTER
DAY 1 (6 HOURS)		
8:30–8:45 a.m.	Introduction	Elisha Bury
8:45–10:00 a.m.	Lesson 1 – Before You Get Started	Elisha Bury
10:00–10:15 a.m.	BREAK	
10:15 a.m. – Noon	Lesson 2 – Creating Your HACCP-Based Food Safety Plan	
Noon – 1 p.m.	LUNCH (on your own)	
1:00–2:00 p.m.	Lesson 2 – Creating Your HACCP-Based Food Safety Plan	
2:00–3:25 p.m.	Update HACCP-Based Food Safety Plan	Individual Work
3:25–3:30 pm.	Wrap Up	Elisha Bury

18 Hour HACCP Pre-/Post-assessment

Pre-assessment

- Use a unique, 4 digit identifier (last 4 of cell #)
- You will use the same ID # for the post-assessment

  - So TDA can collect and analyze data to improve training effectiveness.
  - Anonymous

Warm-Up Activity

DAY 1

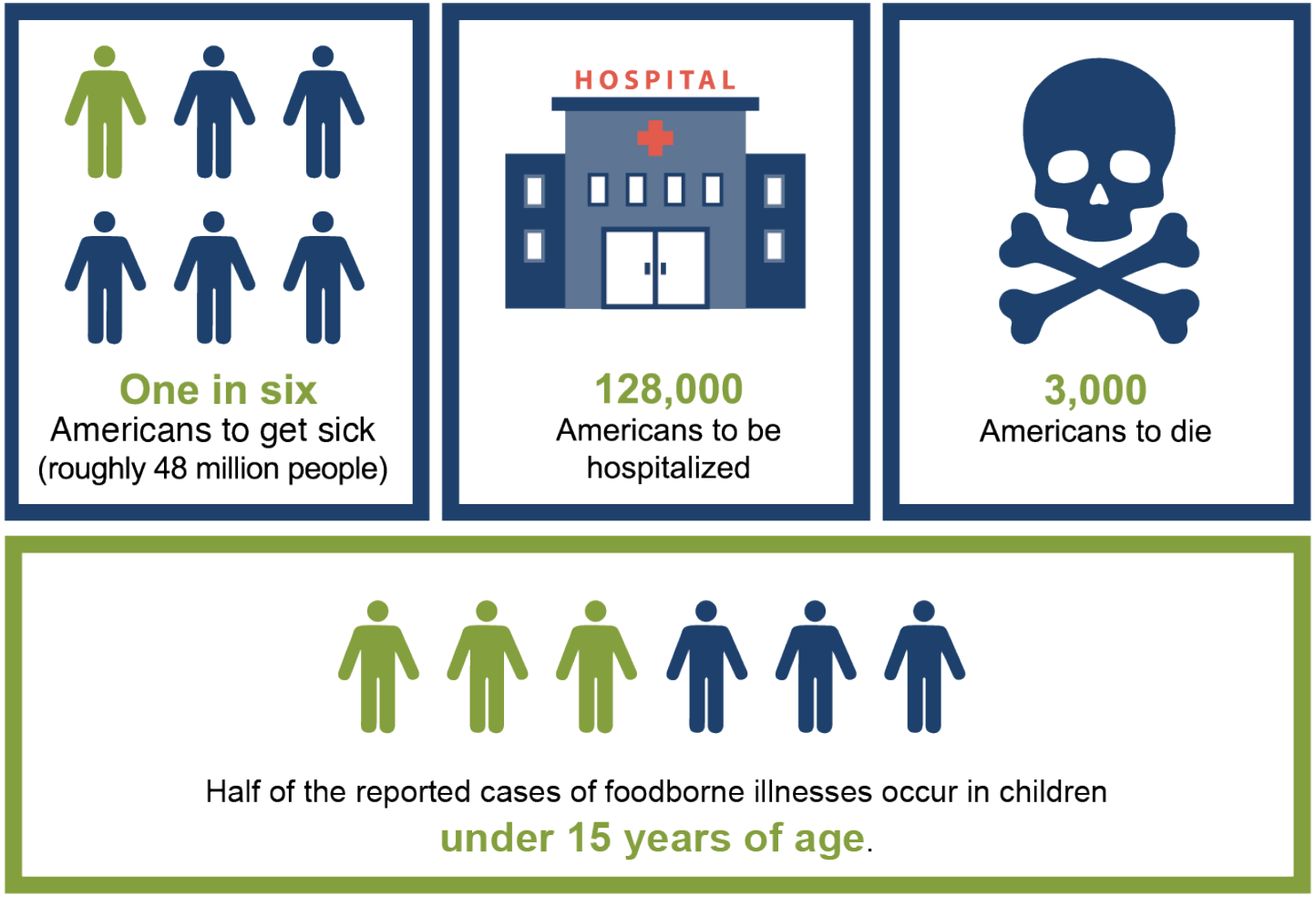
Learning Developing Writing

Lesson 1 –

Before You Get Started

Background

The Centers for Disease Control and Prevention (CDC) estimates that annually foodborne illness will cause:



Lesson 1 Objectives

- What is HACCP
- Why HACCP is important to schools
- What prerequisite programs are needed
- Write school nutrition program descriptions

HACCP

Hazard Analysis Critical Control Point

FDA

Process Approach

USDA

Process Approach to HACCP-based plan for schools

Population in Schools

- Over 30 million children served school meals daily
- Young children at risk for foodborne illness:
  - Developing immune systems
  - Lower body weight
  - Limited control over their diet
  - Reduced stomach acid production

Food-Related Disabilities

- Food allergies/intolerances
- Celiac disease
- Diabetes
- PKU
- Modified texture

Child Nutrition Programs and HACCP

Child Nutrition Reauthorization Act of 2004

- Requirement for a food safety program based on HACCP

Healthy, Hunger-Free Kids Act of 2010

- Amended the requirement for the HACCP-based plan to apply to all locations in the school where food is stored, prepared, or served

Essential Point of HACCP

Heart of HACCP is prevention!

