



Food Safety on the Go

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Food Safety on the Go: A Training Program for MOW Programs

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WE ARE
Meals On Wheels
ASSOCIATION OF AMERICA
so no senior goes hungry.





Outline

- Overview
- Survey results
- “Food Safety on the Go”
 - Module 1 - Food Safety Basics
 - Highlights of Modules 2-6



Purpose



Reduce
risk
factors



Help older
adults live
at home



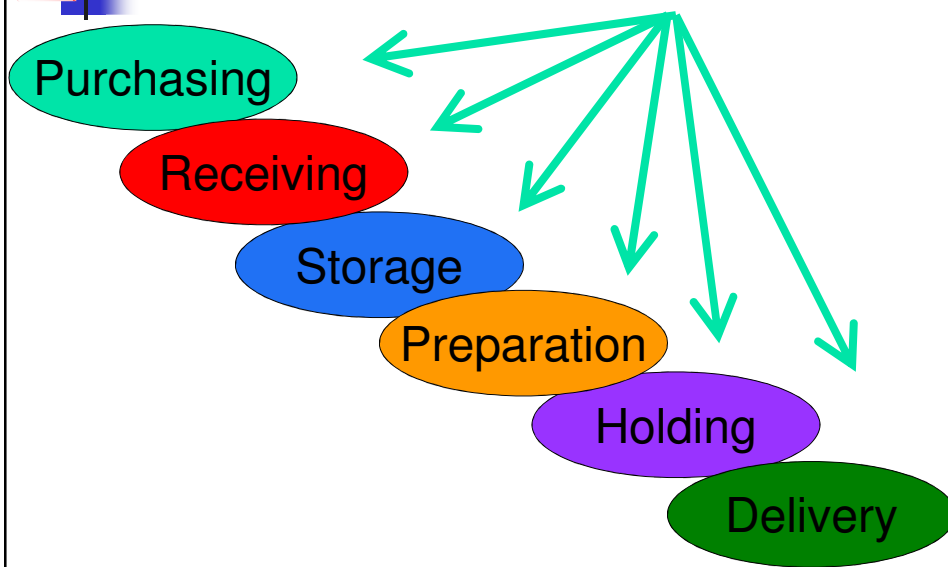
Overall objective

- Develop
- Evaluate
- Disseminate

Food safety training program targeting the continuum from food preparation to packaging to delivery



Food safety course



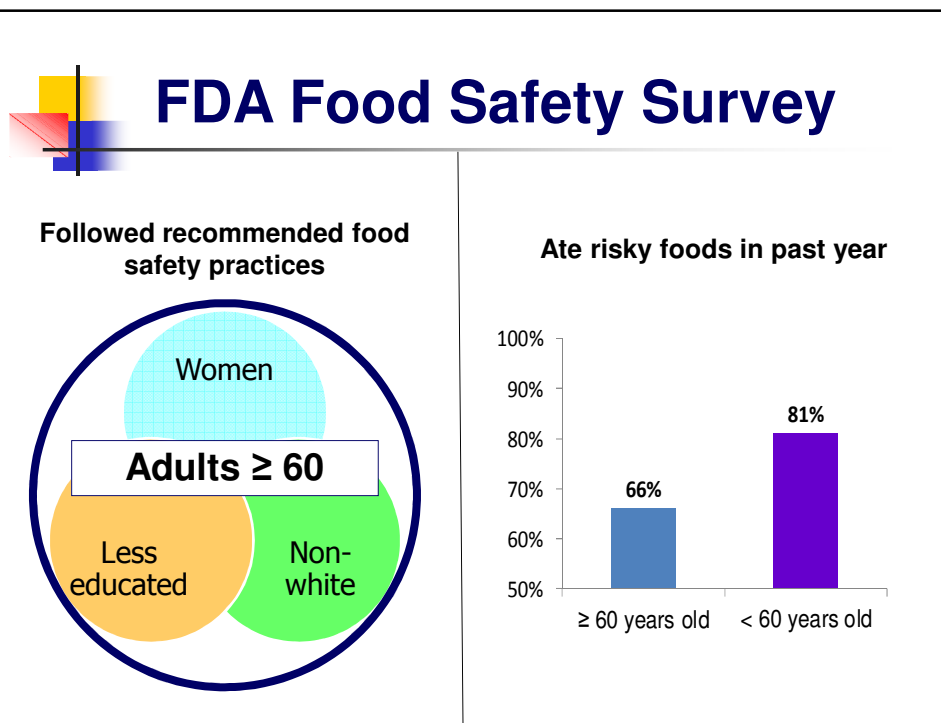


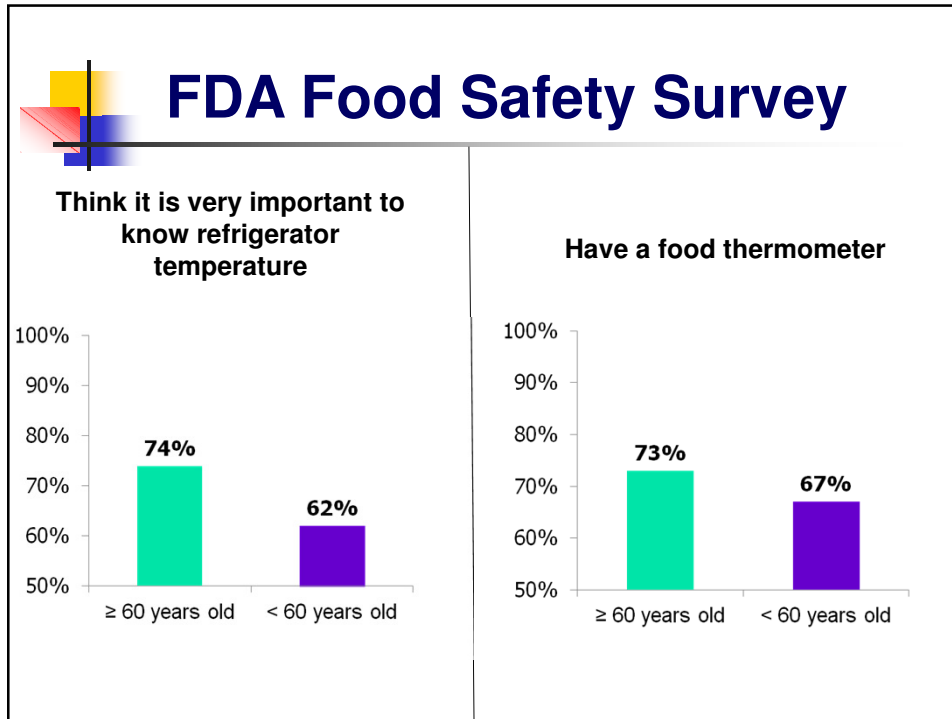
Develop

National data analysis

FDA Food Safety Survey—1988, 1993,
1998, 2001, 2006

Published in Public Health Reports,
March/April 2011






FDA Food Safety Survey

Adults ≥60 had better practices overall than <60,

BUT:

- ❖ 27% did not always wash hands before preparing food
- ❖ 61% did not have a refrigerator with a thermometer
- ❖ 66% ate one or more risky foods in the last year, especially foods with raw eggs






Surveys

State Units on Aging (SUA)

~360 home-delivered meal programs

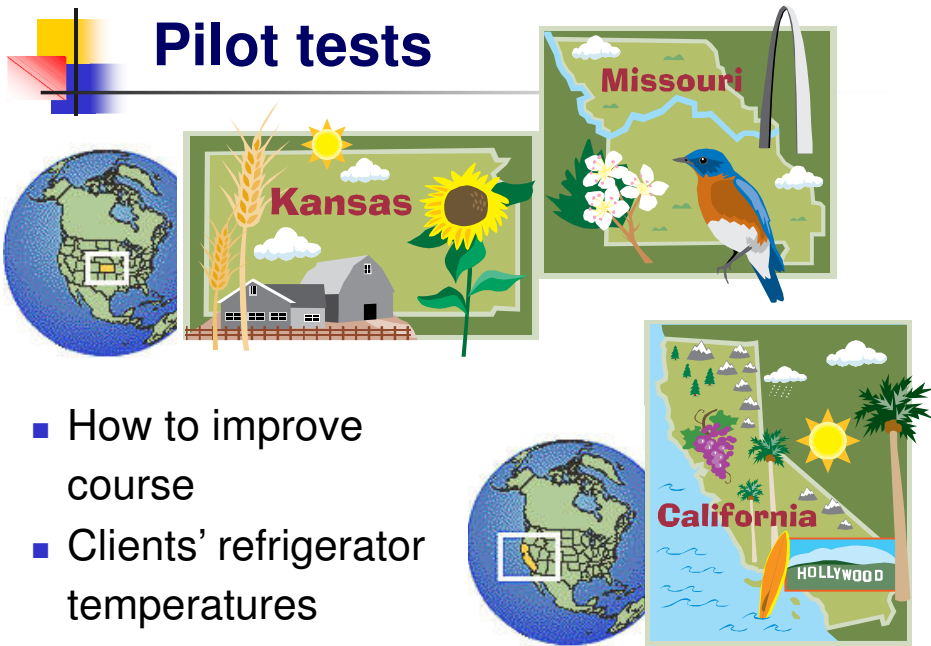
- Food safety policies and procedures
- Meal delivery procedures and equipment
- Staff and volunteer training
- Information for clients



Focus groups

- Questions to include in surveys
- Course material
- Feedback on initial version of course

