• Massachusetts Parternship for Food Safety Education •

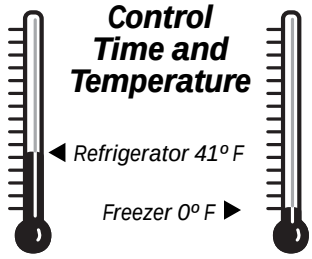
Food Safety for Food Workers

Most foodborne illness can be avoided by handling food properly. Foods from animal sources and cooked beans, rice and pasta are especially risky. These foods are "Potentially Hazardous Foods" (PHFs). Follow these basic food safety principles and practices to keep the food you prepare and serve safe to eat. These recommendations are consistent with the FDA 1999 Food Code.

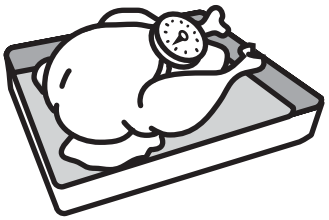
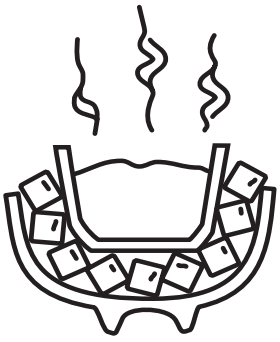
STAY HEALTHY

Key Principle	Hazard	Food Safety Message
Be in Good Health	**Microbiological Contamination**	• Don't prepare food when you are ill or have an open cut or sore on your hands or arms. • Report illnesses to the manager. • Avoid coughing and sneezing in food areas.
Practice Good Personal Hygiene 	**Microbiological Contamination**	**Always wash your hands after you:** • use the restroom. • cough, sneeze, or use a handkerchief or tissue. • work with raw foods. • handle dirty equipment or utensils. • take out the garbage.
	Cross-contamination	• Use a designated hand sink.
	Physical Contamination	• Wear clean clothing on the job.
	Microbiological and Physical Contamination	• Wear effective hair restraint while working in a food preparation area. • Don't eat, drink or smoke while preparing food. • Keep nails trimmed.

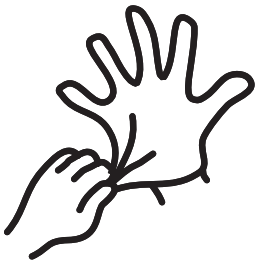
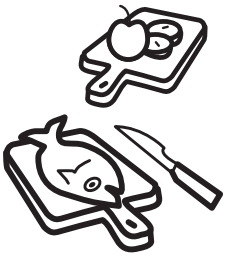
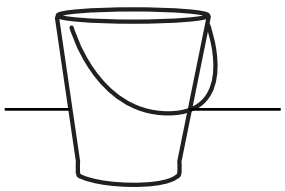
CONTROL TIME AND TEMPERATURE

Key Principle	Hazard	Food Safety Message
	**Bacterial Growth, Toxin Production**	**Keep foods out of the "Danger Zone": 41ºF - 140ºF** • Use a calibrated food thermometer to check food temperatures. **Receive and store food at proper temperatures** • Refrigerated foods at 41ºF or below. • Frozen foods at 0ºF or below.
During Preparation	**Bacterial Growth, Toxin Production**	**Thaw frozen foods in:** • Refrigerator. • Potable cold running water below 70ºF for 2 hours or less. • Microwave oven followed by cooking or as part of the cooking process.

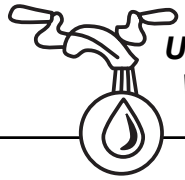
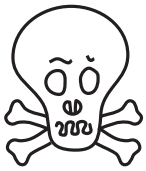
CONTROL TIME AND TEMPERATURE

Key Principle	Hazard	Food Safety Message
Control Time & Temperature ***During Cooking*** 	**Bacterial Survival, Toxin Production**	**Cook each food to proper internal temperature:** • ***165ºF for 15 seconds:*** poultry, stuffed meat, fish, pasta and stuffing containing meat, poultry or fish. • ***165ºF for 15 seconds:*** ground poultry, turkey. • ***155ºF for 15 seconds or 158ºF instantaneously:*** for ground meats (comminuted and injected meats) and the following comminuted: fish, meat and raw eggs not prepared for immediate consumption. • ***145ºF for 15 seconds***: fish, meat, pork and raw shell eggs that are intended for immediate service. • ***145ºF for 3 minutes:*** whole beef roasts, whole pork roasts and corned beef roasts. • ***145ºF on the top and bottom surface*** of a beef steak labeled to indicate that it meets the definition of "whole muscle intact beef." • ***165ºF raw animal foods*** cooked in a microwave.
During Holding	**Bacterial Growth, Toxin Production**	• Hold hot Potentially Hazardous Foods (PHFs) at 140ºF and above. • Hold cold PHFs at 41ºF or below.
During Cooling 	**Bacterial Growth, Toxin Production**	**Cool cooked Potentially Hazardous Foods (PHFs):** • 140ºF to 70ºF in 2 hours or less. • 70ºF to 41ºF in 4 hours or less. • Cool foods prepared cold to 41ºF or less within 4 hours. • Date and mark cold foods prepared on-site and held for more than 24 hours with the date of discard: • at 41ºF - 7 days including date of preparation • at 45ºF - 4 days including date of preparation • Cool foods in shallow containers (4 inches or less).
During Reheating	**Bacterial Survival and Growth, Toxin Production**	• Rapidly reheat PHFs to 165ºF (2 hours or less) and hold at 140ºF.

