

The Centers for Disease Control and Prevention's Vessel Sanitation Program is proud to bring to you the following session:

*Food Protection: Source to Service*

While this presentation is primarily intended for cruise vessels under the jurisdiction of the Vessel Sanitation Program it may also be used by anyone who is interested in this topic.

This session should not be used as a replacement for existing interactive training but should be used as an adjunct to a comprehensive training program.



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# Food Protection

Source to Service

Vessel Sanitation Program

2007



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# Learning Objectives

- List the proper temperatures of foods from source to service.
- List reasons to reject provisions.
- List ways to protect food during preparation and service.
- List records that must be maintained and why they are maintained.
- Demonstrate proper hand washing.



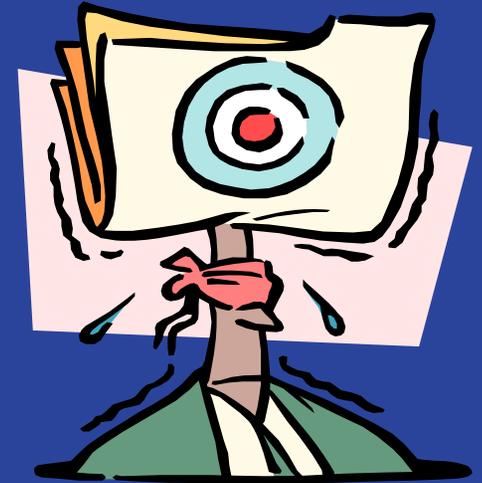
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# Person in Charge

- Knowledgeable
  - foodborne diseases
  - food safety
  - sanitation
- Food safety and sanitation duties



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# Food Protection During Sourcing and Delivery

- Vendor
- Source
- Receipt
- Storage



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# Vendor Selection

- Food Safety
- Food Quality
- Timely
- Licensed
- Inspection
- Openness



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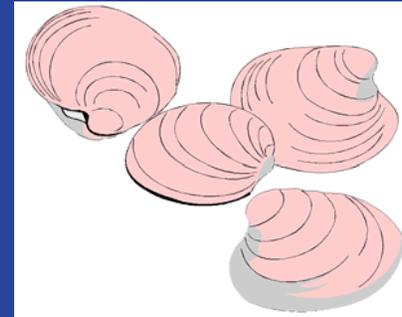
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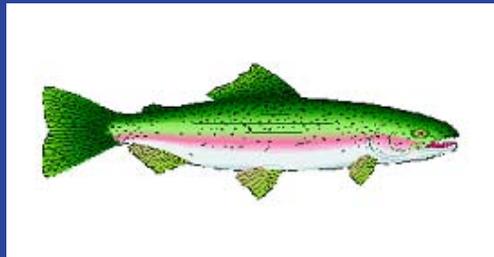
# Food Sources



Cultivated  
Wild  
mushrooms



Certified Shellfish  
Shipper



Commercially  
Caught Fish

Approved  
Dairy



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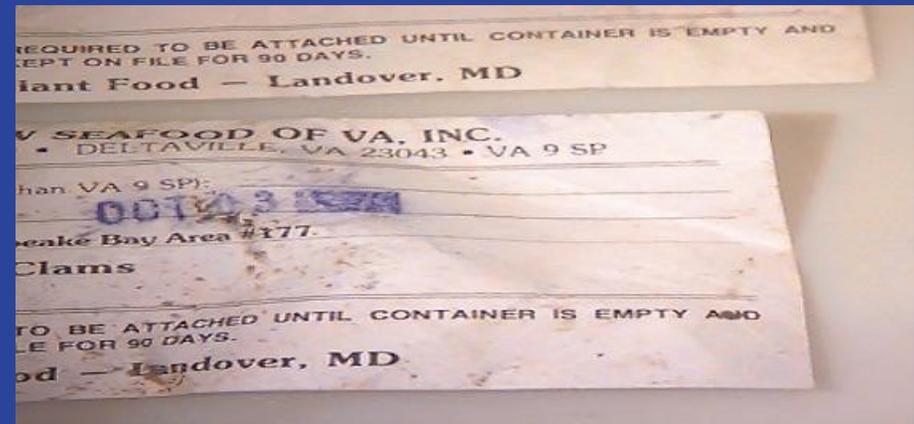
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# Shellstock Tags