Pilot tests



- How to improve course
- Clients' refrigerator temperatures

Evaluate

- Pilot tests:
 - 20 participants in 2 states
 - Impact evaluation: Pre- and post test
 - Outcome evaluation: 4-months post training
 - Challenges, barriers, suggested changes to curriculum
 - Measurement of refrigerator temperature in clients' homes by in-home assessors

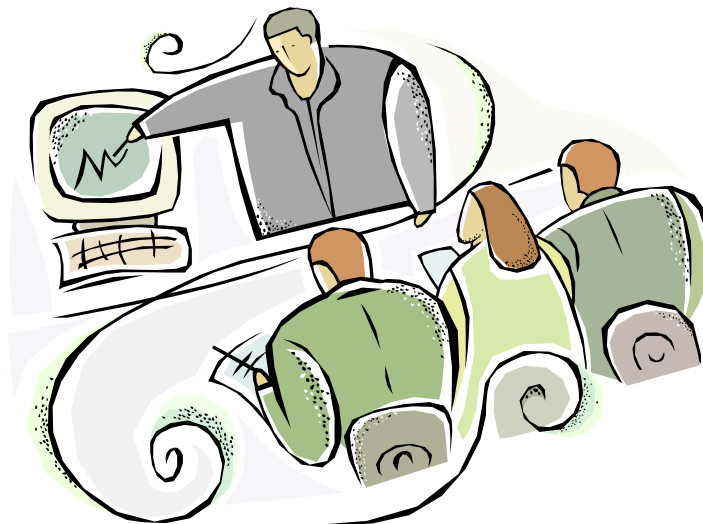


Disseminate

- Present via web conferencing as a train-the-trainer package to all State nutritionists or designated individuals who can in turn provide statewide trainings to their stakeholders.
- Identify best training mechanism within each state to deliver the curriculum.



Train the trainer

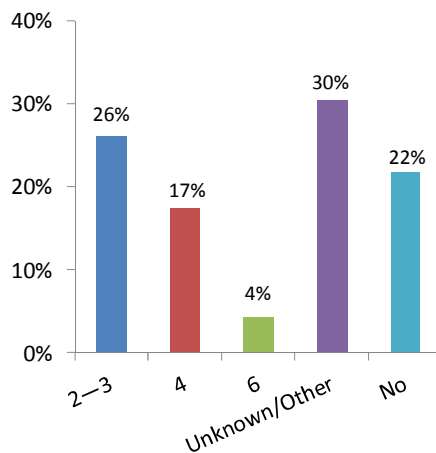




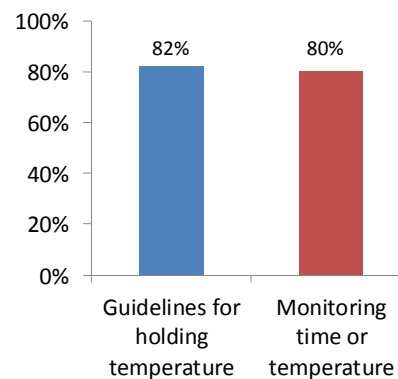
SUA survey results

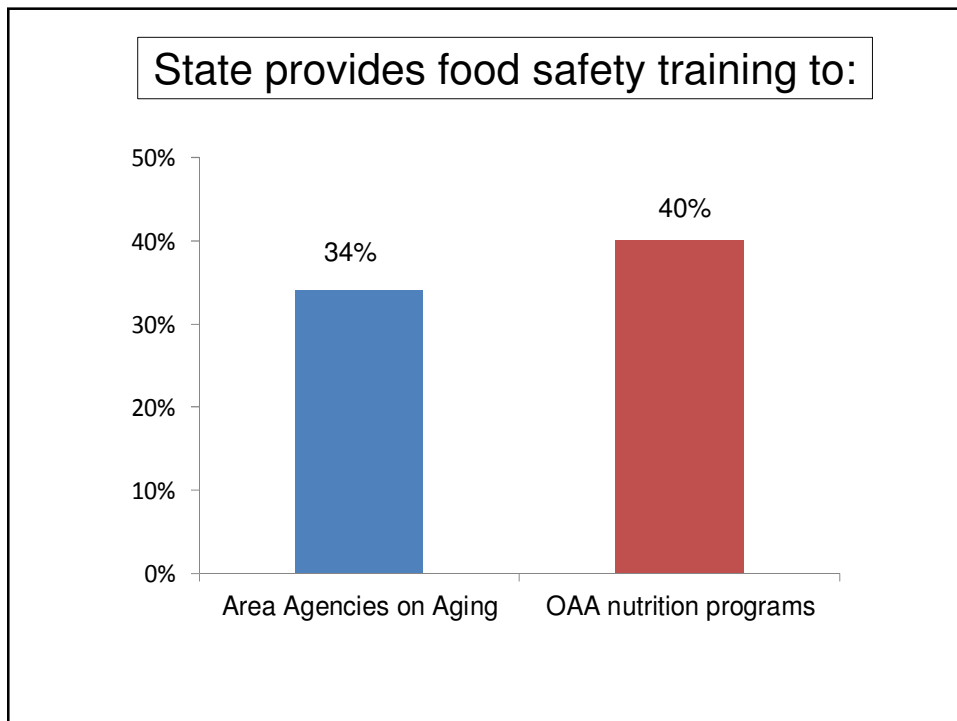
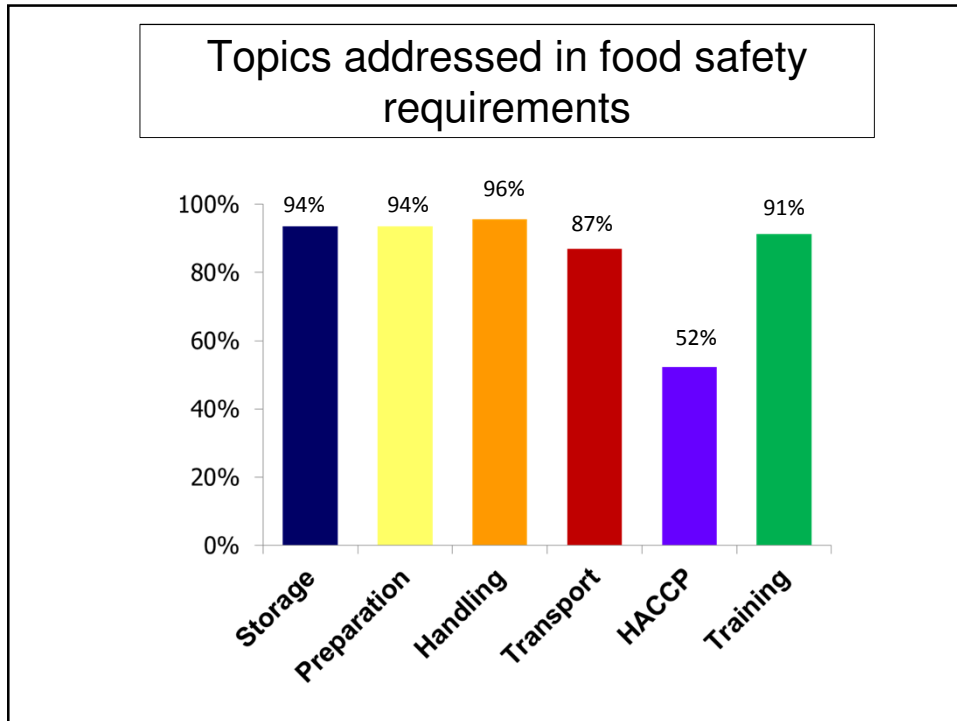
- 46 of 51 responded
- 94% had food safety standards for Older Americans Act (OAA) nutrition programs
- Of these, 98% said standards addressed holding time and temperature (n=43)