Sanitation

Temperature Control

Standard Operating Procedures (SOPs)

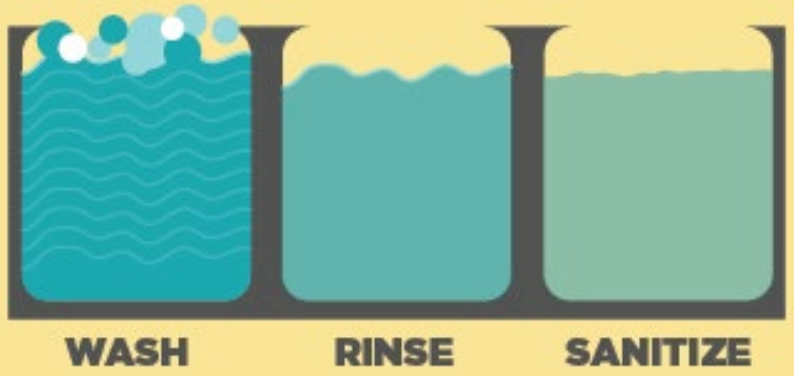
HACCP and Sanitation

Prevent foodborne illness outbreaks

Eliminates microorganisms on **food contact surfaces**

Wash, rinse, sanitize, and air dry before and after use:

- Food contact surfaces
- Equipment
- Utensils
- Sinks
- Tables
- Thermometers
- Carts



HACCP and Personal Hygiene

Prevent foodborne illness outbreaks

Reduce the spread of microorganisms from **employees to food**

- Approved hair restraint
- Remove jewelry
- Don't work when sick
- Don't touch ready-to-eat foods with bare hands
- Clean uniform and apron
- Wash hands
- Clean short nails, no polish or false nails
- Closed-toe non-slip shoes

HACCP and Temperature Control

Temperature Danger Zone (TDZ): 41 °F – 135 °F

Hold food temperatures

Cold foods (41 °F or below)
Hot foods (135 °F or above)

Cook food to proper cooking temperature

Use a calibrated food thermometer

Record temperatures

HACCP and Standard Operating Procedures (SOPs)

- Step-by-step instructions for food safety
- How to do
- What to do
- Foundation for the food safety program

HACCP Prerequisite Programs

- Cleaning schedule and Safety Data Sheets (SDS)
- Personnel policies
- Preventative maintenance plan
- Vendor letters of assurance of food safety standards
- Pest control contract

Cleaning Schedule

Preventative Maintenance Plan

	Weekly	3 Months	6 Months	Yearly	Vendor List	Notes
Refrigerator						
Freezer						
Milk cooler						
Oven						
Combi oven						
Dishwasher						
Steam-jacketed kettle						
Hot holding equipment						
Transport equipment						
Ice machine						