- Completed
- 90-day Retention
- Record Correlation

DEALER NAME Dealer Address City, State Zip Code	CERT. NO.
ORIGINAL SHIPPER'S CERT. NO. IF OTHER THAN ABOVE:	
HARVEST DATE:	
HARVEST LOCATION:	
TYPE OF SHELLFISH:	
QUANTITY OF SHELLFISH:	
THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY AND THEREAFTER KEPT ON FILE FOR 90 DAYS.	
<small>RETAILERS, INFORM YOUR CUSTOMERS Thoroughly washing. Book of animal origin such as beef, eggs, fish, fowl, shellfish, poultry, swine, etc. should be thoroughly washed with clean water. Do not use the same water for washing different types of products. Consult your physician or public health official for further information.</small>	



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# Deliveries



- Vehicle
  - Clean
  - Temperature
  - Storage



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# Provisions Inspections

- Training
- Authority
- Equipment



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# Receiving Fresh Meats, Poultry, and Fish 7°C (45°F)

- Reject if:
  - Temperature abused
  - Off odor
  - Off color
  - Texture
  - Slimy or Sticky



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# Frozen Products

- Evidence of Temperature Abuse
  - Present
  - Past



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# Receiving Eggs and Dairy Products

- Temperature
- Appearance



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# Packaged and Canned Goods



- Inspect for
  - Damage
  - Package integrity



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# Produce Delivery



- Spoilage
- Vermin



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# First In First Out

Rotate stock to ensure usage  
of older product first



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# Prohibited Storage Areas

- Toilet Rooms
- Underneath Unprotected Wastewater Lines
- Locker or Dressing Rooms
- Garbage Rooms
- Mechanical Rooms
- Underneath Leaking Water Lines
- Under Open Stairwells



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# Food Storage

- Clean
- Dry
- Protected
- 15 cm (6 inches) above deck

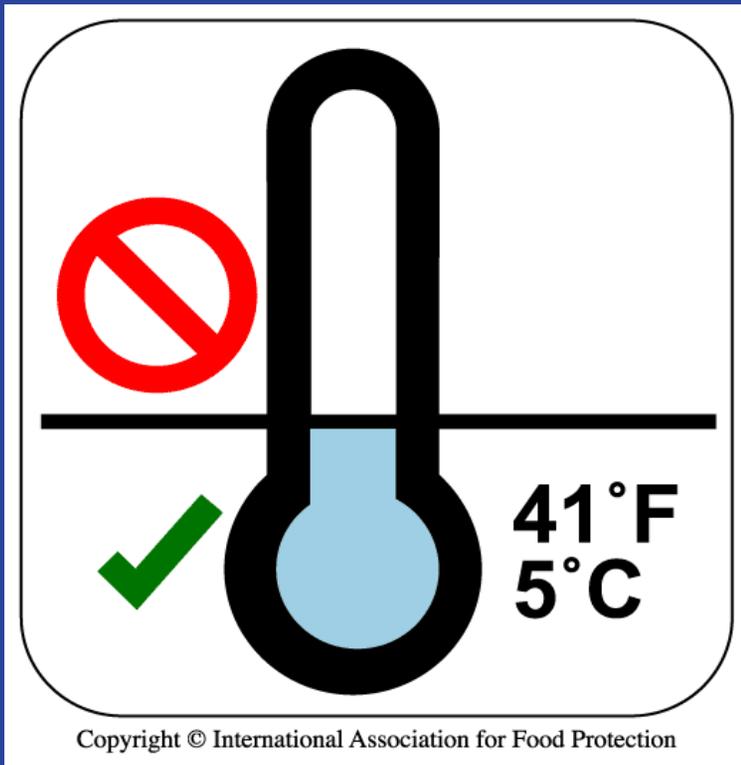


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# Cold Holding



- 41°F or below
  - Walk-in refrigerators
  - Other refrigerators
  - Buffets
  - Cold tables
  - Ice baths
  - Freezers
- Ambient temperature thermometers