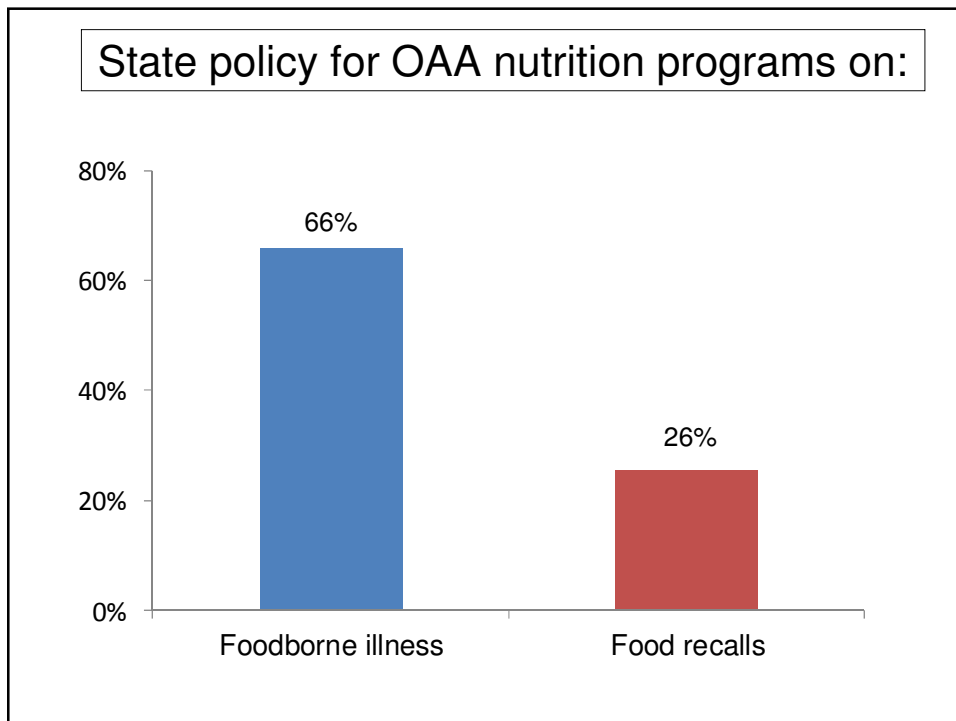
Maximum hours in transit for meals



Holding time and temperature





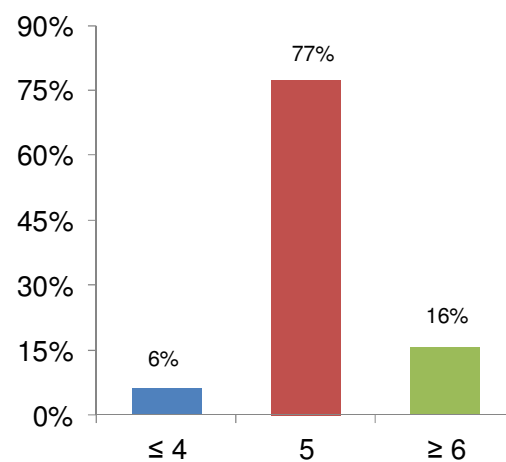


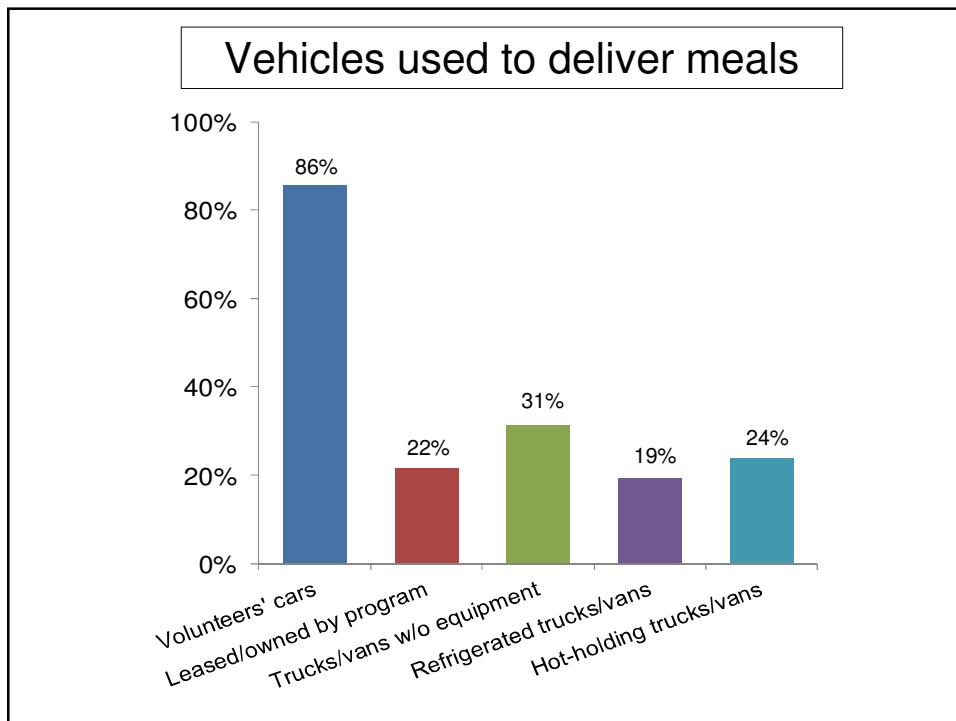
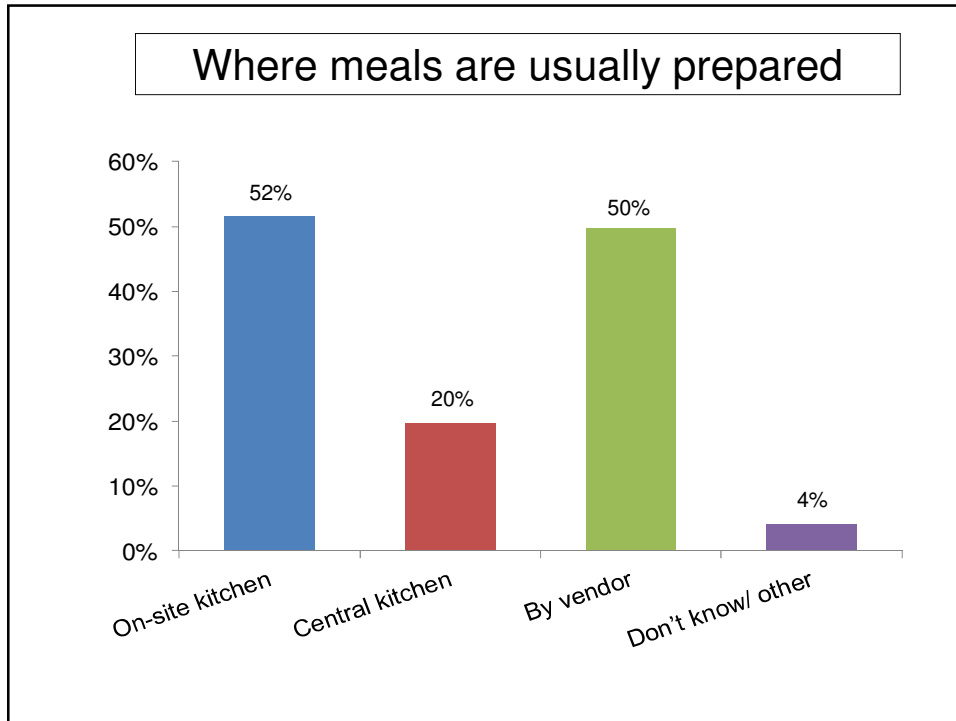


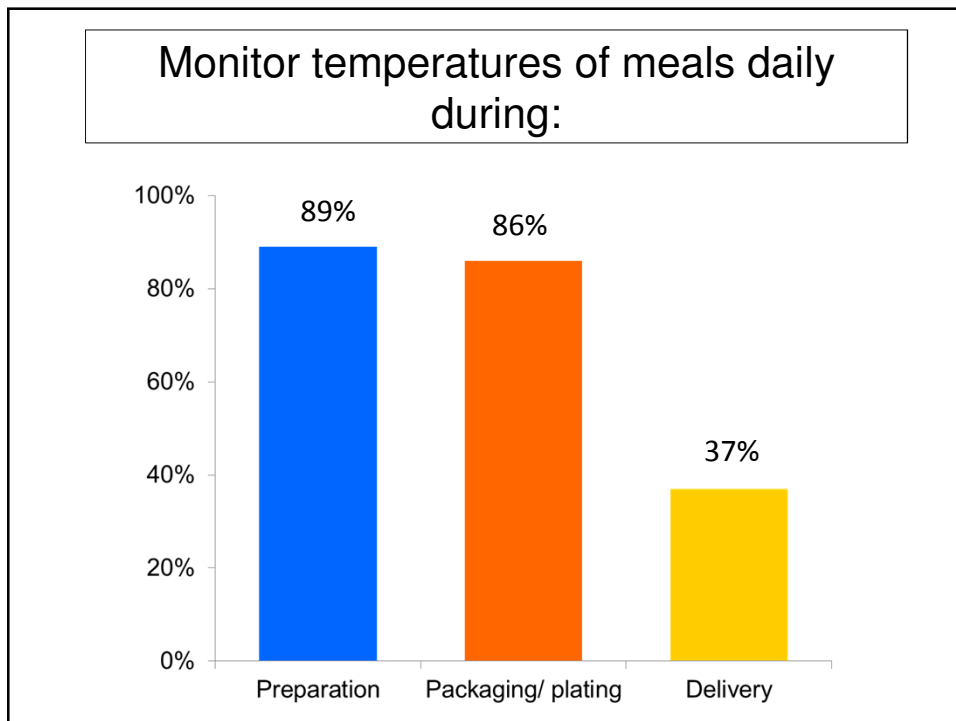
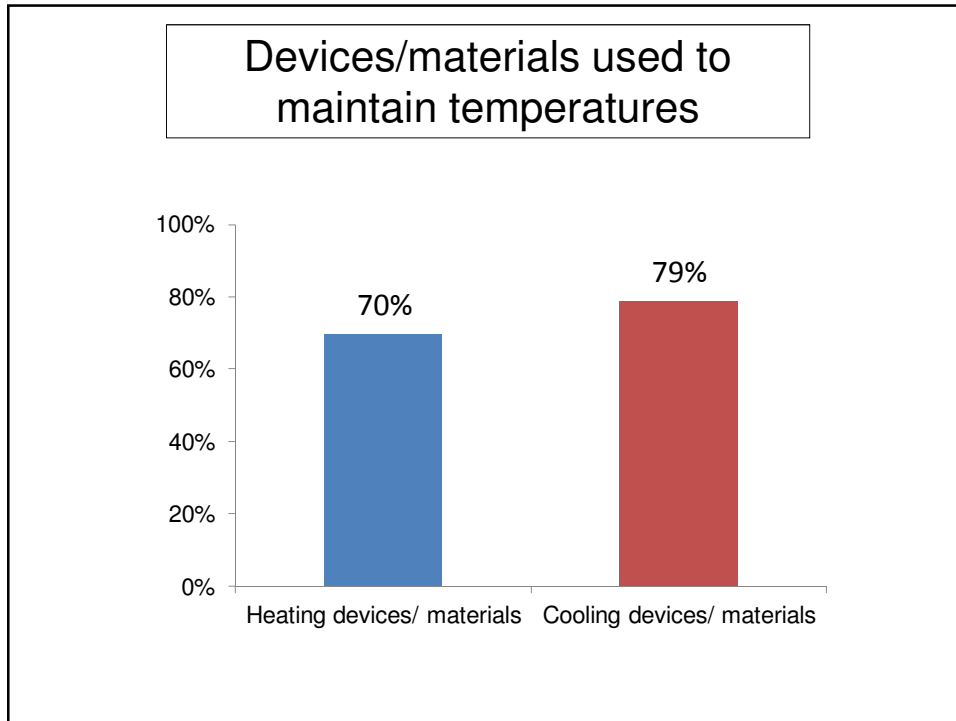
HDM program survey results