Employee Policies

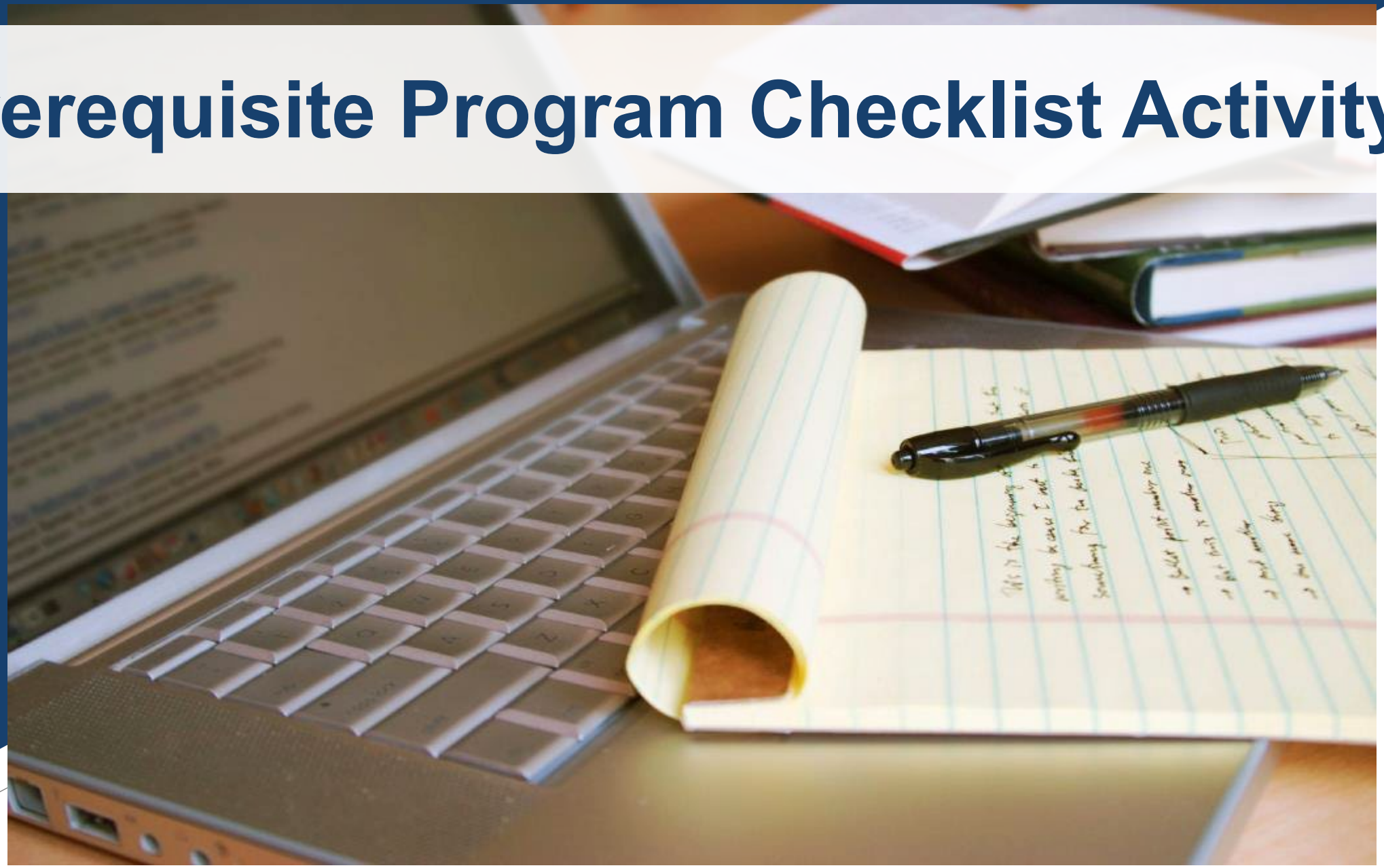
Vendor Food Safety

Demonstrate focus on food safety

- Share food safety plan
- Allow for inspection of their facility
- Share scores of recent inspections

Pest Control Contract

Prerequisite Program Checklist Activity



Program Overview Description

- District-wide policies
- Examples:
  - Purchasing
  - Leftover use
  - Uniforms
  - Training
  - Contracted and shared services
  - Version of *Food Code*

School Site Description

- Kitchen site specific policies
- Type of foodservice production
- Location where food is served
- Equipment list
- Condition of kitchen and serving area
- Menu and recipes categorization
- Hours of operation
- Vendor delivery schedule
- Site staff and food safety training

Program Overview and School Site Descriptions Activity

Lesson 1 Review

- What is HACCP
- Why HACCP is important to schools
- What prerequisite programs are needed
- Write school nutrition program descriptions

