

# SERVING FOOD SAFELY



**TM**





# NMED Food Program




- Our top priority is to protect the health of the citizens of New Mexico by preventing the spread of foodborne illness

# ***Foodborne illness***

“... when a person becomes ill after ingesting a contaminated food...”

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Foodborne illness can be caused by:

- Biological hazards
  - Microorganisms(bacteria  viruses)
  - Parasites
- Chemical hazards
  - Naturally occurring
  - Intentionally added
  - Unintentionally added (cleaning  agents, toxins)
- Physical hazards ( bone, glass, metal)

# ILL FOODWORKERS



## Restriction

### Symptoms:

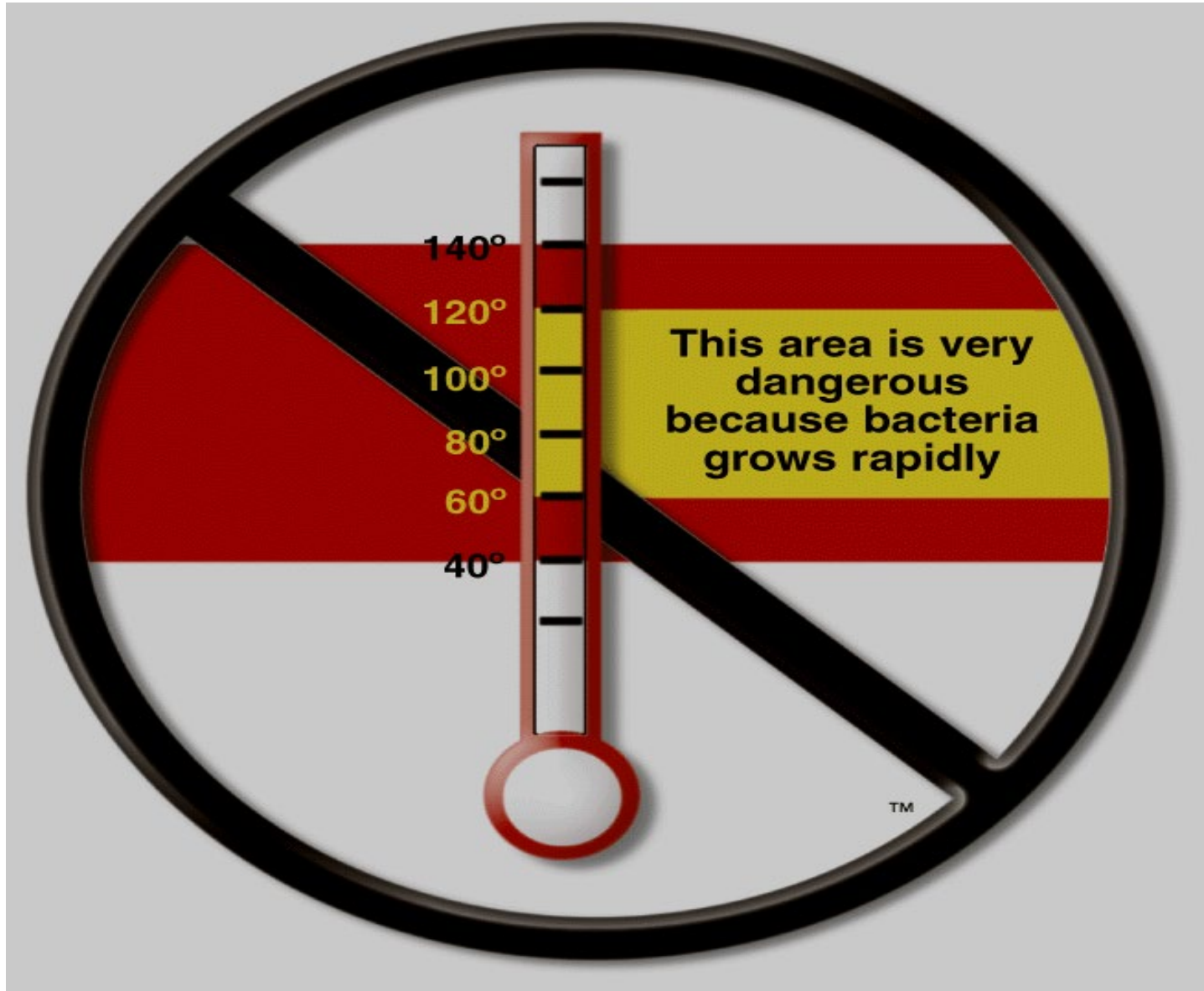
- Diarrhea
- Vomiting
- Fever
- Jaundice
- Sore Throat w/Fever
- Infected Wound (I.e. cut, lesion or boil)
- Contact w/”Confirmed Big 4”