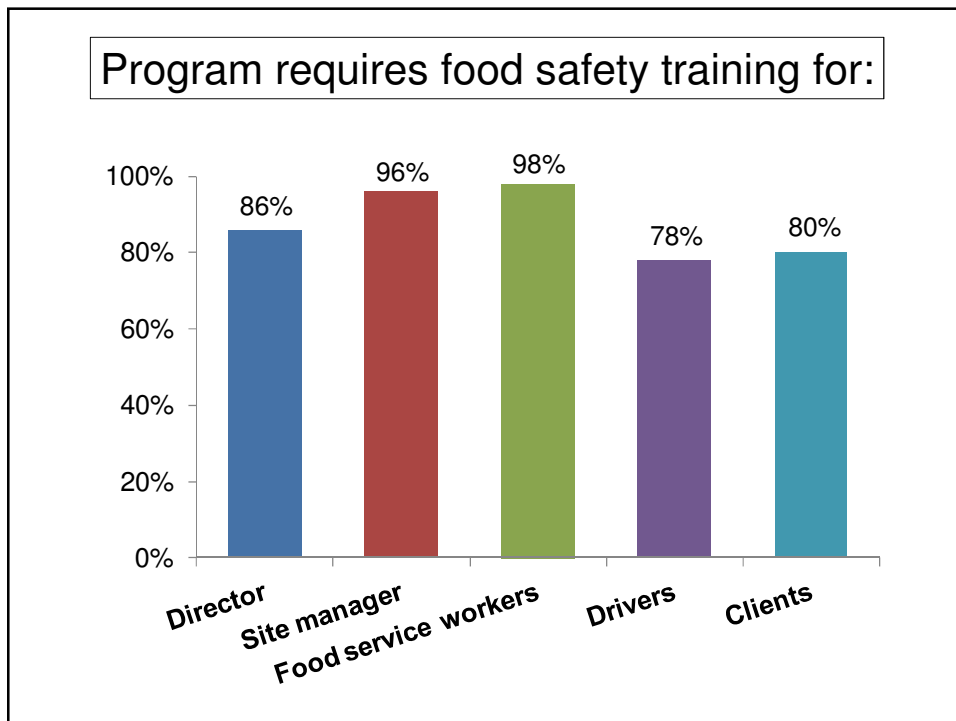
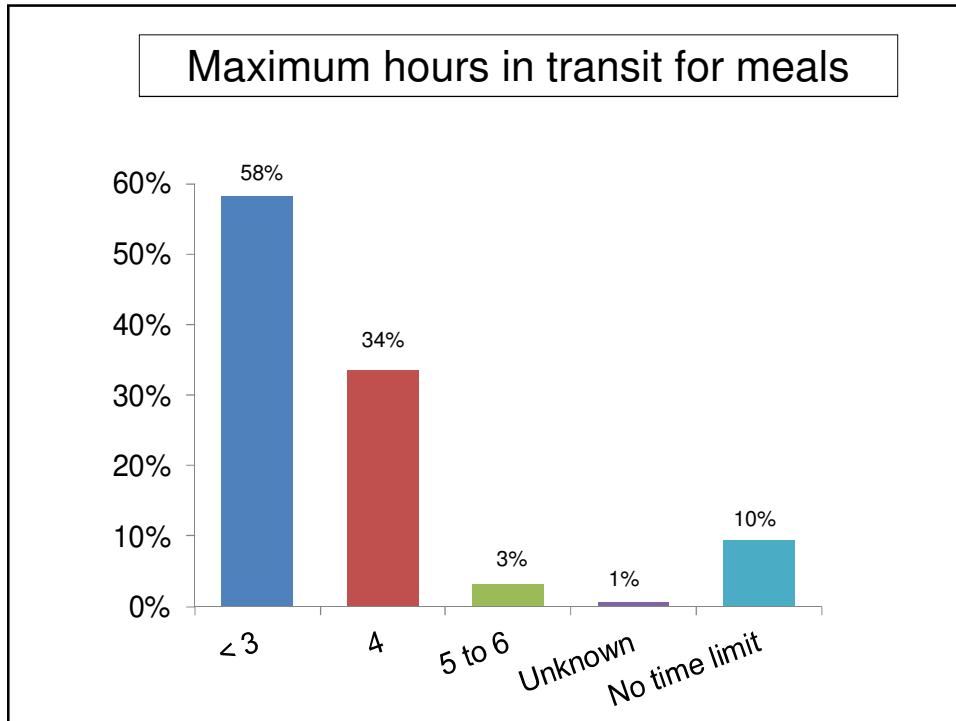
- ~360 of ~1,000 responded
- 97% had food safety regulations for home-delivered meals
- 95% had guidelines for holding temperatures of meals

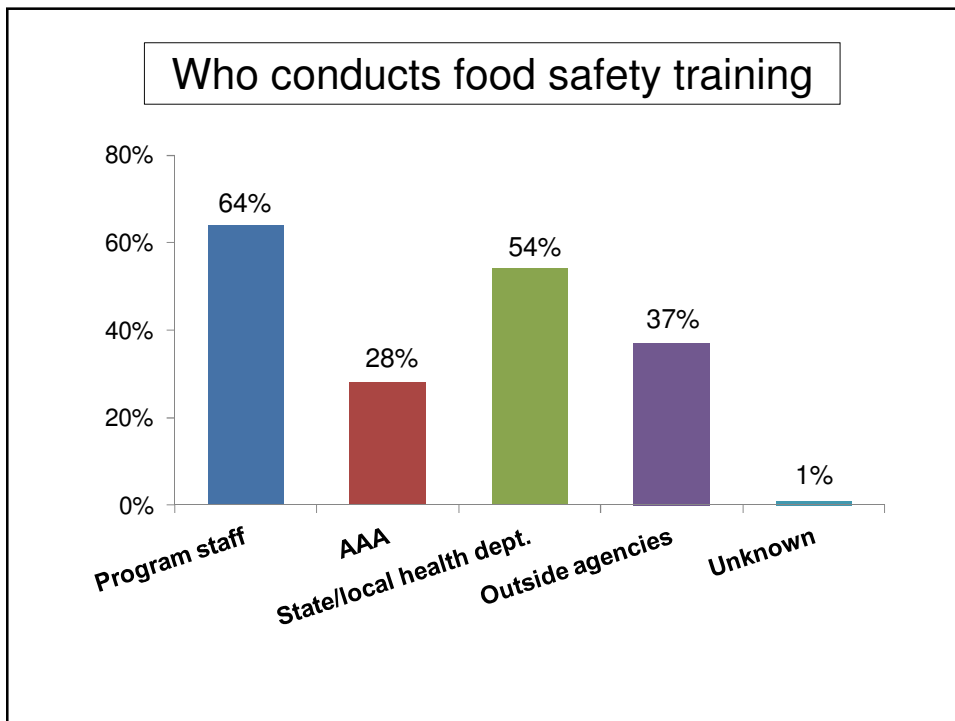
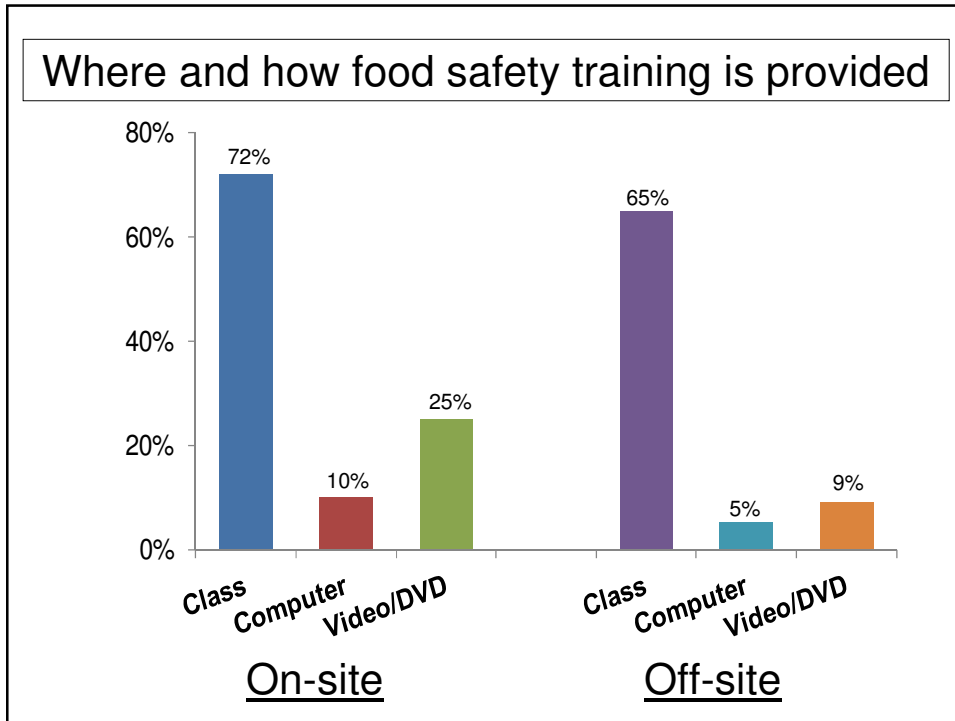
How many days per week meals can be delivered










