COURSE BOOK

FOOD SAFETY ON THE GO

MODULE 4:

FOOD SERVICE WORKERS (STAFF AND VOLUNTEERS)

COLLEGE OF AGRICULTURE & NATURAL RESOURCES
MEALS on WHEELS AMERICA

2019 EDITION

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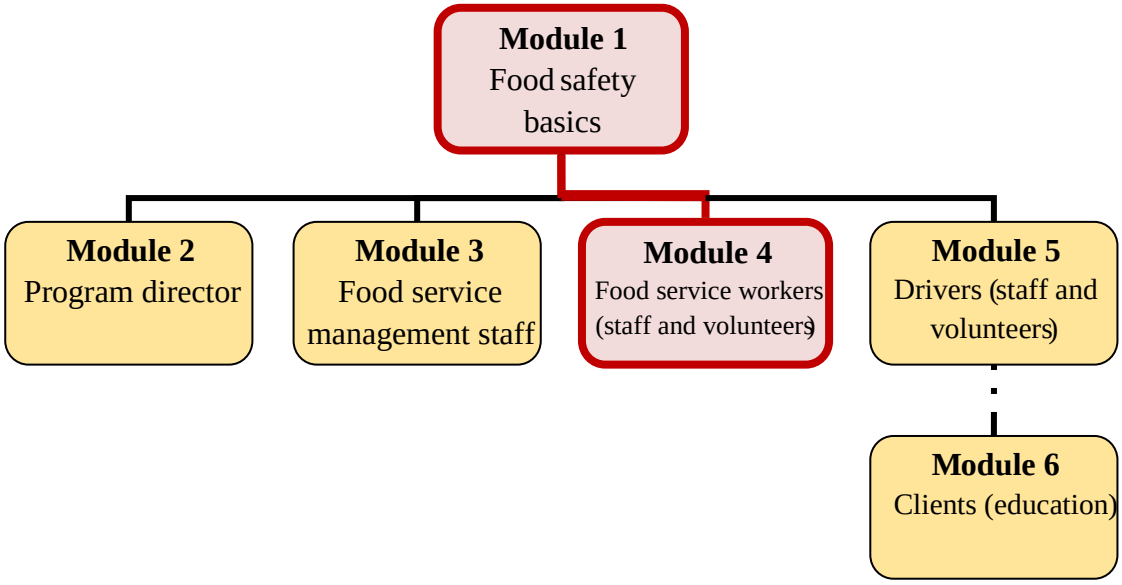
INTRODUCTION

"Food Safety on the Go" is a food safety training program for staff, volunteers and clients of home-delivered meal programs. It is made up of 6 modules. Module 1, Food safety basics, is an overview of food safety for all staff and volunteers. Modules 2 through 5 are for specific individuals within a program: Module 2 is for the program director, Module 3 is for the food service management staff, Module 4 is for food service workers (staff and volunteers), and Module 5 is for drivers (staff and volunteers). Module 6, which is for clients, is in the form of magnets for drivers to give to clients.



Food service workers should complete Module 1, Food safety basics, and Module 4, Food service workers. Thank you for participating in the "Food Safety on the Go" training program.

MODULE 4 - FOOD SERVICE WORKERS (STAFF AND VOLUNTEERS)

Length

~30 minutes

Audience

Food service workers (staff and volunteers)

Purpose

This module discusses the food safety responsibilities of food service workers in a home-delivered meal program.

1. Food service workers need to be in good health and maintain good personal hygiene

a. Symptoms and illnesses of concern

Home-delivered meal clients are at high risk of foodborne illness. To prevent foodborne illness, staff and volunteers who handle food need to be in good health. People who are sick and who work with food can transfer harmful viruses and bacteria to food, which can lead to foodborne illness in clients. They can also transfer harmful viruses and bacteria directly to other staff members or volunteers, who can then become sick. If someone who handles food is diagnosed with a foodborne illness or shows any of the following symptoms, he or she should report this to the food service management and be excluded from working:

- vomiting
- diarrhea
- jaundice (yellowing of the skin and eyes)
- sore throat with fever

Also, any wounds on hands or arms should be covered with a clean, dry, impermeable bandage that keeps the wound from leaking. Bandages on hands should also be covered with disposable gloves.

b. Washing hands

Washing hands is one of the best ways to reduce risk of foodborne illness, as it decreases the spread of harmful viruses and bacteria. Up to 80 percent of all infections are transmitted by hands, and harmful bacteria and viruses can sometimes survive on unwashed hands for hours.