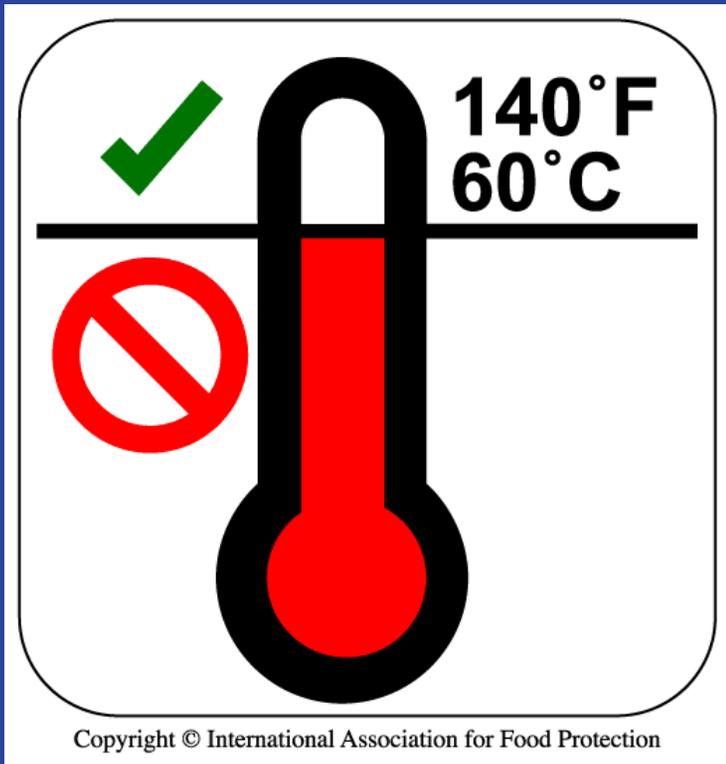


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# Hot Holding



- 140°F or above
  - Buffets
  - Warming Cabinets
  - Ovens
  - Double boilers
- Ambient temperature thermometers



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# Refrigerated Storage Requirements



- Air circulation
- Covered
- Labeled
- 15 cm off deck



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# Date Marking Requirement



- Refrigerated
- Ready-to-eat
- Potentially hazardous
- Prepared by vessel or commercially
- Held > 24 hours



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# Date Marking Requirement

- Maximum 7-day use
- Day 1 is the day of preparation or day package is opened
- Discard date must be on food container

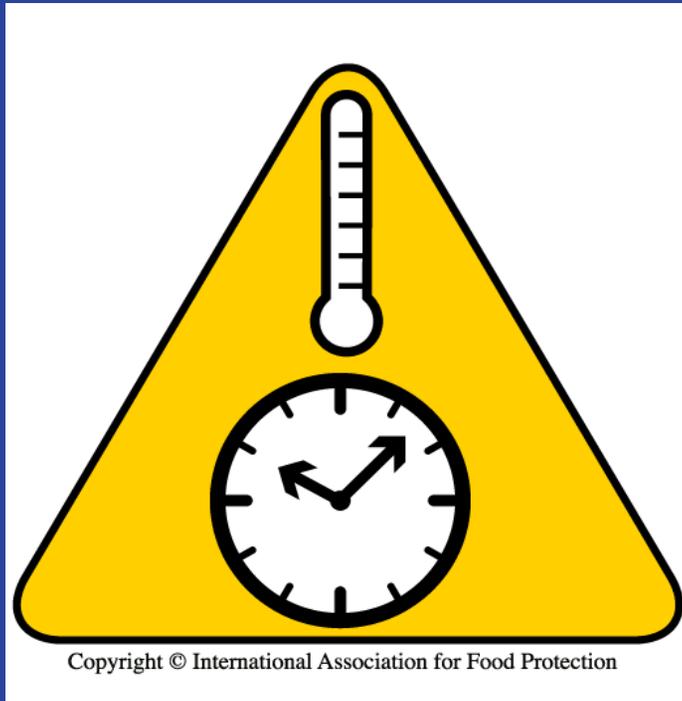


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# Day Stores



- 7°C (45°F)
- 24 hours
- Labels
  - Permanent label for refrigerator
  - 24 hour discard label for foods



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# Protection During Preparation



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# Contamination by Employees



Handling



Tasting



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# Poor Hygienic Practices

- Eating, drinking, smoking
- Not bathing
- Soiled uniforms
- Poor handwashing
- Too much jewelry



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# Gloves



- Single-use
  - Barrier
  - Ready-to-eat foods
- Multi-use Gloves
  - Cleaning
  - Warewashing



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# When Should You Wash Your Hands?