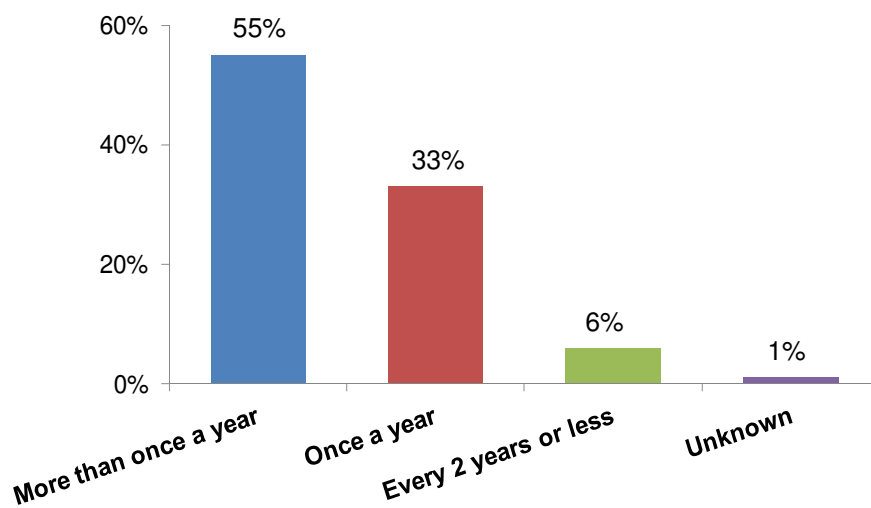


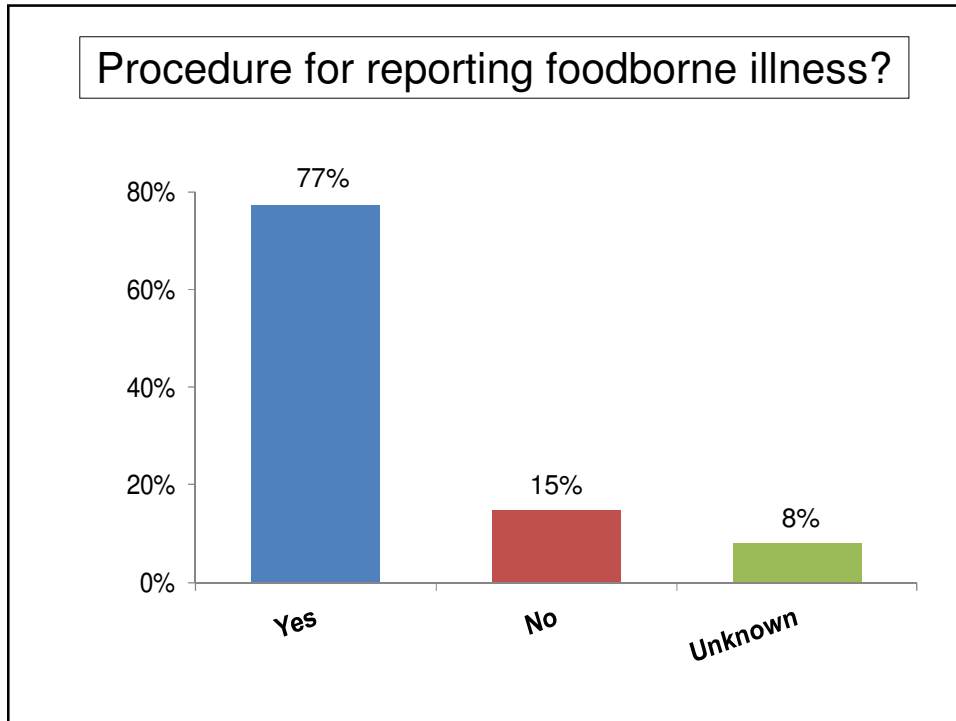


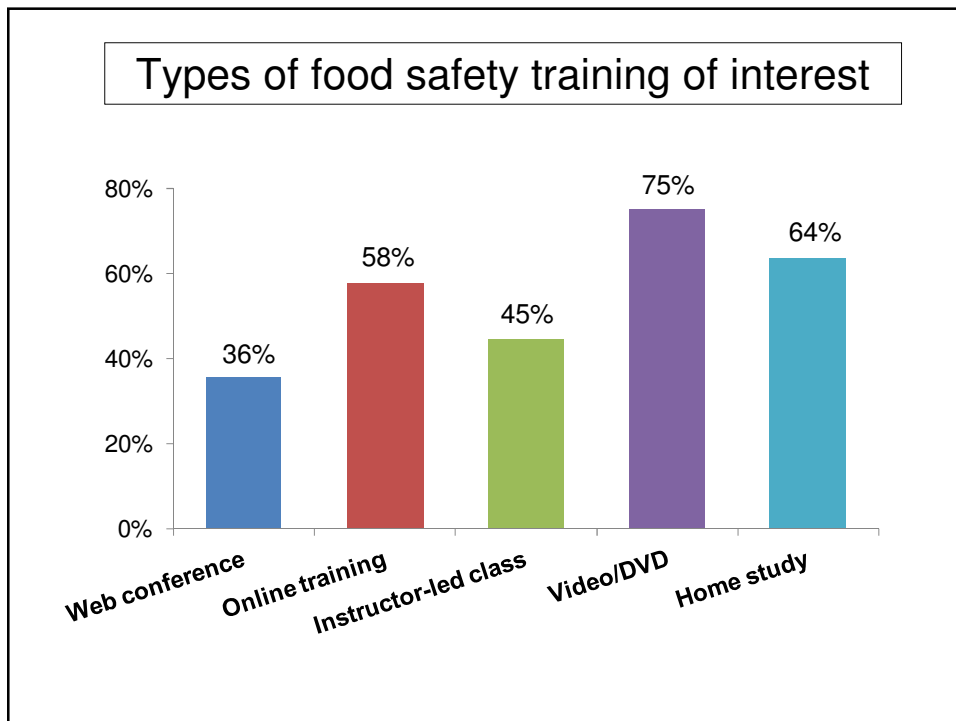
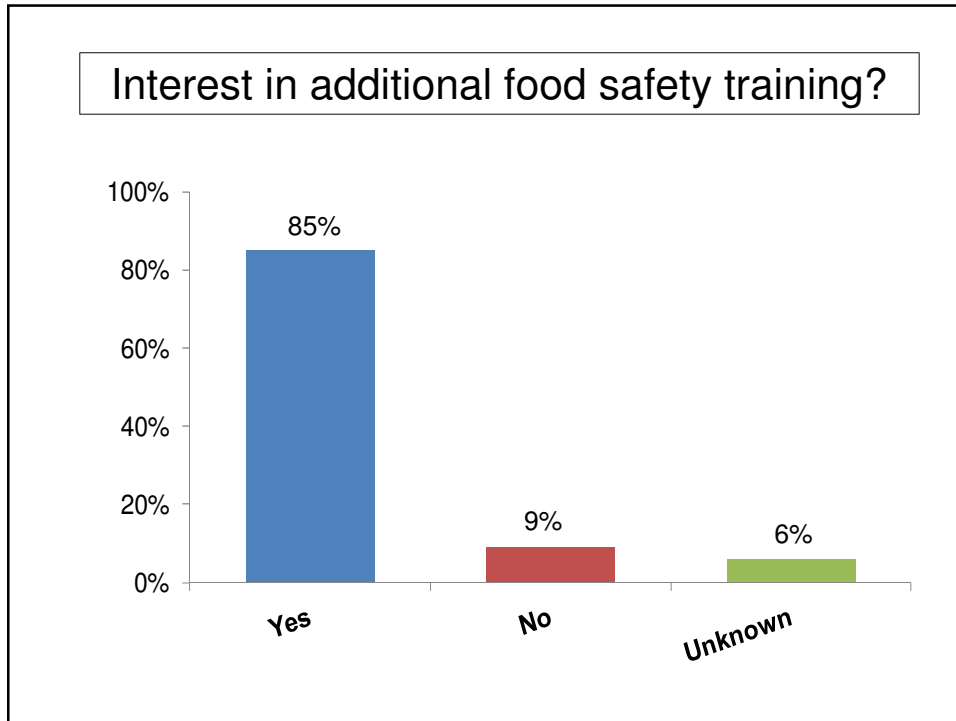
Main types of food safety training

- ServSafe
- Local health department training
- Training developed by program

How often food safety training is provided









Focus group recommendations

- Existing training (ServSafe)
 - longer, more detailed than needed for many volunteers and staff
 - does not cover meal delivery
- Course should be **short**, **targeted**, **simple**, address **meal delivery**, include **client education**



