

AGRICULTURE & MEALS

# **COURSE BOOK** FOOD SAFETY ON THE GO



# **MODULE 5: DRIVERS** (STAFF AND VOLUNTEERS)



COLLEGE OF AGRICULTURE & MEAL NATURAL RESOURCES







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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.



Drivers should complete Module 1, Food safety basics, and Module 5, Drivers. They should also provide clients with magnets from Module 6, Clients. Thank you for participating in the "Food Safety on the Go" training program.





## **MODULE 5 - DRIVERS (STAFF AND VOLUNTEERS)**

## Length

~30 minutes

## Audience

Drivers (staff and volunteers)

### Purpose

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

- 1. Drivers need to be in good health and maintain good personal hygiene
- a. Health

Home-delivered meal clients are at high risk of foodborne illness. To prevent foodborne illness, staff and volunteer drivers need to be in good health. People who are ill and who handle meals can transfer harmful viruses or bacteria to the meals, which can lead to foodborne illness in clients. They can also transfer harmful viruses or bacteria directly to the clients, who can then become ill. If a driver is diagnosed with a foodborne illness, or shows any of the following symptoms, he or she should report this to the program management and be excluded from delivering meals:

- 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**

Staff and volunteer drivers need to wash their hands properly. 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 70 percent of all infections are transmitted by hand touch, and harmful







bacteria and viruses can sometimes survive on unwashed hands for hours (1).

Hands should be scrubbed in warm soapy water for at least 20 seconds before and after handling food, after using the restroom, after handling pets, 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.

Drivers should clean their hands before handling any food containers during meal pick-up and delivery. It is best to wash hands with soap and clean running water. Washing hands with soap and water is more effective than using hand sanitizers, as hand sanitizers don't remove soil and other material that might be on hands (2). However, drivers should carry alcohol-based disposable hand sanitizing wipes or hand sanitizing lotion in their vehicles, as they may not always have access to soap and water during meal delivery. The lotion should have an alcohol content of at least 60 percent.

To use an alcohol-based hand sanitizing lotion (3):

- Apply it to the palm of one hand.
- Rub hands together.
- Rub it over all surfaces of hands and fingers until hands are dry.

### c. Personal hygiene

Poor personal hygiene is a common cause of foodborne illness. Drivers need to have good personal hygiene so that they don't spread harmful viruses or bacteria to food or to other people. They should bathe or shower before delivering meals, and keep their hair and fingernails clean. Clothing can contaminate food and lead to foodborne illness. When delivering meals, drivers should wear clean clothes. If outer clothes such as coats and gloves or mittens are worn, it is important that they also be washed often and kept clean.

#### 2. Procedures for delivering safe meals

#### a. Temperature requirements

### i. Maintaining temperatures of meals during delivery

Food can become contaminated if it is not handled safely and kept at the correct temperatures. Bacteria grow fastest at temperatures between 41°F and 135°F, known as the temperature "danger zone." To prevent the growth of harmful bacteria, it is very important to **keep cold food cold, and hot food hot**. It is safest to keep hot food at 135°F or above, and



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cold food at 41°F or below until clients receive their meals. Temperature requirements can differ by state or region.

The time from when food is prepared to when it is eaten should be as short as possible. The shorter a driver's route, the less chance for harmful bacteria to grow to unsafe levels in the meals. Drivers' routes should be as short as possible for both meal safety and meal quality.

It is recommended that the time at which drivers pick up meals from the kitchen and deliver the meals to each client be recorded. Meal temperatures should also regularly be measured and written down when meals are picked up from the kitchen.

#### ii. Periodically checking temperatures during meal delivery

Preferably on a daily or weekly basis, but at least once a month, meal temperatures should also be measured and written down on each route during delivery, to make sure that meals stay out of the temperature danger zone. On test days, the temperature of a test meal can be measured and recorded when the last client on a route receives his or her meal. Alternatively, program staff could measure and record the temperature of a test meal at the end of a driver's route.

#### b. How to deliver meals safely

#### i. Cleanliness of delivery vehicle

The inside of program vehicles and volunteers' private vehicles should be cleaned regularly. Program delivery vehicles should be checked for cleanliness before drivers go on their routes. Volunteer drivers should remember to keep the inside of their vehicles clean. Drivers should not bring pets along in their vehicles during meal delivery, as pets could contaminate drivers' hands and the meals.