Lesson 2 –

Creating Your Food Safety Plan

A HACCP-Based Food Safety Plan

1. Develop, document, and implement Standard Operating Procedures (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

Lesson 2 Objectives

- Write a food safety plan
- Review and discuss current resources available

Hazard Analysis

Biological

Chemical

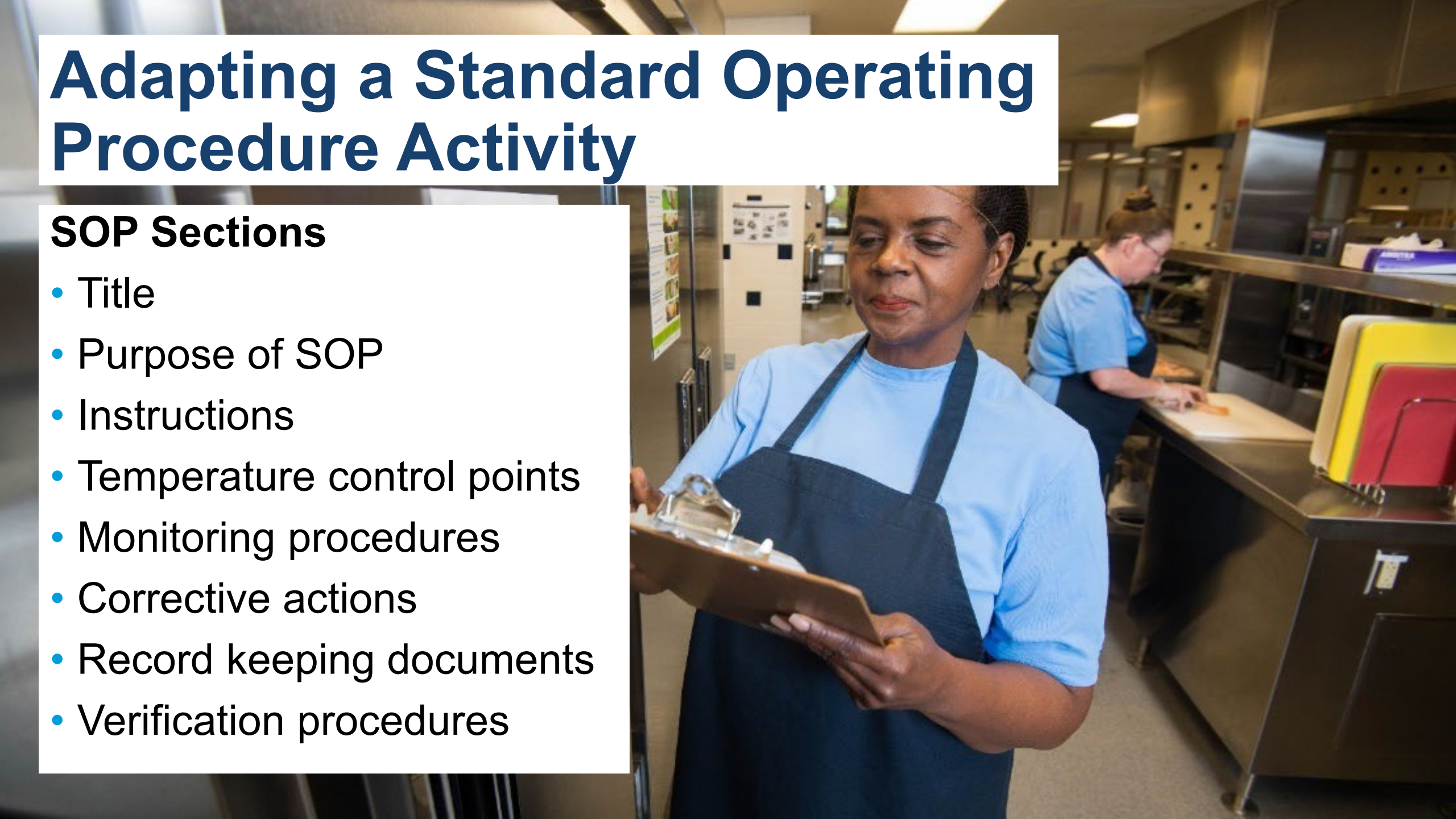
Physical

1. Develop, Document, and Implement SOPs

Standard Operating Procedure (SOPs)

- Step-by-step written instructions
- Cover food safety practices
- Tailor to individual school
- Important for staff to follow

Adapting a Standard Operating Procedure Activity

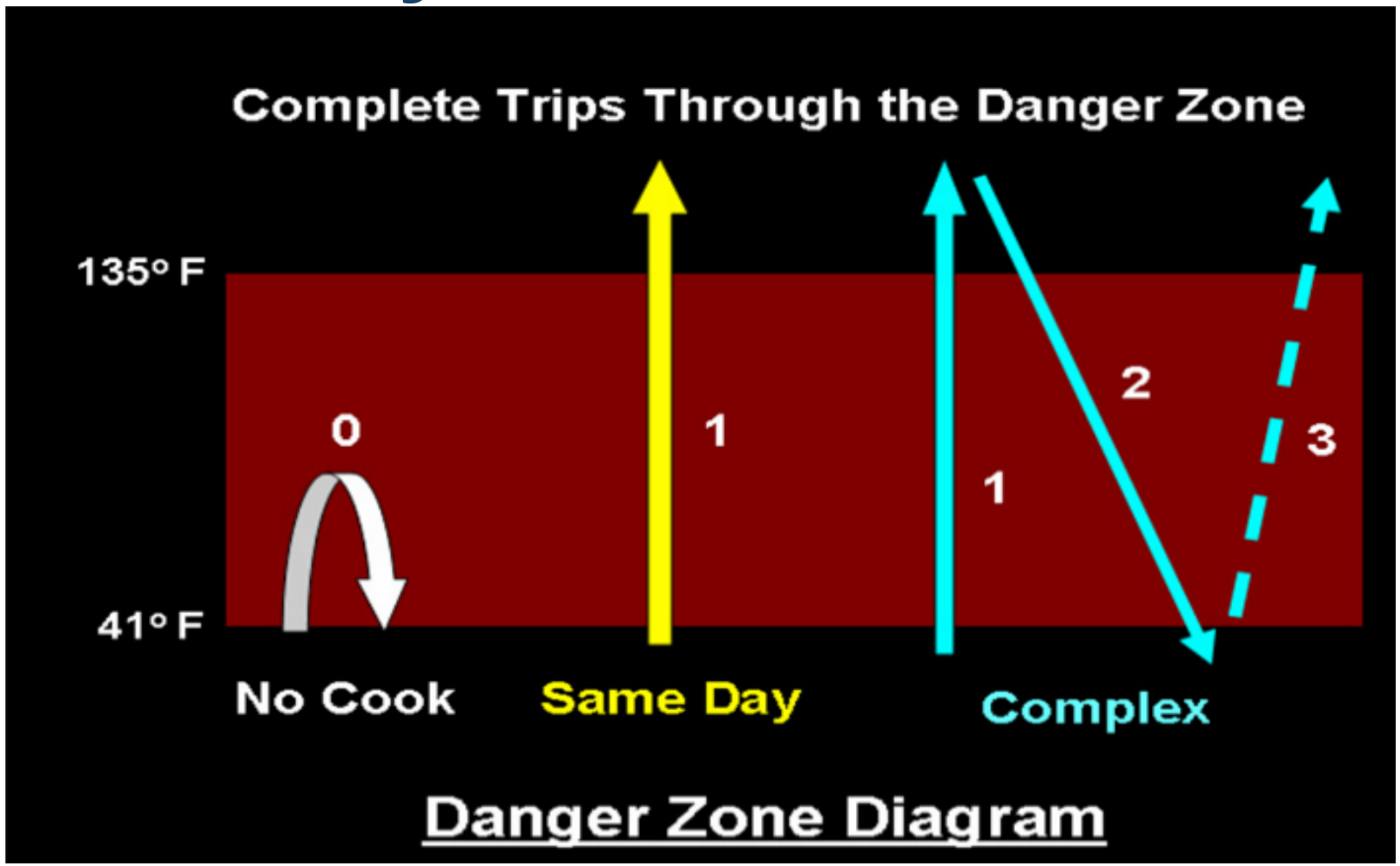


SOP Sections

- Title
- Purpose of SOP
- Instructions
- Temperature control points
- Monitoring procedures
- Corrective actions
- Record keeping documents
- Verification procedures