- Reporting to work
- After handling raw foods
- In between glove changes
- After eating, smoking, or drinking
- After handling soiled items
- After using the bathroom
- After any potential contamination



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# Proper Handwashing



- Wet hands
- Apply soap
- Lather vigorously  
– 20 seconds
- Rinse thoroughly
- Dry hands



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# Personal Appearance



- Natural nails clean and trimmed
- Plain wedding band
- Clean uniform
- Effective hair restraints
- Set a good example



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# Cross-contamination



- Hands
- Gloves
- Equipment
- Utensils



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# Cross-contamination



- Raw animal vs. raw ready-to-eat foods



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# Cross-contamination



- Raw animal vs. cooked or processed ready-to-eat foods

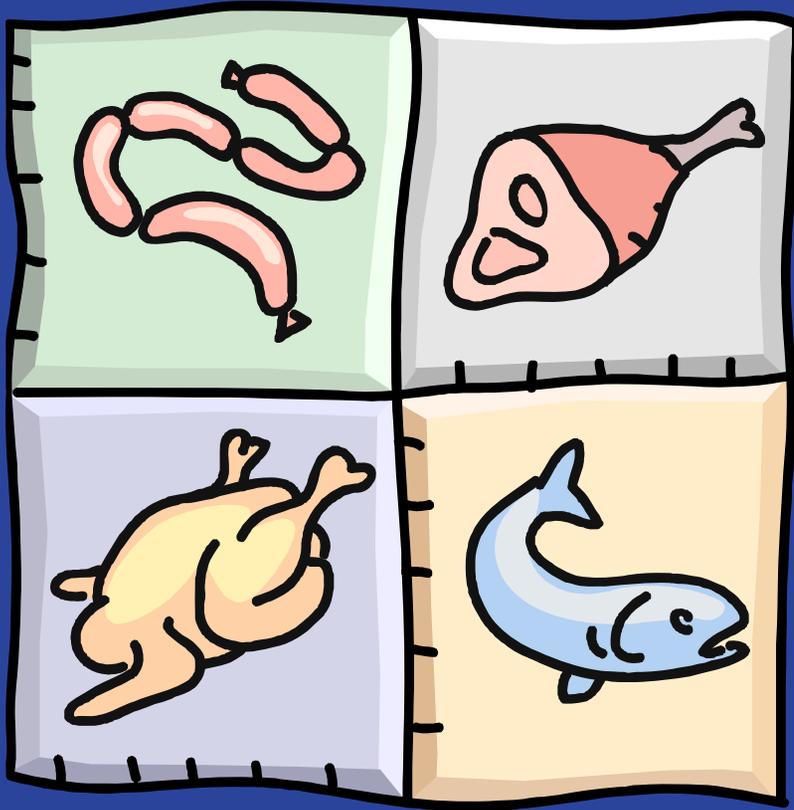


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# Cross-contamination



- Raw animal vs. raw animal foods



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# Refrigerated Storage Sequence

- Cold Cuts (top shelf)
  - Beef Roast
  - Ground Beef
  - Pork
  - Poultry (bottom shelf)
- Poultry (top shelf)
  - Beef Roast
  - Ground Beef
  - Pork
  - Cold Cuts (bottom shelf)

**A**

**B**



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# Thawing



- Refrigeration
- Running Water
- During Cooking
- Microwave



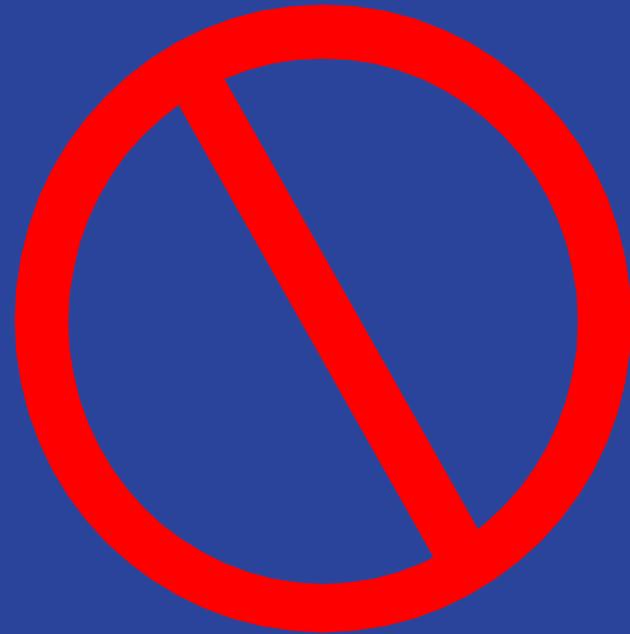
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# Destruction of Organisms

- Cooking
- Freezing
- Reheating



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# Cooking



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# Cooking Temperatures

- Poultry
  - Ground Beef
  - Pork
  - Beef and Pork Roasts
  - Stuffed Meats
  - Eggs
  - Vegetables
- 74°C (165°F)
  - 68°C (155°F)
  - 63°C (145°F)
  - 54°C (130°F) for 121 minutes or 63°C (145°F) for 15 seconds
  - 74°C (165°F)
  - ?
  - ?