Focus group recommendations

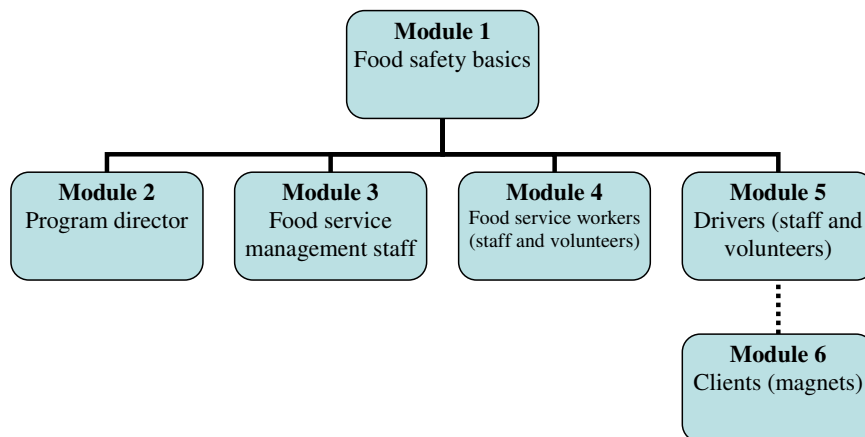
- Include training for director
- Separate modules for different types of staff and volunteers
- DVD and internet

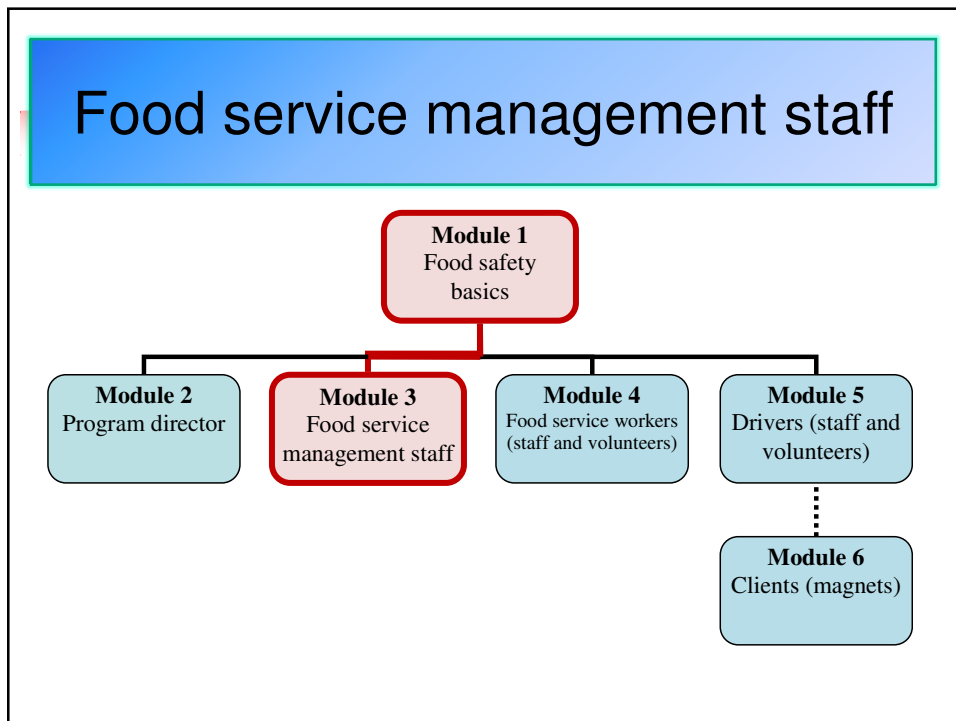
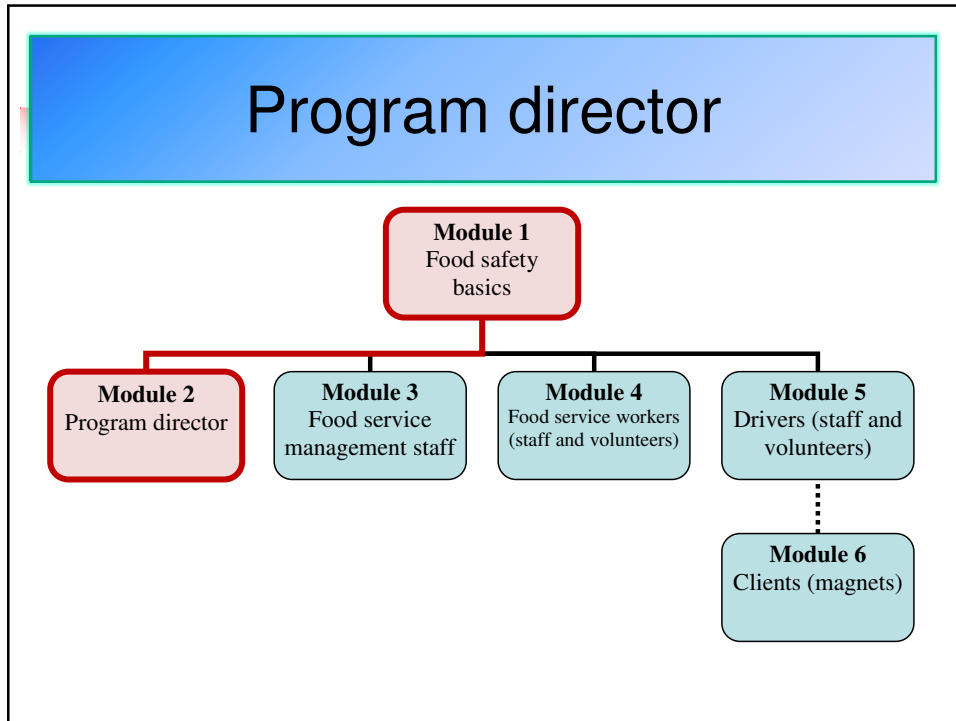
Food safety course

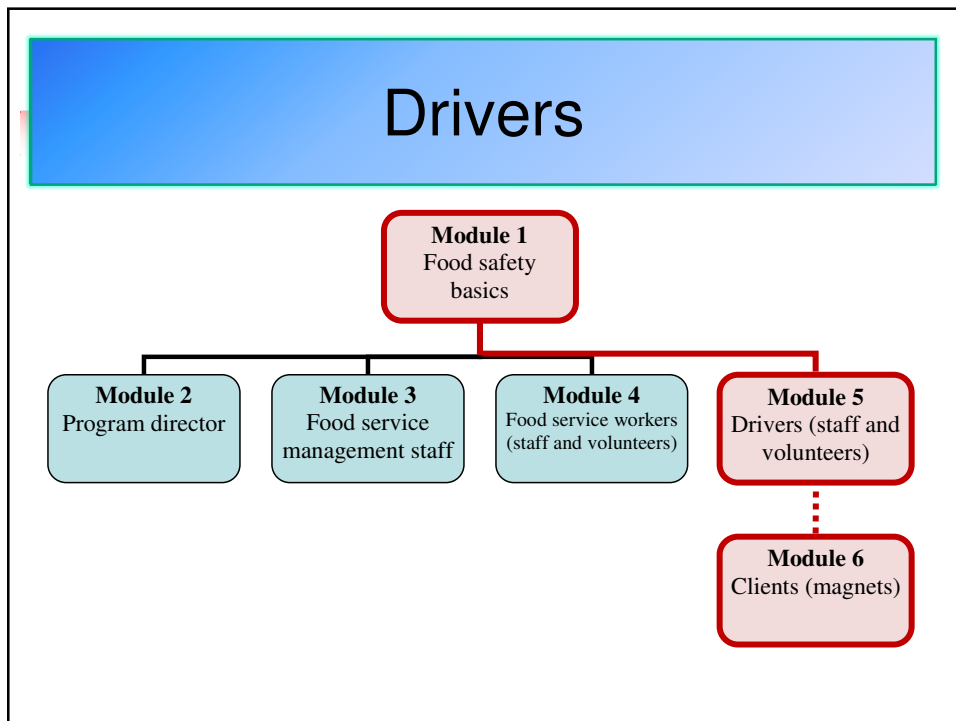
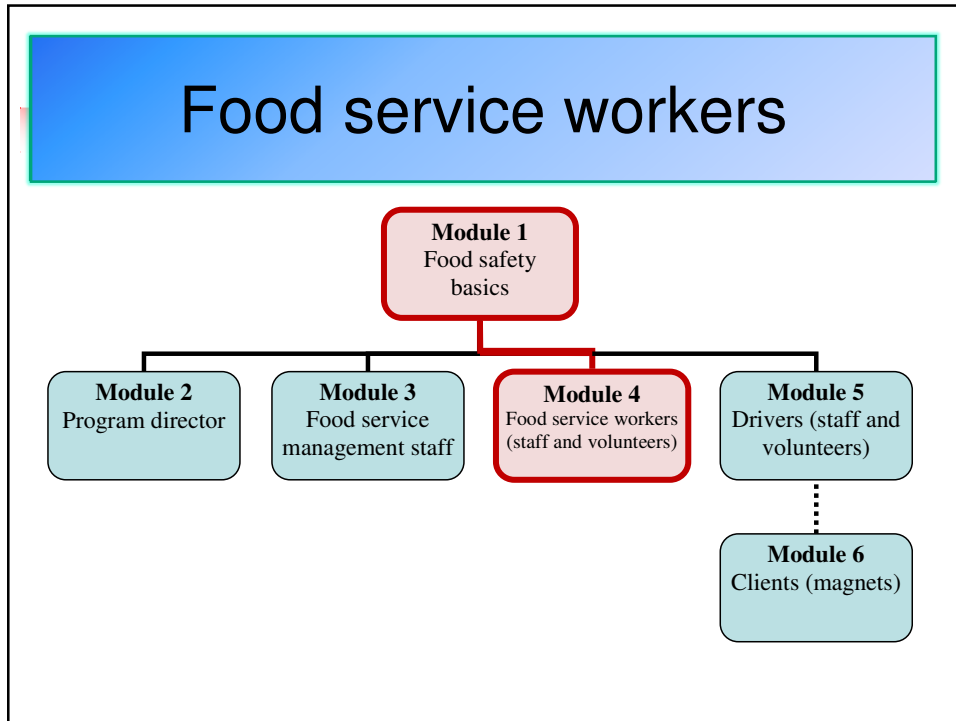
- ❖ For home-delivered meal program:
 - staff
 - volunteers
 - clients
- ❖ Train-the-trainer course
- ❖ To decrease clients' risk of foodborne illness