Standard Operating Procedure Checklist Activity

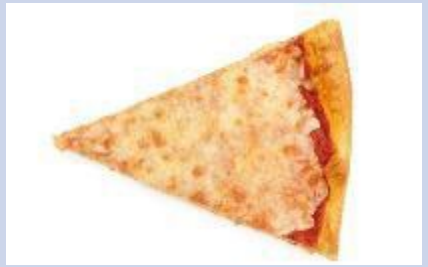
2. Identify and Document All Menu Items



Process Approach for HACCP

Categories based on times item moves through the temperature danger zone (TDZ)

Process Approach Categories

Process Category	Temperature Danger Zone	Example Foods
No Cook	Food <u>does not</u> go through TDZ	  
Same Day Service	Food goes through TDZ <u>one</u> time	  
Complex	Food goes through TDZ <u>two or more</u> times	  

3. Identify and Document Control Measures and Critical Limits

Critical Control Point (CCP)	• Key point: prevent, eliminate, or reduce a food safety hazard • Example: Check final internal cooking temperature of ground beef
Critical Limit (CL)	• Min or max limit to prevent or eliminate a hazard • Example: Ground beef min cooking temperature is 155 °F

Control Measures — No Cook

Does not go through TDZ

Cold Holding: 41 °F or lower

- Prevents growth of pathogens

Process 1: No Cook – Fruit Salad

Receive	• Use known source, receiving temperatures
Store	• Proper storage temperatures, prevent cross-contamination, store away from chemicals
Prepare	• Good personal hygiene, restrict ill employees, prevent cross-contamination
CCP: Cold Hold	• CL: hold at 41 °F of below. • Check and record temperatures.
Serve	• No bare hand contact with ready-to-eat food, personal hygiene, restrict ill employees

Control Measures — Same Day Service

Food goes through the TDZ one time

Cook to internal temperature to destroy bacteria

Hot Holding: 135 °F or higher

Process 2: Same Day – Baked Chicken

Receive	• Use known source, receiving temperatures
Store	• Proper storage temperatures, prevent cross-contamination, store away from chemicals
Prepare	• Good personal hygiene, restrict ill employees, prevent cross-contamination
CCP: Cook	• CL: internal temperature of 165 °F for at least 15 seconds. • Check and record temperatures.
CCP: Hot Hold	• CL: hold at no less that 135 °F. • Check and record temperatures.
Serve	• No bare hand contact with ready-to-eat food, personal hygiene, restrict ill employees

Control Measures — Complex

Food that goes through the TDZ two or more times

Cook to internal temperature to destroy bacteria

Cool quickly to slow bacterial growth

- 70 °F within 2 hours
- 41 °F within additional 4 hours

Reheat

- 165 °F for 15 seconds within 2 hours

Hot holding

- 135 °F or higher

Process 3: Complex–Beef and Bean Tamale Pie

Receive	• Use known source, receiving temperatures
Store	• Proper storage temperatures, prevent cross-contamination, store away from chemicals
Prepare	• Good personal hygiene, restrict ill employees, prevent cross-contamination
CCP: Cook	• CL: internal temperature of 165 °F for at least 15 seconds. • Check and record temperatures.
CCP: Cool	• CL: cool to 70 °F within 2 hours and from 70 °F to 41 °F or lower within an additional 4 hours. • Check and record temperatures.
CCP: Reheat	• CL: heat to 165 °F for at least 15 seconds.. • Check and record temperatures.
CCP: Hot Hold	• CL: hold at no less that 135 °F. • Check and record temperatures.
Serve	• No bare hand contact with ready-to-eat food, personal hygiene, restrict ill employees

Identify Critical Control Points in Recipe Activity

Chicken Alfredo with a Twist

STEP 3
Critical Control Point:
Hold pasta at 135°F or higher.

STEP 4
Critical Control Point:
Heat to 165°F or higher for at least 15 seconds.

STEP 5
Critical Control Point:
Hold for hot service at 135°F or higher.

Sorting Recipes into Process Approach Categories Activity

Use Your Recipes

4. Establish Monitoring Procedures

Questions to Consider	Example
How will you monitor?	Verify the refrigerator temperature is 41 ˚F or lower.
When and how often will you monitor?	Two times daily; beginning and end of workday
Who will be responsible for monitoring?	Cafeteria manager

5. Establish Corrective Procedures

Corrective action – what must be done if a CCP is not met

Example Scenario

- Cooler temperature is 46 ˚F
- Should be 41 ˚F
- Temperature taken the day before and logged
- Corrective action
  1. Check a carton of milk.
     - If it registers 42 ˚F or above, do not serve.
  2. Call for replacement milk and equipment repair.
  3. If milk temperature is too high, mark all the milk in the cooler as *BAD – do not use* or *discard as instructed*.

6. Keep Records

Method for checking and verifying that the food safety plan is working

Examples of records to keep

- SOPs
- Time and temperature logs
- Corrective action records
- Calibration logs
- Training logs

Records can show what safety measures were taken if there is a foodborne illness outbreak.

Using Logs

Cooking and Reheating Temperature Log

Instructions: Record product name, time, the two 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. Maintain this log for a minimum of 1 year.