Hands should be scrubbed in warm soapy water for at least 20 seconds before and after handling food, after using the restroom, and after touching one's hair, face, body, clothing, or anything else that could contaminate hands. Hands should be dried with a clean paper towel or a hand dryer.

c. Personal hygiene

Poor personal hygiene is a common cause of foodborne illness. Food service workers need to have good personal hygiene so that they do not spread harmful viruses or bacteria to food or to other people. They should keep their fingernails short and clean, bathe or shower before working with food, and keep their hair clean. They should also wear clean clothes and a clean hair restraint when working with food. If food service workers wear aprons and leave a food preparation area, to go to the restroom for example, they should take off their aprons and store them properly before going. Food service workers should remove any jewelry from their hands and arms before working with food. They should not eat, drink, smoke, or chew gum or tobacco while handling food or while working in a food preparation area. They should also minimize talking if they do not wear a face mask while they are working.

d. How to use single-use gloves

Gloves can help keep hands from contaminating food if they are used properly. There are gloves that are specifically designed for foodservice operations. Gloves should be used only once, and never washed and reused. Gloves do not take the place of washing hands. People need to wash their hands at least as often when wearing gloves as when not wearing them. They should wash their hands before putting on gloves and when changing gloves.

Food handlers should change gloves:

- before beginning a different task
- as soon as the gloves become soiled or torn

- after handling raw meat, and before handling ready-to-eat food – that is, food that will be eaten without any more preparation, washing or cooking

2. How to handle food safely

a. Time/temperature control for safety foods (TCS foods)

While any food can become contaminated, some foods allow harmful bacteria to grow better than others, and require time and temperature control in order to limit the growth of harmful bacteria. These foods are known as “time/temperature control for safety,” or “TCS” foods. TCS foods include:

- an animal food that is raw or heat-treated, e.g., shell eggs, meat, poultry, fish, shellfish, crabs, lobster, milk, dairy products, cream and custard ;
- cooked plant foods, such as baked potatoes, rice, beans and vegetables;
- tofu and other soy protein; raw sprouts and sprout seeds (any type); sliced melons, cut tomatoes or mixtures of cut tomatoes, and cut leafy greens;
- garlic-in-oil mixtures (Note: this does not include commercially prepared acidified products that you may find on the shelves at the grocery store).

b. Temperature requirements

Bacteria grow fastest at temperatures between 41°F and 135°F, known as the temperature “danger zone.” To prevent the growth of harmful bacteria, TCS foods should spend as little time as possible in the temperature danger zone. Time-temperature abuse is when TCS foods are held for too long in the temperature danger zone. Food service workers should know which foods need to be kept at proper temperatures to be safe.

Food can become contaminated after preparation or cooking if it is not handled safely and held at the right temperatures. It is a must to **keep cold food cold, and hot food hot** to prevent the growth of harmful bacteria. Hot TCS food should be held at 135°F or above. Cold TCS food should be held at 41°F or below.

i. How to measure the temperature of food

A food thermometer should be used to measure the internal temperature of a food. Thermometers should be washed, rinsed, sanitized and air-dried before and after each use to avoid cross contamination. To measure the temperature of a food, the thermometer should be inserted into the thickest part of the food. Thermometers should be calibrated often, preferably every day, to make sure they are accurate.

c. Cross-contamination must be avoided

Cross-contamination is the transfer of harmful bacteria or viruses from one food or surface to another, which can lead to foodborne illness. To prevent cross-contamination, it is important to separate raw meat, poultry, and seafood from ready-to-eat foods in storage area, refrigerator, and while preparing and handling foods, e.g. use two cutting boards: one cutting board for raw meat, poultry, and seafood and another one for fresh fruits and vegetables. Clean and sanitize work surfaces, equipment and utensils that come into contact with food after each task. It is safest to avoid bare-hand contact with ready-to-eat food.

KEY POINTS

- Staff and volunteers who handle food need to be in good health and have good personal hygiene. It is very important that they wash their hands properly.
- Some foods allow harmful bacteria to grow better than others. These "time/temperature control for safety" foods, or "TCS" foods, need to be kept at safe temperatures, out of the temperature danger zone which is between 41°F and 135°F. It is a must to **keep cold food cold, and hot food hot.**
- It is important to avoid cross-contamination, which is the transfer of harmful bacteria or viruses from one food or surface to another.