***Foodborne Illness Is Not a Menu Item!***



# *Temperature Danger Zone*

135 degrees F to 41 Degrees F



# MONITORING POTENTIALLY HAZARDOUS FOODS' TEMPERATURES

## Use & Care of Temperature Taking Devices

### Cleaning:

- Use a clean and sanitized thermometer
- Single use alcohol wipe or other approved sanitizer may be used



*Thermocouple*



*Infrared*



*Digital Thermometer*

### Taking Temperatures:

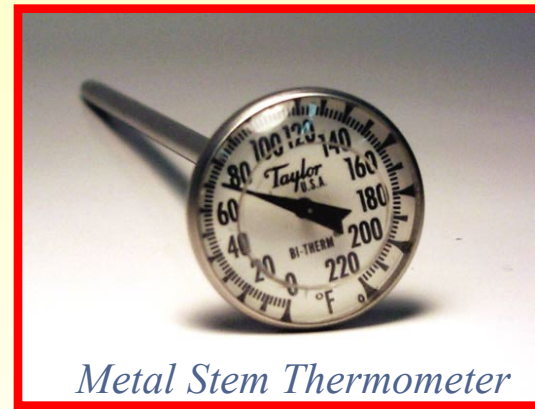
- Use a metal stem thermometer, digital thermometer, or thermocouple unit
- Place the probe in the center or thickest part of the food, between the fold of the flexible packaged food or between packages of food; do not puncture the packaging
- Allow time for the thermometer to register and record the temperature

# MONITORING POTENTIALLY HAZARDOUS FOODS' TEMPERATURES

## Use & Care of Temperature Taking Devices

### Calibrating Metal Stem Thermometers:

- Calibrate thermometers frequently
- Insert sensing area into a cup of ice slush
- Allow indicator to stabilize
- Adjust calibration nut to 32°F while in ice
- Digital thermometer and thermocouple units can be checked for accuracy using this method



*Ice Slush Calibration*



# 4 WAYS TO THAW FOOD SAFELY



In a Cooler or  
Refrigerator at  
41°F or Less



In Cold (70°F)  
Running Water  
for Two Hours or  
Less



During the Cooking Process, Continuous  
Cooking with No Interruption

By Microwaving as the First Step  
in a Continuous Cooking Process



*NEVER THAW FOODS AT ROOM TEMPERATURE*

*The thawed portions on the outside will support bacterial growth and can result in an unsafe product!*



# ***Cooking***

Most raw foods of animal origin (beef, lamb, eggs, fish, etc.).....	<b>145</b> <sup>0</sup> F
Rare roast beef or rare steak.....	<b>130</b> <sup>0</sup> F
Ground beef, pork, ratites, chopped fish & meats, injected meats..	<b>160</b> <sup>0</sup> F
Poultry, stuffing, stuffed meats and poultry.....	<b>165</b> <sup>0</sup> F
Microwave cooking (any of the above).....	<b>165</b> <sup>0</sup> F

# ***Holding***

Hot holding (for service).....	<b>140</b> <sup>0</sup> F
Cold holding (refrigeration).....	<b>41</b> <sup>0</sup> F

# COOL FOODS QUICKLY & SAFELY

## Cooling Methods

### Shallow metal pans - 2" - 4" deep

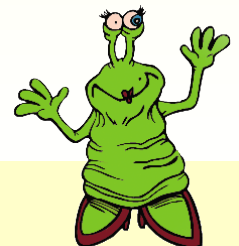
- Leave pan partially uncovered
- Refrigerate immediately
- DO NOT stack hot pans - allow for air flow



### Ice Bath - must use ice and water



- Fill a clean sink or large pan with ice and fill spaces with cold water
- Divide product into 1 gallon containers
- Immerse product pan to depth of product in sink or larger pan until it is level with ice
- Agitate/stir every 10 minutes using an ice paddle or other equipment
- Drain water and replenish ice as it melts
- Use a clean thermometer to monitor the temperature of the food
- After the food has cooled to 41°F, refrigerate immediately



*Improper Cooling is the Leading Cause of FBI!*

# COOL FOODS QUICKLY & SAFELY

## Cooling Methods

### Small Portions - reduce the mass/volume

- Divide food into smaller pans
- Separate food into smaller or thinner portions (2" depth for thick foods/ 4" for thick liquids)
- Cut or slice portions of meat no larger than 4 inches or 4 pounds