PREVENT CONTAMINATION

Key Principle	Hazard	Food Safety Message
Protect Food from Contamination 	**Microbiological and Physical Contamination**	• Prevent bare-hand contact with ready-to-eat foods by using utensils like disposable gloves, deli tissue, spatulas, tongs or dispensing utensils. • Minimize bare-hand contact with exposed foods that are not in ready-to-eat form. • Store food in covered containers or original packaging. • Do not store packaged food in absorbent packaging in direct contact with ice or water. • Do not store unpackaged food in direct contact with undrained ice. • Wash fruits and vegetables before cooking or serving. • Store foods in a clean, dry location that is not subject to splash, dust or other contaminants and is 6 inches above the floor.
Prevent Cross-contamination 	**Cross-contamination**	• Separate raw animal foods from ready-to-eat animal foods and other ready-to-eat foods (sushi, molluscan shellfish, fruits and vegetables) during storage, preparation, holding and serving.
	Microbiological Contamination	• Clean and sanitize food thermometers before and after each temperature check of raw and ready-to-eat foods.
	Cross-contamination	• Do not mix raw animal foods with cooked food.
Keep Food Contact Surfaces Clean  	**Microbiological Contamination**	**Clean and sanitize food contact equipment and utensils:** • Before you use a different type of raw animal food (beef, fish, lamb, pork and poultry). • When you change from working with raw foods to working with ready-to-eat foods. • Between preparing raw fruits and vegetables and Potentially Hazardous Foods. • At any time during the operation when contamination may have occurred. • Every 4 hours if used with Potentially Hazardous Foods at room temperature greater than 55ºF. • Clean and sanitize food thermometers before using and storing.

KEEP YOUR FOOD SUPPLY HEALTHY

Key Principle	Hazard	Food Safety Message
Consider the Source and the Condition of the Food	**Microbiological, Physical and Chemical Contamination**	• Use foods from approved suppliers. • Do not use food prepared in a private home. • Do not use food from bulging or dented cans or from damaged packaging.
 ***Use Safe Water***	**Microbiological and Chemical Contamination**	• Use only safe, potable water. • Ice for food use must be made from potable water.
Use Safe Transportation/ Travel	**Microbiological and Chemical Contamination**	• Protect food from contamination during transportation. • Transport in clean vehicles and equipment. • Keep refrigerated foods cold (41ºF or below). • Keep hot foods hot (140ºF or above).
Use and Store Chemicals and Pesticides Safely 	**Chemical Contamination**	• Store and use only chemicals that are absolutely necessary. • Use chemicals in accordance with manufacturers' instructions. • Do not store chemicals where they can contaminate food equipment, utensils, linens and single service/single use articles. • Only licensed individuals should apply pesticides.

The Massachusetts Partnership for Food Safety Education is a collaboration established among the University of Massachusetts Extension Nutrition Education Program and state and federal agencies and associations working with consumers, regulators and food workers in food preparation, processing, food service and retail establishments. Its goal is to reduce foodborne illnesses in Massachusetts by:

- *Improving food safety knowledge and skills among target groups*
- *Educating target groups in a systematic approach to food safety*
- *Increasing collaborations and communication among partners*

Participating agencies include:

- MA Department of Education
- MA Department of Food & Agriculture
- MA Department of Public Health
- MA Environmental Health Association
- MA Executive Office of Elder Affairs
- MA Food Association
- Massachusetts Food Banks
- Massachusetts Head Start Programs
- MA Health Officers Association
- MA Milk, Food & Environmental Inspectors Association
- MA Restaurant Association
- MA School Food Service Association
- US Department of Agriculture - Food & Nutrition Service (NERO)
- US Department of Agriculture - Food Safety & Inspection Service
- US Food and Drug Administration

Massachusetts Department of Education

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