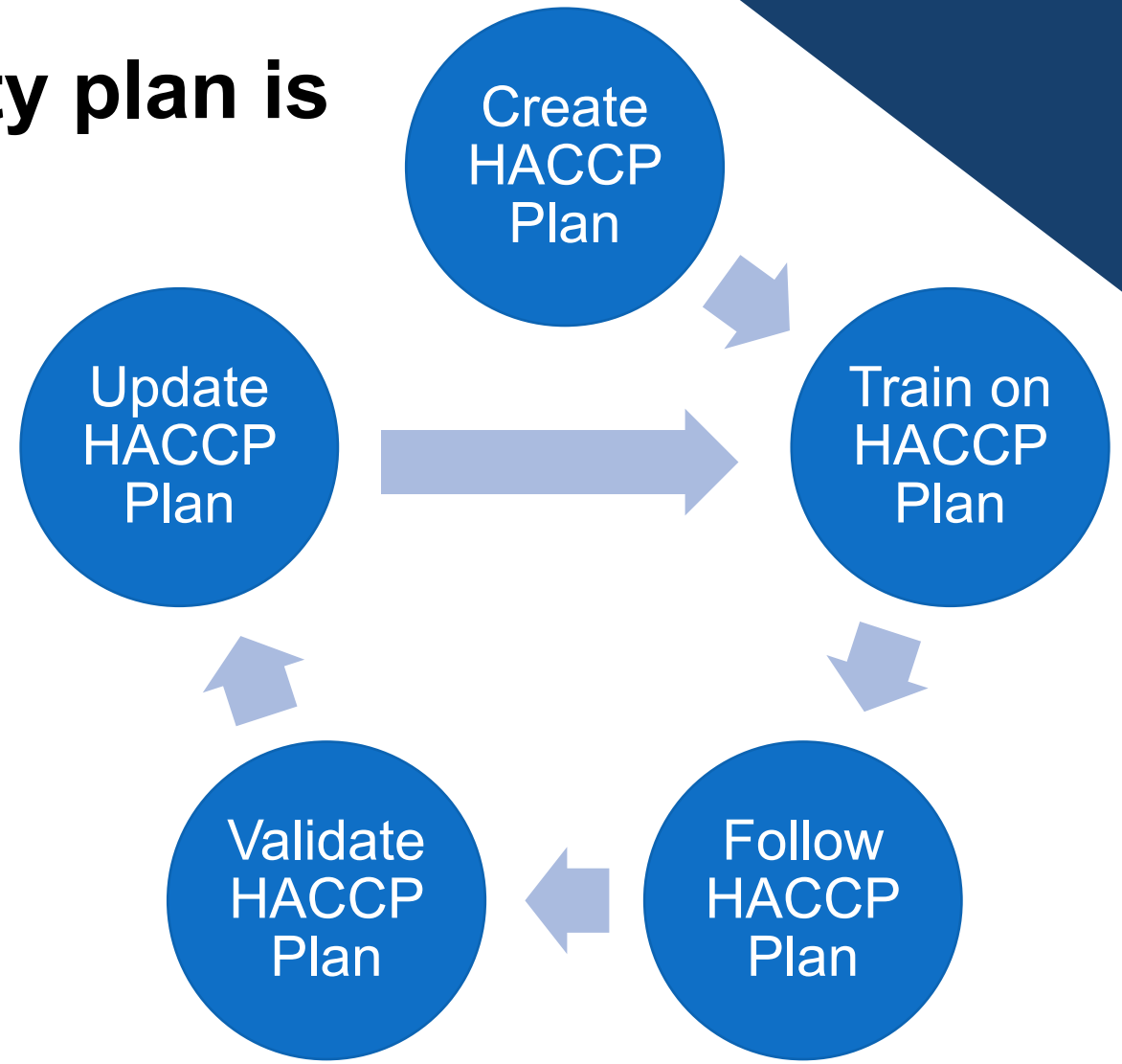
Date and Time		Food Item	Internal Temperature	Internal Temperature	Corrective Action Taken	Initials	Verified By/Date

7. Review and Revise

HACCP-based food safety plan is a living document!

Review and revise food safety plan

- At least annually
- With changes in facility
  - New equipment
  - New menu items
  - New laws and regulations
- When employees voice issues
- Procedure is not working



Selection of SOPs

Do not reinvent the wheel

Use available resources

Adapt SOPs and logs to your school

Organize Your HACCP Plan

- HACCP Plan
  - District plan
  - All school plans
- Organize material with Table of Contents
  - Outline for HACCP plan