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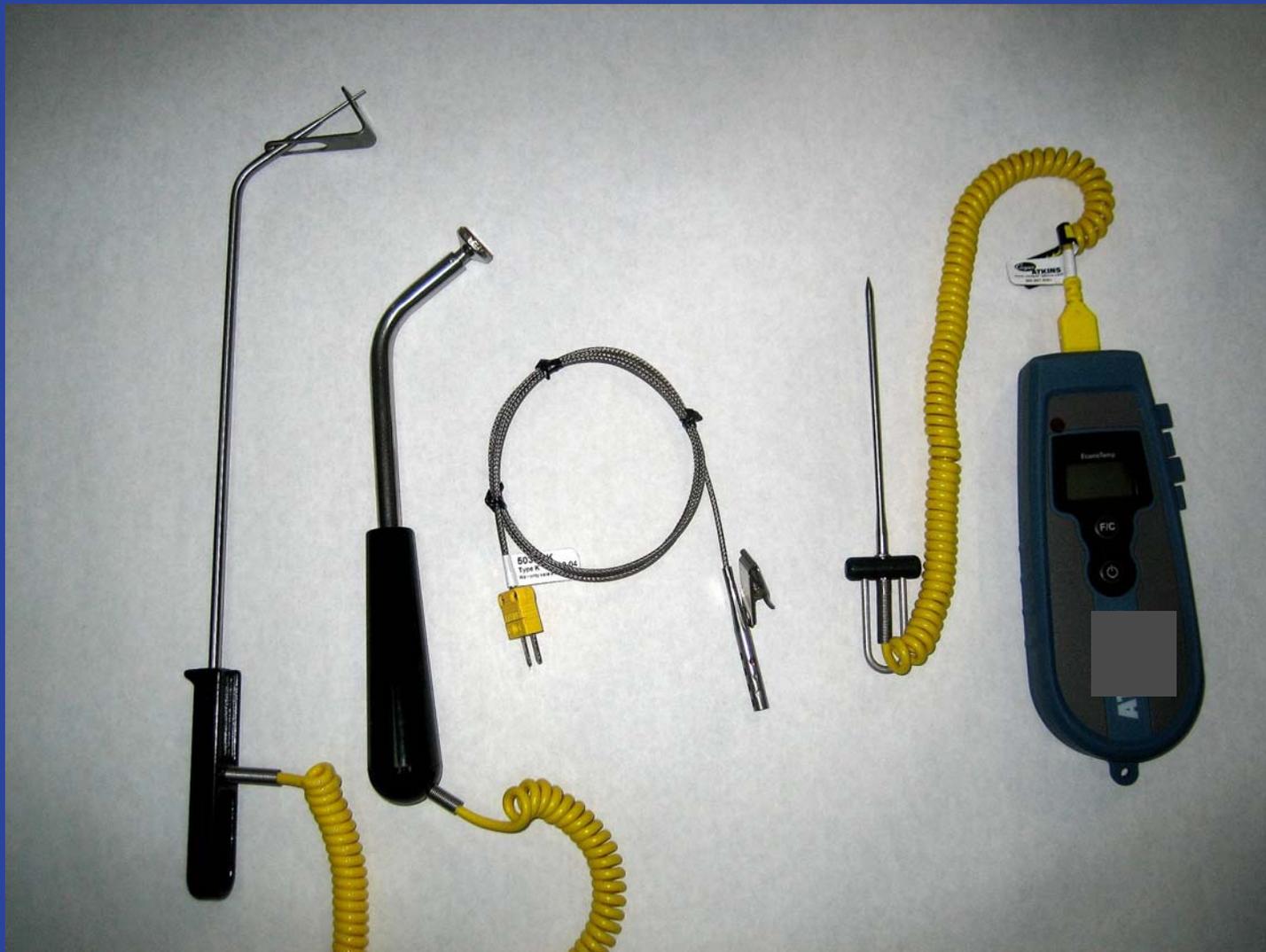
# Monitoring Temperatures