Activity: What's wrong with this picture?

MORE INFORMATION

- U.S. Food and Drug Administration. Employee Health and Personal Hygiene Handbook - Employee Health and the Food Establishment. https://www.fda.gov/food/guidanceregulation/retailfoodprotection/industryandregulatoryassistanceandtrainingresources/ucm113827.htm
- U.S. Food and Drug Administration. Safe Practices for Food Processes. https://www.fda.gov/food/foodborneillnesscontaminants/ucm545157.htm

GLOSSARY

Bacterium: A single-celled organism.

Calibrate a thermometer: Ensure that a thermometer gives accurate readings by adjusting it to a known standard, such as the freezing point or the boiling point of water.

Campylobacter: A group of bacteria, some of which can cause foodborne illness.

Clean: The process of removing food residue and other types of soil from the surface of equipment or utensil. Be sure to select right cleaning agent for food-contact surface.

Contamination: The unintended presence of harmful substances or microorganisms.

Cross-contamination: The transfer of harmful bacteria or viruses from one food or surface to another.

E. Coli: A group of bacteria, some of which can cause foodborne illness.

Flow of food: The path food takes through a foodservice operation; it can include purchasing, receiving, storage, preparation, cooking, holding, cooling, reheating, plating and delivery.

Food Code (FDA): A model for state and local regulators to use to develop or update their food safety rules. It is issued by the Food and Drug Administration (FDA), a federal government agency.

Food product recall: An action by a food manufacturer or distributor to remove products from commerce that may cause health problems or death.

Food safety: The conditions and practices that preserve the quality of food to prevent contamination and foodborne illness.

Foodborne illness (often called "food poisoning"): Any illness that is caused by eating food that is contaminated.

Foodborne illness outbreak: An incident in which two or more people get the same illness after eating the same food.

Hazard analysis and critical control point (HACCP) system: A food safety system that can be used to identify, evaluate and control food safety hazards throughout the flow of food.

Health inspector (may also be called sanitarian, health official or environmental health specialist): State, county or city employee who conducts food service inspections.

Hepatitis A virus: A virus that can cause foodborne illness.

Immune system: The body's defense system against illness.

Infectious dose: The number of harmful bacteria or viruses that are needed to cause illness.

Jaundice: Yellowing of the skin and eyes; a symptom of various diseases including hepatitis A.

Norovirus: A group of viruses that can cause foodborne illness.

Personal hygiene: Maintaining cleanliness of one's body and clothing to preserve overall health and well-being.

Ready-to-eat food: Food that will be eaten without any more preparation, washing or cooking.

Salmonella: A group of bacteria, some of which can cause foodborne illness.

Sanitize: Reduce the number of microorganisms on a surface to safe levels.

Shigella: A group of bacteria, some of which can cause foodborne illness by producing Shiga toxins.

Shiga toxins: One of the most potent bacterial toxins produced by the bacterium *Shigella dysenteriae* and some serogroups of *E. coli*, causing dysentery in humans.

Spore: A form that some bacteria can take to protect themselves in unfavorable conditions.

Temperature danger zone: The temperature range between 41 and 135 degrees Fahrenheit; many bacteria that cause foodborne illness grow fastest within this temperature range.

Time-temperature abuse: Allowing food to remain too long at a temperature which supports the growth of harmful bacteria.

Time/temperature control for safety foods (TCS foods): Foods that support the growth of harmful bacteria, and therefore require time and temperature control to limit the growth of harmful bacteria.

Toxin: A poison that is produced by living cells or organisms.

Virus: A very small infectious agent that can only multiply inside a living cell.

FOOD SAFETY WEBSITES

Food safety for older adults

https://www.foodsafety.gov/risk/olderadults/index.html

https://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM312790.pdf

Federal food safety gateway

www.foodsafety.gov

U.S. Department of Agriculture (USDA) Food Safety and Inspection Service

www.fsis.usda.gov

U.S. Food and Drug Administration (FDA) education resource library and retail food protection

https://epublication.fda.gov/epub/

https://www.fda.gov/food/guidanceregulation/retailfoodprotection/ucm2006807.htm

Partnership for Food Safety Education

www.fightbac.org

Iowa State University Extension food safety project

http://www.extension.iastate.edu/foodsafety/educators/index.cfm?articleID=295&parent=2

UC Davis food safety music

http://foodsafe.ucdavis.edu/index.html#

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