Add ice directly to the product as an ingredient

### Hints:

Use rapid chill refrigeration equipment that encourages quick cooling

Never try to cool foods in plastic containers

Never allow foods to cool at room temperature



*Improper Cooling is the Leading Cause of FBI!*

# COOL FOODS QUICKLY & SAFELY

## 2 Stage Cooling is Required

Cooked potentially hazardous foods need to move quickly through the temperature danger zone to limit microbial growth:

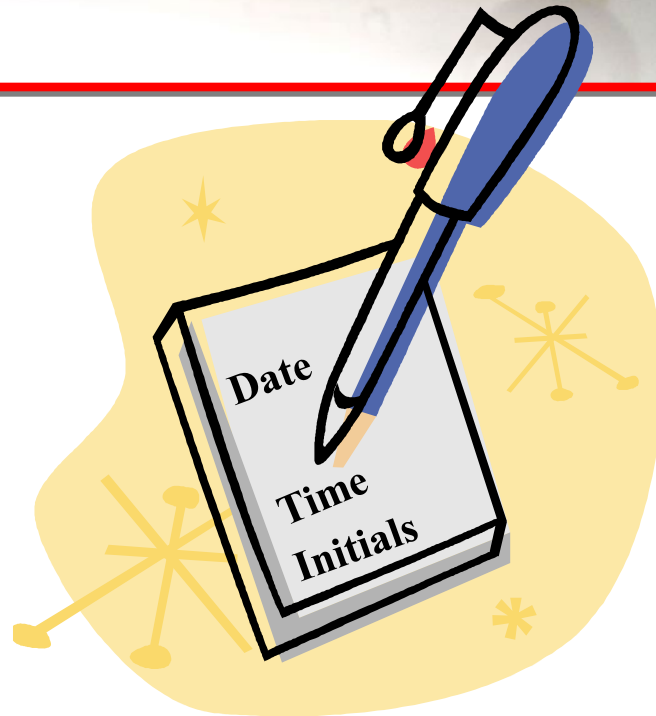
- Stage 1 : 140°F - 70°F in 2 hours
- Stage 2: 70°F - 41°F in next 4 hours

*Improper Cooling is the Leading Cause of FBI!*



# MONITOR your Cooling Method

- Thermometer
- Data Logger
- Date Mark
- Logs



# RE-HEAT FOODS QUICKLY & SAFELY

## Key Elements:

- Reheat previously cooled foods to an internal temperature of 165°F or above
- Rapid reheating is required (2 hours or less)
- Stir foods frequently to distribute the heat
- Measure the internal temperature with a thermometer
- After reaching 165°F, the food must be held hot at 140°F or above



## Reheating Methods:

- Direct heat (stove top) is best... may also use ovens and microwave if reheating achieves 165°F within 2 hours
- Reheating in steam tables and crock pots is unsafe and Not Allowed

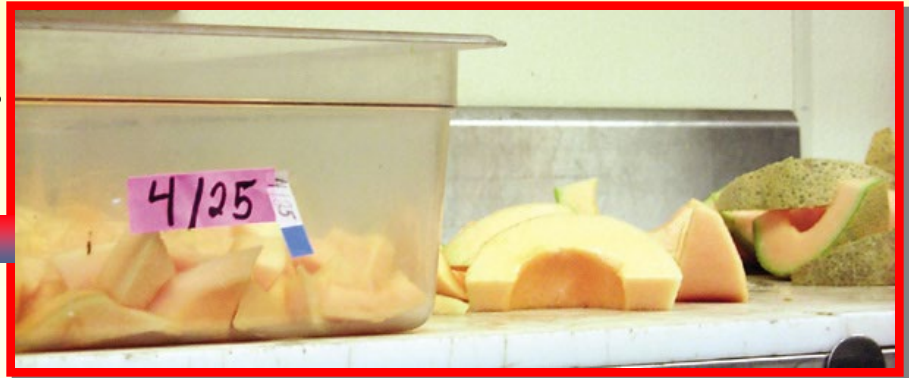
*Do Not Mix New/Fresh Food with Leftover Items*



# DATE MARKING

## Food Must Be Date Marked If It Is:

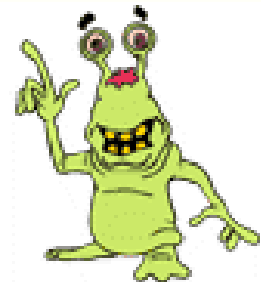
- Prepared on-site and refrigerated, or commercially processed after the original container is opened
- Potentially hazardous
- Ready-to-eat and held for more than 24 hours