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# Parasites and Fish



-20°C (-4°F) for 168 hours (7 days)  
or -35°C (-31°F) for 15 hours



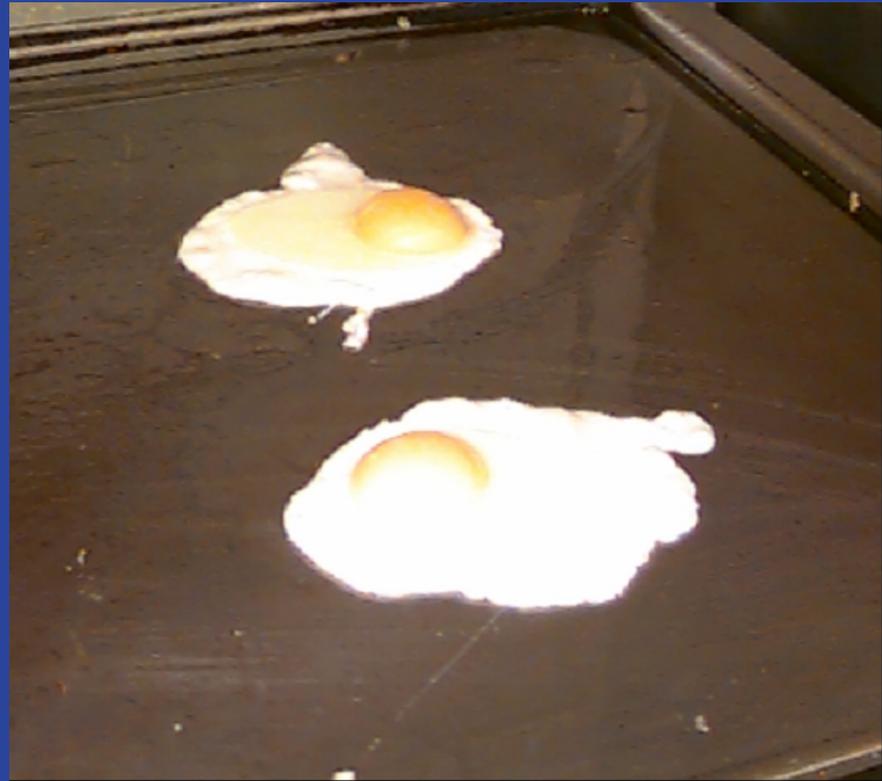
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# Consumer Advisory

- Foods
- Wording
- Location



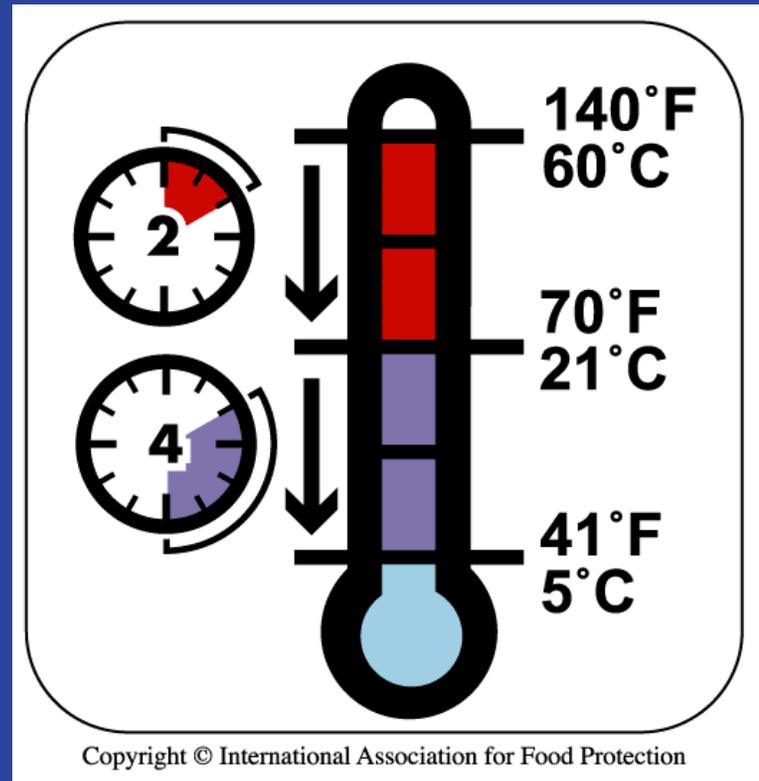
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# Cooling Methods