Modules








FOOD SAFETY ON THE GO




2012 EDITION



WE ARE
Meals On Wheels
ASSOCIATION OF AMERICA
so no senior goes hungry.

Module 1: Food safety basics



Module 1

- ❖ Audience: all staff and volunteers
- ❖ Why food safety matters
- ❖ Questions before and after course



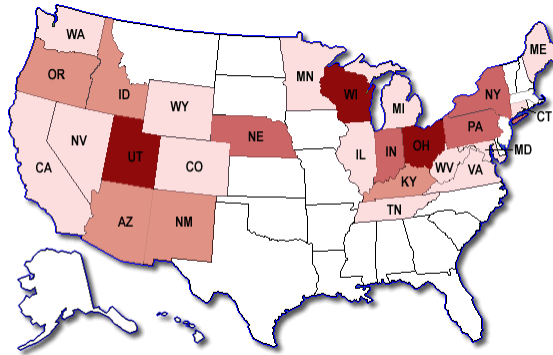
Foodborne illness (“food poisoning”)



- ❖ Caused by eating food that is contaminated
- ❖ **Bacteria**
Salmonella, E. coli
- ❖ **Viruses**
Norovirus, Hepatitis A

E. coli outbreak in 2006

- ❖ From contaminated spinach
- ❖ About 200 people infected in 26 states
- ❖ Over half hospitalized
- ❖ At least 3 died

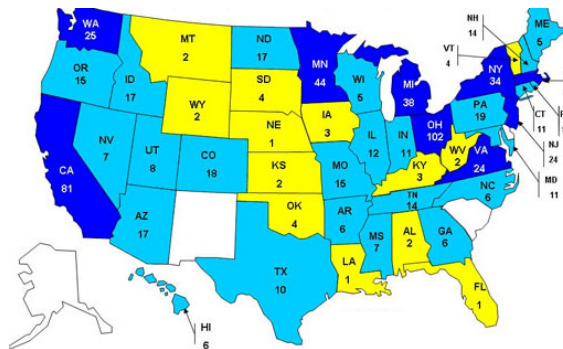


1-4 5-9 10-14 15 or higher

Number of cases by state

Salmonella outbreak in 2008

- ❖ From peanut butter and peanut products
- ❖ Over 700 people infected in 46 states
- ❖ About one fourth hospitalized
- ❖ At least 9 died



1-4 5-19 20-102

Number of cases by state

Foodborne illness is common

- ❖ 1 in 6 Americans every year
- ❖ Adults 50 and over more likely to be hospitalized and die
- ❖ Cost: \$152 billion/year



Symptoms

- ❖ Stomach and intestines: nausea, vomiting, diarrhea
- ❖ May not appear for weeks
- ❖ Not “stomach flu” or “24-hour flu”
- ❖ There can be serious complications: kidney failure, arthritis, paralysis...



The food supply is changing

- ❖ U.S. food supply one of safest
- ❖ Foods produced on a larger scale, more processed, come from further away
- ❖ ~20% from other countries



How food is contaminated



- ❖ Bacteria are everywhere: soil, water, air, plants, animals, humans
- ❖ Food can be contaminated during growing, harvesting, processing, storing, transport, preparation, holding, delivery...
- ❖ Viruses mainly come from humans



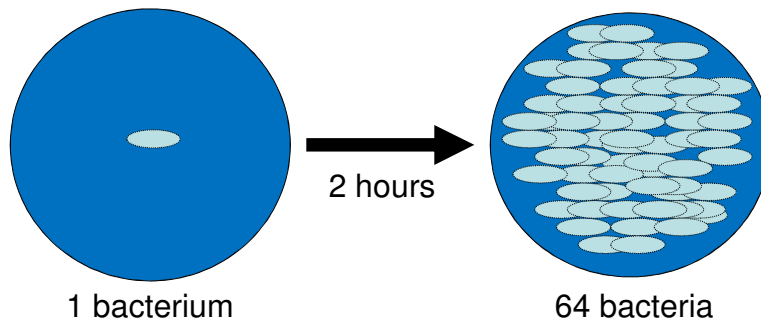
Harmful bacteria

- ❖ Don't change how food looks, tastes or smells
- ❖ Different from spoilage bacteria



Harmful bacteria

- ❖ Multiply in food
- ❖ Can produce toxins
- ❖ Grow best at certain temperatures
- ❖ Can change into spores



Older adults are at high risk

- ❖ Weaker immune system
- ❖ Less stomach acid
- ❖ Infected by lower numbers of harmful bacteria and viruses



Older adults are at high risk

- ❖ Health conditions – diabetes, arthritis, cancer, heart disease, kidney disease...
- ❖ Side effects of medications



Older adults are at high risk

- ❖ Most people do not handle and store food safely
- ❖ Clients need to be taught how to handle and store meals safely



Cost of a foodborne illness outbreak

- ❖ Ill clients
- ❖ Lawsuits
- ❖ Low morale
- ❖ Negative attention from media
- ❖ Bad reputation
- ❖ Program may have to close



Foodborne illness is preventable

- ❖ Buy foods from approved suppliers
- ❖ Cook to safe temperature
- ❖ Keep at safe temperature, and store correctly
- ❖ Clean and sanitize equipment, and avoid cross-contamination
- ❖ Maintain good personal hygiene



Food safety policies

Throughout the flow of food:

- purchasing
- receiving
- storage
- preparation
- holding
- delivery



Food safety training

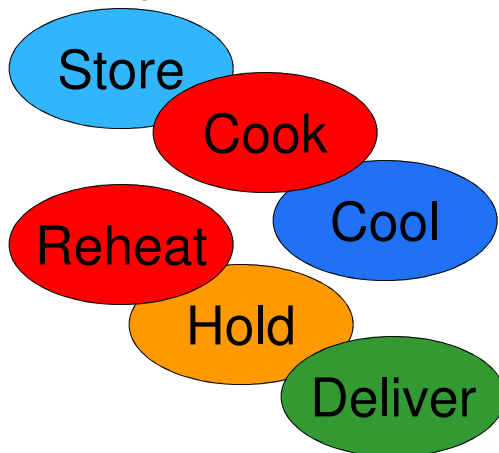
Train staff and volunteers:

- when they start
- at least once a year



Temperature of food

Need procedures to:



at a safe temperature

Harmful bacteria

- ❖ Grow best between 41 and 135 F = “danger zone”
- ❖ **Time/temperature control for safety (TCS) foods** should be kept out of danger zone



Health and personal hygiene

- ❖ Staff and volunteers need to be in good health
- ❖ Washing hands is one of the best ways to reduce risk of foodborne illness



Washing hands

- ❖ Wash hands in warm soapy water for at least 20 seconds:
 - before and after handling food
 - after using restroom
 - after touching one's hair, face, body, clothing, or anything else that could contaminate hands
- ❖ Dry with a clean paper towel or a hand dryer



Personal hygiene

Staff and volunteers who work with food need to:

- keep fingernails short and clean
- bathe/shower
- keep hair clean
- wear clean clothes and hair restraint
- remove and store aprons before leaving area
- remove jewelry from hands/arms
- not eat, drink, smoke, or chew gum or tobacco



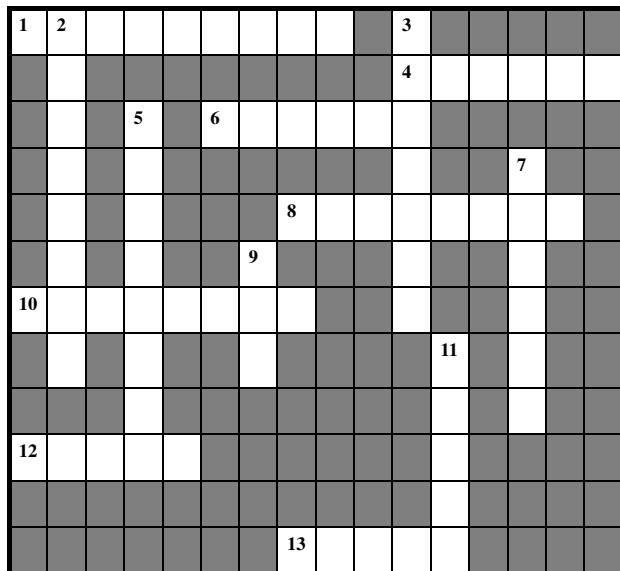
Monitoring and keeping records

Monitoring = observing, taking measurements

- example: food temperatures



Crossword puzzle



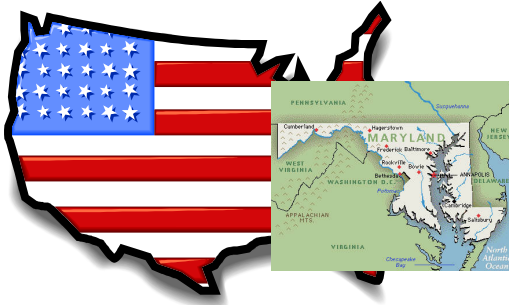
ACROSS

- _____ illness is any illness that is caused by eating food that is contaminated.
- A person's _____ system can become weaker with age.
- The temperature range between 41 and 135 degrees Fahrenheit is called the temperature "_____ zone."
- It is important for staff and volunteers to maintain good _____ hygiene.
- _____ and viruses are the most common causes of foodborne illness.
- _____contamination is the transfer of harmful bacteria or viruses from one food or surface to another.
- Washing your _____ is one of the best ways to reduce the risk of foodborne illness.