## Mark With the Date To Be Consumed By or Discarded:

- Allow seven (7) days if held at 41°F or less

*When in Doubt, Throw it Out!*





# **Cross - contamination**

- *Cross-contamination is the transfer of a harmful substance from one food to another food by vehicles such as human hands, contaminated food contact surfaces of equipment, utensils, or directly from a raw food to a ready-to-eat food.*

# What you cannot see can cause foodborne illness.



**Staph**

**E. coli**

**Salmonella**

**Hepatitis**

**Listeria**

**Strep**

**COMPLIANCE  
CONTROL**

# FOOD SAFETY IS IN YOUR HANDS

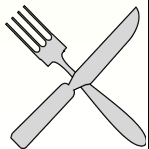


## Handwashing is Important in Preventing FBI Food Workers & Management

- Wash Hands FREQUENTLY and EFFECTIVELY 20 second friction wash; adequate soap; warm water; use paper towel to dry
- Keep Hand Sinks Accessible AT ALL TIMES
- Wash Hands at APPROPRIATE TIMES

## Wash Hands After:

Smoking, Eating or Drinking



Handling Raw Food

Cleaning or Handling Garbage



Using a Tissue



Going to the Restroom

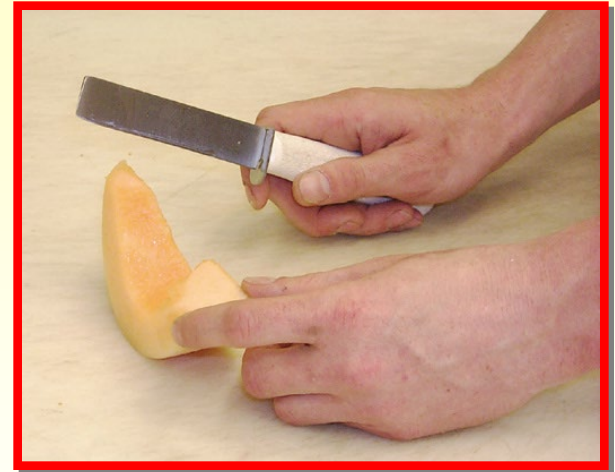


*Improper or Lack of Handwashing Causes 30% of All FBI*

# NO BARE HAND CONTACT

Bare hand contact with ready-to-eat (RTE) food is prohibited. When handling RTE foods, food service workers may use utensils such as:

- Deli Tissue
- Spatulas
- Tongs
- Forks
- Dispensing Equipment
- Single-Use Gloves



*A Ready-To-Eat (RTE) Food is Any Food that Can be Consumed Without Further Preparation*

# NO BARE HAND CONTACT

## Single-Use Glove Guidelines

- Glove usage does not replace the need for good hand washing practices
- Wash hands before putting on gloves
- Put gloves on only when you are ready to handle ready-to-eat food
- Use gloves for only one task, such as ready-to-eat foods, then discard
- If an interruption occurs during food preparation, remove gloves'
- Use clean gloves when you resume food preparation
- Dispose of gloves immediately upon removal
- Single-use gloves should not be used around heat or hot fats
- Gloves are susceptible to contamination, so discard when soiled or damaged
- Fabric or re-usable gloves may not be used with RTE food
- Avoid single-use gloves made of natural rubber latex



*A Ready-To-Eat (RTE) Food is Any Food that Can be Consumed Without Further Preparation*

# OBSERVE GOOD HYGIENIC PRACTICES



- Wash hands only in the hand sink-- not in the dishwashing, food preparation or mop sinks
- Ill employees can cause FBI. Enforce sick leave policy or reassign duties
- Eat, drink or use any form of tobacco only in designated non-food production areas
- Do not use a common cloth towel or apron for hand wiping

*Good Hygienic Practices are the Responsibility of Both the Foodworker & the Management!*



# Protecting stored food

- Keep food storage areas clean and sanitary and use “F.I.F.O.”
- Properly store foods away from toxic items such as cleaning agents
- Store foods on shelves at least six inches above the floor
- Prevent insect and rodent infestation
- Prevent leakage from overhead pipes

# ***Watch out for dented cans***



# CROSS-CONTAMINATION

## Avoid the Risk

No bare hand contact with ready-to-eat food or ice

Use proper utensils or single-use gloves

Practice good handwashing and hygienic habits

Store raw meat, raw poultry, and raw shell eggs below cooked or ready-to-eat foods in the cooler

Clean and sanitize all utensils and surfaces that touch food:

- after each use
- when changing product
- between meat species
- frequently when preparing large amounts
- between raw meats and cooked or ready-to-eat foods

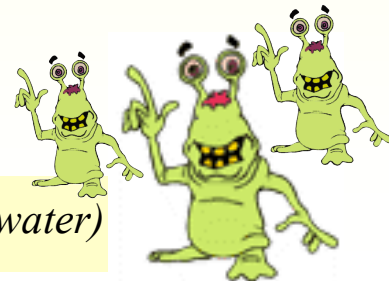
*Use Separate Cutting Boards for Raw Meats & Cooked or Ready-to-Eat Foods*



# CLEANING & SANITIZING

## Manual Warewashing Steps:

1. **Wash:**
  - Clean and sanitize sinks and drain boards
  - Pre-soak/pre-rinse all eating utensils and equipment
  - Use hot soapy water
2. **Rinse:**
  - Use clean hot water
3. **Sanitize:**
  - Use 50-200 ppm chlorine; mix with cool water or
  - 200 ppm quaternary ammonia; mix with 75°F water
  - Immersion in hot water at 171°F for at least 30 seconds
  - Air dry utensils and equipment
  - Use appropriate test strips to check concentration
4. **Air Dry**



*Making 100PPM Chlorine Solution is as Easy as 1-2-3 (1 ounce bleach to 3 gallons water)*

# CLEANING & SANITIZING

## Mechanical Dishmachines: *(Pre-rinse before loading any machine)*

### HIGH TEMPERATURE:

1. Wash Temperature:
  - Single tank, stationary rack, dual temperature machine... 150°F
  - Single tank, conveyor machine... 160°F
2. Hot Water Sanitization:
  - 180°F at manifold
  - 160°F at plate level

### LOW TEMPERATURE:

1. Chemical Sanitization Required
2. Water Temperatures According to Manufacturer
3. Chemicals Must Be Auto dispensed into Final Rinse Water; Check Daily
4. Must Have a Visual or Audible Low Sanitizer Indicator

*Making 100PPM Chlorine Solution is as Easy as 1-2-3 (1 ounce bleach to 3 gallons water)*



# *Wiping cloths*

- **Rinse and store your wiping cloths in a bucket of sanitizer.**
  - **For example: 1/2 tablespoon of bleach for each gallon of cool water. This is equivalent to 100ppm chlorine**
- **Change the solution every 2 hours or as soon as it becomes dirty, whichever comes first.**
- **Food contact surfaces should be sanitized at least every 4 hours**

**Store chemicals and toxins  
separately from foods.**



# FOOD STORAGE CONCEPTS

## Three Main Categories

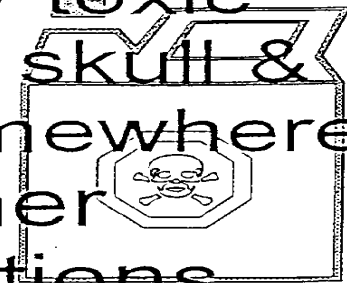
1.) **Food:** food and food contact surfaces, including single service, processing equipment, etc. Store above cleaners or separate.



2.) **Cleaners:** necessary to clean food contact surfaces must be used properly. Spillage or leakage is contamination. Store below food or separate.



3.) **Toxics:** bug spray, very toxic cleaners (Draino), stuff with skull & crossbones on it. Store somewhere else, by itself. Observe other hazardous material regulations.



# A SAFE & CLEAN FACILITY

## TOXIC MATERIALS

### These Items Can Be Poisonous Or Toxic If Ingested

- Detergents
- Sanitizers
- Polishes & Cleaners
- Insecticides
- Rodenticides
- First Aid Supplies & Personal Medication

### Storage, Labeling & Use

- Store separately from foods & food-contact surfaces
- Never store above foods or food surfaces
- Label all toxins
- Use only approved chemical in food areas



*Incorrect*

*NEVER store chemicals ABOVE sinks. ALWAYS store BELOW.*



*Correct*

# A SAFE & CLEAN FACILITY

## Insect & Rodent Control

(cockroaches, flies, mice, rats, etc.)

Insects and rodents carry diseases and can contaminate food and food-contact surfaces. Utilize measures to minimize their presence



- Protect outer openings by keeping outer doors closed, repair screens, maintain tight fitting doors & openings, use air curtains
- Eliminate harborage conditions
- Exterminate regularly

# A SAFE & CLEAN FACILITY

## Floors, Walls & Ceilings



- Good Repair
- Clean
- Light in color and easily cleanable