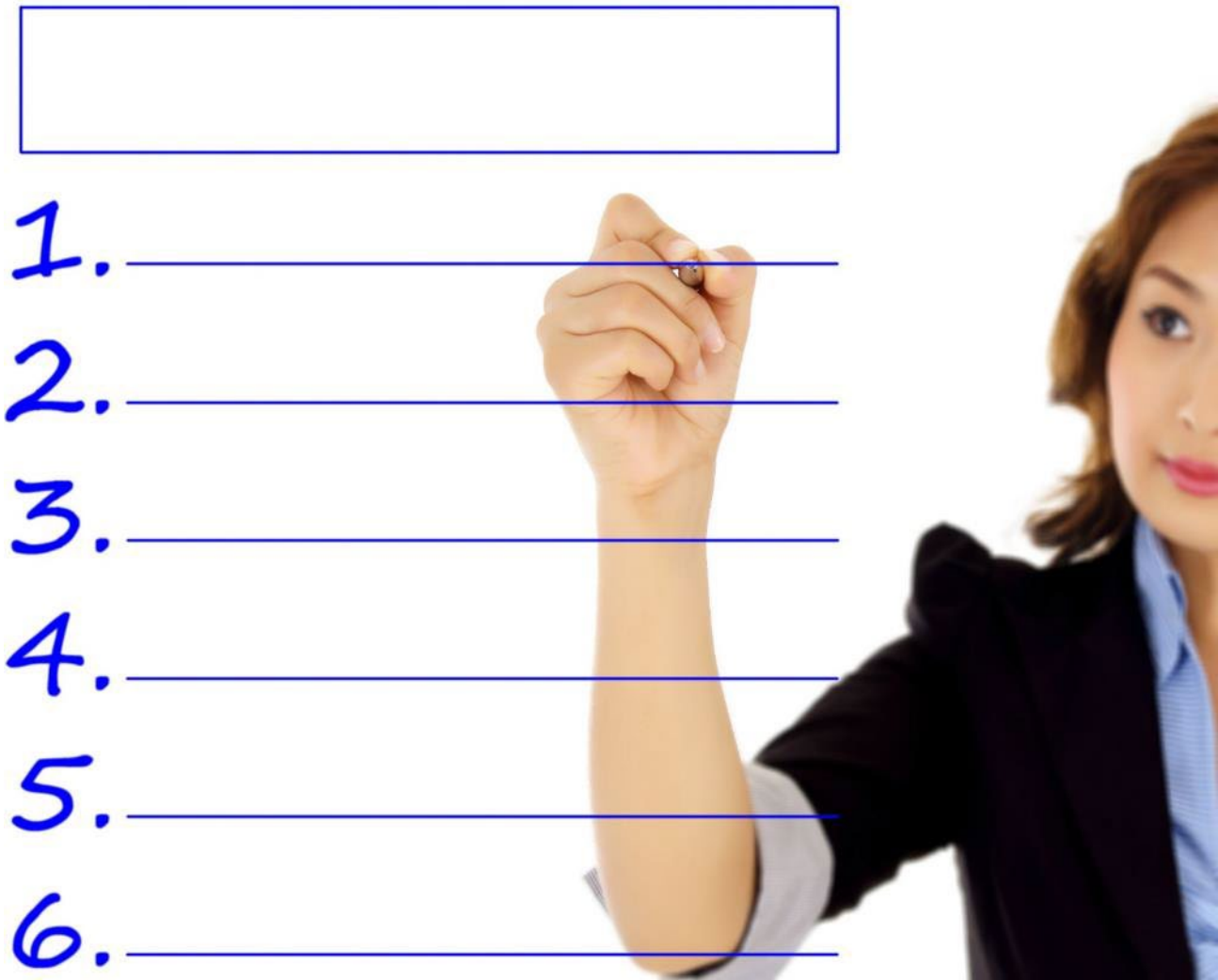


Table of Contents Activity

Lesson 2 Review

- Write a food safety plan
- Review and discuss current resources available

Individual Work: Writing Your HACCP-Based Food Safety Plan

End Day 1

DAY 2

Group Discussion and Writing

AGENDA – DAY 2

TIME	TOPIC	PRESENTER
DAY 2 (6 HOURS)		
8:30–8:45 a.m.	Welcome	Elisha Bury
8:45–9:25 a.m.	District Size Challenges and Solutions	Group Work
9:25–10:05 a.m.	School Location Challenges and Solutions	Group Work
10:05–10:20 a.m.	BREAK	
10:20–11:05 a.m.	Food Production Type Challenges and Solutions	Group Work
11:05 a.m. – 12:05 p.m.	LUNCH (on your own)	
12:05–1:25 p.m.	Edit Safety Plan from Group Work	Individual Work
1:25–2:25 p.m.	Emergency Plan Challenges and Solutions	Group Work
2:25–3:25 p.m.	Food Defense Challenges and Solutions	Group Work
3:25–3:30 p.m.	Wrap Up	Elisha Bury

Group Breakout
Session 1

District Size

- Small: <5,000 students
- Medium: 5,001–10,000 students
- Large: 10,001–49,999 students
- Major: 50,000 or more students

What challenges occur in your school nutrition program?

What are your unique food safety hazards?

What are some possible solutions?

School Location

- Rural
- Urban
- Suburban
- Remote

What challenges occur in your school nutrition program?

What are your unique food safety hazards?

What are some possible solutions?

Food Production Type

- Scratch-Cooking
- Central Kitchen
- Heat and Serve
- Satellite Site
- Combination

What challenges occur in your school nutrition program?

What are your unique food safety hazards?

What are some possible solutions?

Individual Work:
Editing Your HACCP-Based Food Safety Plan 1

Emergency Situations

- Internal Threat
- External Threat
- Natural disaster

What challenges occur in your school nutrition program?

What are your unique food safety hazards?

What are some possible solutions?

Food Defense

What challenges occur in your school nutrition program?

What are your unique food defense hazards?

What are some possible solutions?