DOWN

- When two or more people get the same illness after eating the same food, it is called an _____.
- _____ that cause foodborne illness mainly come from humans.
- _____ of foodborne illness may not appear for days or even weeks after a person eats a contaminated food.
- Time/temperature control for _____ foods are foods that support the growth of harmful bacteria when kept at inappropriate temperatures.
- Every year, about one in _____ Americans gets a foodborne illness.
- Most bacteria and viruses that cause foodborne illness don't change the way food _____, smells or tastes.

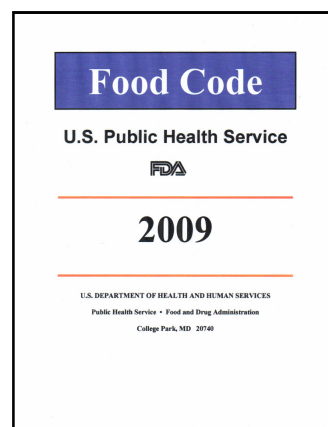
Food safety regulations



- ❖ Recommended at the federal level
- ❖ Written at the state level
- ❖ Enforced at the state and local levels

Federal Food Code

- ❖ Model for state and local regulators
- ❖ New version every 4 years
- ❖ Nearly all state food codes based on this



Food safety regulations

- ❖ State, county or city health inspectors conduct inspections in most states
- ❖ Regulations differ by state and region
 - hot holding temp. $\geq 140^{\circ}\text{F}$ or $\geq 135^{\circ}\text{F}$
 - cold holding temp. $\leq 40^{\circ}\text{F}$ or $\leq 41^{\circ}\text{F}$

Food safety regulations

- ❖ Find out regulations from local health departments
- ❖ Make sure caterers and vendors follow state and local food safety laws

Other food safety regulations

- ❖ Older Americans Act (OAA) requirements
- ❖ State Unit on Aging and Area Agency on Aging requirements
- ❖ Other funding requirements

Module 3: Food service management staff



Food safety policies and procedures

Throughout the flow of food:

- purchasing
- receiving
- storage
- preparation
- holding
- delivery



Holding

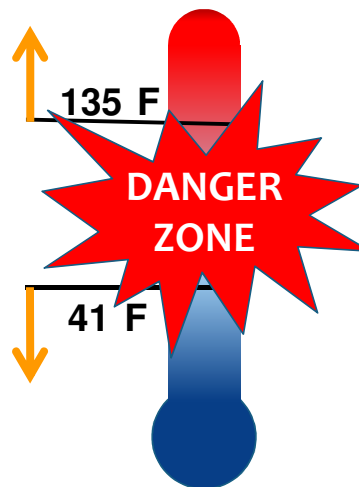
- ❖ Food can be contaminated after preparation or cooking



KEEP
HOT FOOD
HOT



and
COLD FOOD
COLD



- ❖ Use a food thermometer

Delivery

- ❖ Need to train drivers in safe delivery procedures
- ❖ Safest for meals to spend **no** time in danger zone
 - May not be required by state or local regulations
- ❖ Routes should be as short as possible



Delivery

- ❖ Meal pick-up and delivery times should be written down
- ❖ Meal temperatures should be measured and written down:
 - when meals are picked up from kitchen
 - during delivery at least once a month, when last client receives meal, or at end of route
- ❖ Inside of vehicles should be cleaned regularly

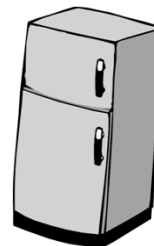
Delivery

- ❖ Delivery equipment should:
 - keep meals at safe temperatures
 - be food-grade
 - not let food mix, leak or spill
 - let air circulate
 - be cleaned and sanitized regularly
- ❖ Drivers should:
 - clean hands before handling food containers
 - have hand sanitizer (alcohol \geq 60%)
- ❖ No pets during delivery



Delivery

- ❖ Meals should be labeled with:
 - “use-by” or “discard by” date
 - instructions for storage and reheating
- ❖ If client not home, driver should not leave meal
- ❖ If program allows, meal can be left with neighbor
- ❖ Clients need to eat meals right away, or refrigerate or freeze them



Client appliances

- ❖ Refrigerators set above 40 F increase risk of foodborne illness
- ❖ Assessor should check kitchen appliances (oven, microwave, refrigerator...)



Policy on recalls

- ❖ Need a policy on food product recalls, that follows state and local requirements
 - recall = action by a food manufacturer to remove products from commerce that may cause harm

Policy on foodborne illness

- ❖ Procedures:
 - Develop form (client name; contact information; symptoms; doctor's name, phone #; foods consumed)
 - Determine who will handle calls
 - Contact local health department immediately in case of suspected outbreak
 - Ask how to store samples of suspected foods for testing
- ❖ Can send draft policy to local health department for suggestions



Self-inspections

- ❖ Conduct self-inspections often to make sure proper food safety procedures are followed
- ❖ Can use same checklist as regulatory agency
- ❖ Correct risks as soon as possible



Health inspections

- ❖ Inspectors use state/local health code to examine whether basic food safety standards are met
- ❖ Program must correct problems
- ❖ Cooperate with inspectors and build a positive working relationship



Module 4: Food service workers (staff and volunteers)

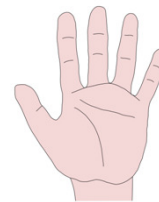


Module 5: Drivers (staff and volunteers)



Hand sanitizers

- ❖ Clean hands before handling food containers
- ❖ Best to wash hands with soap and clean water
- ❖ Bring hand sanitizing wipes/lotion (alcohol $\geq 60\%$)
- ❖ To use lotion:
 - apply to palm of one hand
 - rub hands together
 - rub over all surfaces of hands and fingers until hands are dry



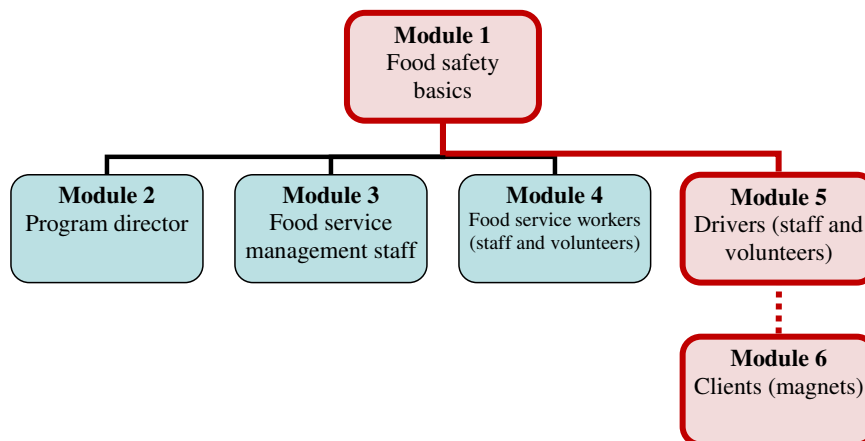
Personal hygiene

Drivers need to:

- bathe/shower
- keep hair and fingernails clean
- wear clean clothes, including outer clothes such as coats and gloves



Module 6 - magnets



KEEP FOOD SAFE



- ❖ **EAT** meals **RIGHT AWAY** or **REFRIGERATE/FREEZE**
- ❖ **THROW AWAY** food left out for more than 2 hours
- ❖ **REHEAT** food until **STEAMING HOT**
- ❖ **WASH YOUR HANDS** before touching food
- ❖ **KEEP** your kitchen **CLEAN**



MANTENGA LOS ALIMENTOS SEGUROS



- ❖ **COMA** alimentos **INMEDIATAMENTE** o **REFRIGÉRELOS/CONGÉLELOS**
- ❖ **TIRE** alimentos dejados afuera del refrigerador por más de 2 horas
- ❖ **RECALIENTE** alimentos hasta que **EMITAN VAPOR**
- ❖ **LAVE SUS MANOS** antes de tocar alimentos
- ❖ **MANTENGA** su cocina **LIMPIA**



More information

- ❖ “Food Safety on the Go” course materials:
<http://nfsc.umd.edu/FoodSafety/index.cfm>

Thank you