*ii. Appropriate containers for meals* Delivery equipment should be able to keep meals at proper temperatures at all times. It is recommended that insulated food containers that can keep hot food at 135°F or above and cold food at 41°F or below being used. Containers should be food-grade, and designed so that food will not mix, leak or spill. They should be able to let air circulate to keep temperatures even.



*iii. How to handle meal containers* Meal containers should be cleaned and sanitized after each use. During delivery, containers should be secured in the vehicle to keep them from moving too much during a route. It is very important to close insulated containers completely during a route, and as soon as possible after removing a meal, so that meals can be kept at safe temperatures.





#### i. Give food safety instructions to clients

Clients need to eat their meals right after they receive them, or refrigerate or freeze the meals. It is recommended that home-delivered meals be labeled with a "use-by" date, as well as instructions for storage and reheating. If the client can't read the "use-by" date or instructions, it is important to read and explain them to the client upon meal delivery.

ii. What to do if the client is not at home

If a client is not at home, the driver should not leave the meal, outside or inside, for the client. Leaving a meal in the temperature danger zone strongly increases the chance that will cause foodborne illness. Even if a client has provided an insulated container for the meal, the container may not keep the meal at a safe temperature. There is an added risk of tampering when meals are left outside. The client may also be away



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from home for a longer time than planned, which increases the chance that the meal will become unsafe to eat.

If the program allows, a meal could be left with a neighbor. In this case, it is important to explain to the neighbor how to store the meal.





## **KEY POINTS**

- Staff and volunteer drivers need to be in good health and have good personal hygiene.
  It is very important that they wash their hands properly.
- It is recommended that meals be kept at safe temperatures, out of the temperature danger zone which is between 41°F and 135°F, until clients receive the meals. It is very important to keep cold food cold, and hot food hot.
- The inside of program vehicles should be cleaned regularly, and volunteer drivers should remember to keep their vehicles clean.
- > Delivery equipment should be able to keep meals at proper temperatures at all times.
- > Meal containers should be cleaned and sanitized after each use.
- Clients need to eat their meals right after they receive them, or refrigerate or freeze the meals. It is recommended that home-delivered meals be labeled with a "use-by" date, as well as instructions for storage and reheating. If the client can't read the "use-by" date or instructions, it is important to read and explain them to the client upon meal delivery.
- If a client is not at home, the driver should not leave the meal, outside or inside, for the client. If the program allows, a meal could be left with a neighbor. In this case, it is important to explain to the neighbor how to store the meal.







## **ACTIVITY: SCENARIOS AND DISCUSSION**

## Scenario 1:

Jim, a volunteer driver for a home-delivered meal program, woke up today with a sore throat and a fever, but knew people were counting on him and decided to tough it out and go on his route. He had promised the clients on his route that he would bring his dog Roxy along to see them.

He and Roxy arrived at the first client's house and saw a note on the door, asking him to leave the meal in a cooler that was left outside the door. Jim considered the client a friend, and wanted to be helpful, so he left the meal in the cooler. The meal contained an egg and cheese omelet with turkey sausage, seasoned broccoli, diced pears, a whole wheat roll with margarine, and 1% milk.



Jim's route covered 40 miles, and to save some time, he left the insulated meal containers unzipped during his deliveries so that he could take meals out more quickly.

# Discussion question: Did Jim follow good food safety practices? Is there anything he could have done better?

### Scenario 2:

Sandy, a volunteer driver for a home-delivered meal program, delivered a meal to a client who she knew may not see anyone else all day. She stayed with the client for half an hour and chatted while petting the client's dog.

Sandy then continued on her route, and since she was behind schedule, took out the remaining meals from the cooler and lined them up on the floor in the back seat of her car to save time.

The next client, who had arthritis, asked Sandy to open the meal tray, which Sandy did right away since she helps clients whenever she can. Sandy didn't have a chance to wash her hands during her route, but she knew she was in good health.





Discussion question: Did Sandy follow good food safety practices? Is there anything she could have done better?







## **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 foodservice 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.

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**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/FoodbornellInessContaminants/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&p arent=2

## UC Davis food safety music

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

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