- Hot Foods
  - 60°C (140°F) to 21°C (70°F) in 2 hours then to 5°C (41°F) in 4 hrs
- Ambient Foods
  - Cool to 5°C (41°F) in 4 hours
- Logs



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# Reheating

- Immediate Service
  - Any temperature
- Hot Holding
  - 74°C (165°F) for 15 seconds
- Commercially Prepared
  - 60°C (140°F)
- Reheat within 2 hours
- Reheat once



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# Protection During Service

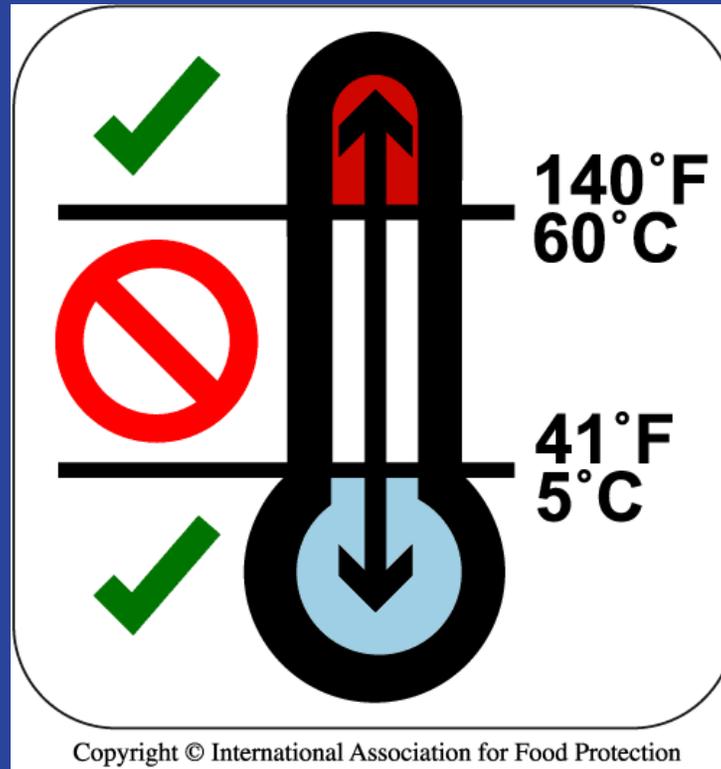


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# Danger Zone



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# Hot Holding Foods

## Temperature Control

### Hot holding

- 60°C (140°F) or higher
  - 2005 FDA Food Code 135°F

### Cold holding

- 5°C (41°F) or lower



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# Time as a Control

- Plan (required)
  - Flow of food
  - Set-up times
  - Discard times
  - List foods
- Logs
  - Not required but if part of plan must be used
- Buffets or Outlet
  - >4 hours
  - Label foods with discard times



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# Food Dispensing Utensils

- In food
- On a clean surface
  - Change every 4 hours for phf's
- Under running water
- Water at or above 140°F for phf's



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# Self-Service Buffet

- Effective sneeze guards
- Serving utensils
- Customer plates and utensils used once



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# Beverage Dispensing

When is refilling  
of glasses  
allowed?



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# Linens Use



- Line non-potentially hazardous food container
  - bread baskets - change after each customer



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Not enough ice to keep foods out of danger zone.



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Are other boards clean or soiled?



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Will this food handler prepare foods next or go off duty?



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Thumb is touching food.



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Pans stacked with raw chicken on the top.



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Excessive jewelry. Touching a ready-to-eat food with bare hands.



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What was cut last on this board? Raw meat?