End Day 2

DAY 3

Validating Implementing

AGENDA – DAY 3

TIME	TOPIC	PRESENTER
DAY 3 (6 HOURS)		
8:30–8:45 a.m.	Welcome	Elisha Bury
8:45–10:30 a.m.	Edit Food Safety Plan from Group Work	Individual Work
10:30–10:45 a.m.	BREAK	
10:45 a.m. – Noon	Validating the Food Safety Plan	Partner Work
Noon – 1 p.m.	LUNCH (on your own)	
1:00–2:30 p.m.	Lesson 3 – Implementation of HACCP-Based Food Safety Plan	Elisha Bury
2:30–3:00 p.m.	Exit Ticket: Scattergories	
3:00–3:30 p.m.	Wrap Up	Elisha Bury

Individual Work:
Editing Your HACCP-Based Food Safety Plan 2

Food Safety Plan Validation

Critical questions for validation of plan

- Is the plan inclusive of all hazards?
- Does the plan prevent hazards in your school nutrition program?
- Is the plan being used?

Validating Your Partner's Food Safety Plan Activity

Review Your Partner's Plan

Lesson 3

Implementation of a HACCP-Based Food Safety Plan

Lesson 3 Objectives

- Encourage staff to adopt a food safety plan
- Write an action plan for training and implementing
- Create a plan for validating and updating your plan

Engagement and Buy-In

Engagement

- Degree of attention, curiosity, interest, optimism, and passion that staff show
- Extends to the level of motivation

Buy-In

- Acceptance and willingness to actively support and participate

Manager and Staff Buy-In and Engagement Activity


Creating a Culture
of
Food Safety

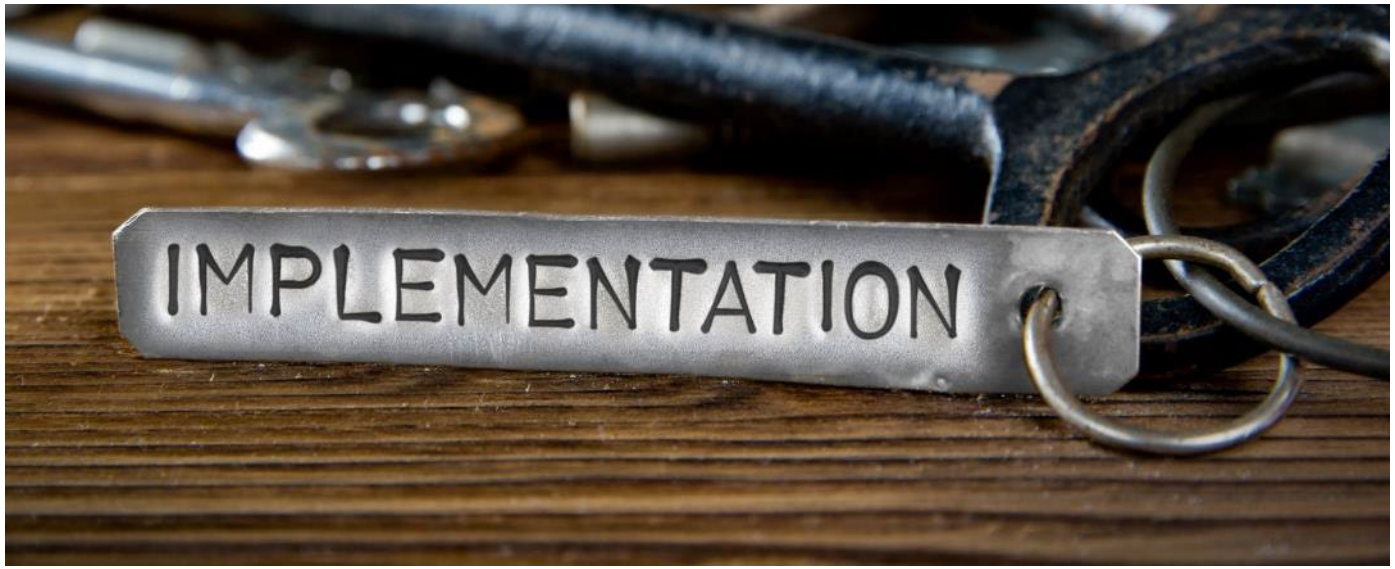
Food Safety Advocate

Every employee has the opportunity!

Implementing the Food Safety Plan – Before You Begin

Development tasks:

- Prerequisite programs
- Introduction of plan to staff
- Program editing
- Equipment purchase
- Training
- SOP and log adaption



Implementing the Food Safety Plan – Training

Manager training

- Procedures
- Logs
- Corrective actions
- Monitoring
- Verification
- Record Keeping

Staff training

- Procedures, logs and corrective actions
- New Employee Orientation
- Plan introduction
- Refresher
- Documentation of training

Implementation Calendar Activity

Validating the Food Safety Plan

- Processes and procedures in plan work
- Staff following processes and procedures
- Validate new equipment and menu items

Updating the Food Safety Plan

Keep your HACCP plan a living document!

Review and revise food safety plan

At least annually

With changes in facility

- New equipment
- New menu items
- New laws and regulations

When employees voice issues

Procedure is not working

Lesson 3 Review

- Encourage staff to adopt a food safety plan
- Write an action plan for training and implementing
- Create a plan for validating and updating your plan

Scattergories Review Activity

18 Hour HACCP Pre-/Post-assessment

Post-assessment

- Use a unique, 4 digit identifier (last 4 of cell #)
- You will use the same ID # for the post-assessment

  - So TDA can collect and analyze data to improve training effectiveness.
  - Anonymous

ESC Training Survey

Training Survey

- TDA strives to use your feedback to make training as effective as possible.
- Short, 4 question survey that TDA will use to improve training.

- So TDA can collect and analyze data to improve training effectiveness.
- Anonymous

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