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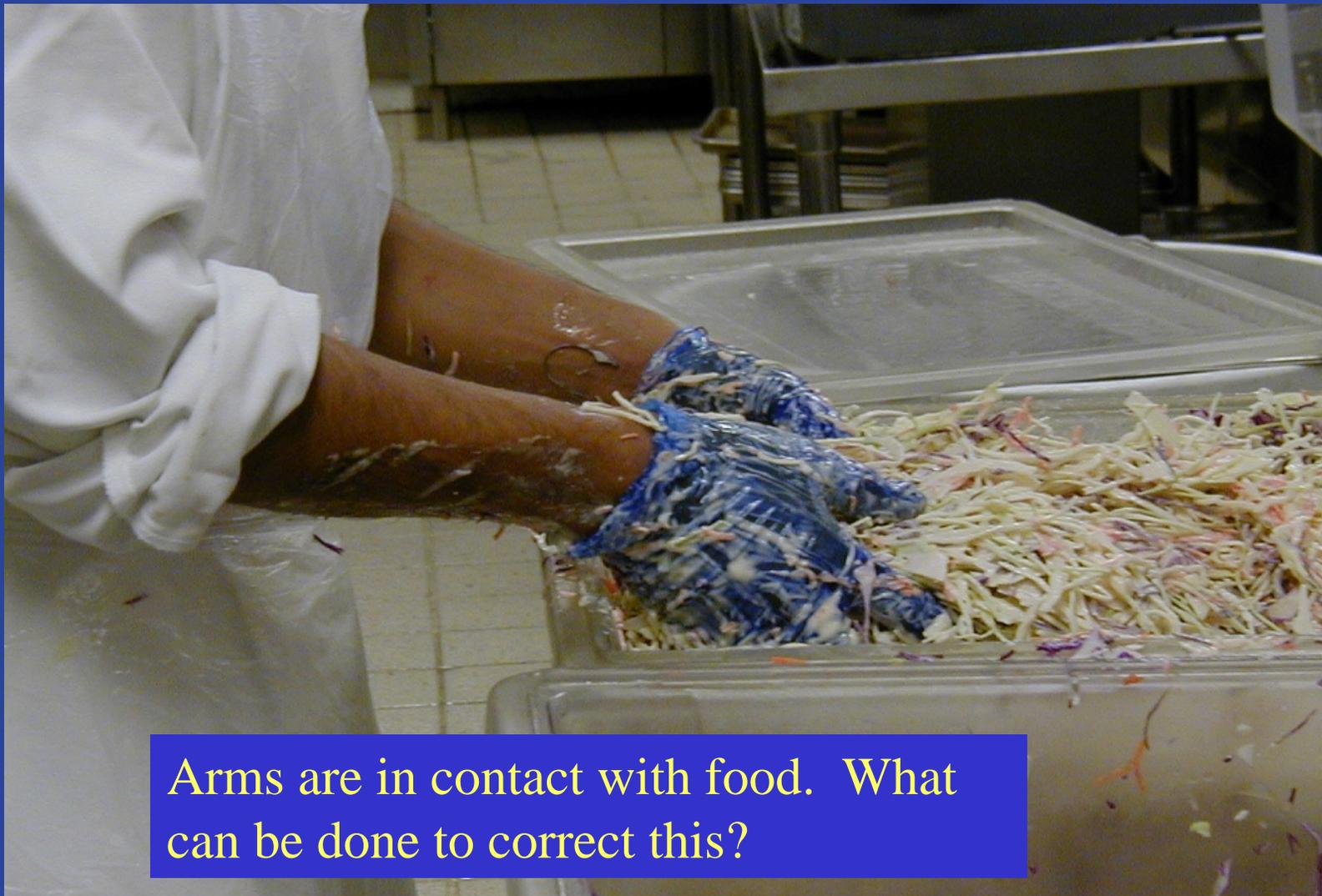
Foods are being prepared on soiled ramp of a 3-compartment sink.



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Arms are in contact with food. What can be done to correct this?



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Garbage can was used to move clean baking pans from one area to another.



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When serving foods in an area that is not designed for food service all requirements must be met. Temperature or time control for phf's, sneeze guard, serving utensils....



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Food/mouth contact surface exposed.



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Foods forward of sneeze guard. Trays not in contact with cold top. Scallop shaped bowl not a good design for this cold top.



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Most creamers need to be kept refrigerated or on time control. If not labeled UHT or no refrigeration needed keep creamers out of danger zone or on time control. Applies to non-dairy creamers as well.



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Too high.



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Tongs too short.



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# Cross-contamination Activity

- Instructions



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# Resources and References

- [www.cdc.gov](http://www.cdc.gov)
  - [www.cdc.gov/nceh/vsp](http://www.cdc.gov/nceh/vsp)
- [www.fda.gov](http://www.fda.gov)
  - [www.cfsan.fda.gov](http://www.cfsan.fda.gov)
- [www.usda.gov](http://www.usda.gov)
  - [www.fsis.usda.gov](http://www.fsis.usda.gov)
- [www.iafp.org](http://www.iafp.org)



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