

Infection Control in Dietary Services for Basic Care Facilities

North Dakota Department of Health

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DIETARY SERVICES

We are all working
towards the same goal:



To provide safe, nutritious food and an enjoyable dining experience for all residents in basic care facilities.

OBJECTIVES

- Review basic food safety principles.
- Review infection control practices for food service and dining.



FOOD SAFETY

- 33-03-24.1-18. Dietary Services.
- “The facility must. . . Provide dietary services in conformance with the North Dakota sanitary requirements for food establishments.”
 - North Dakota Requirements for Food and Beverage Establishments, adopted **01/01/08** (The “Red Book”)
 - Based on 2005 FDA Food Code (Recommendations Only) (use as a reference the Public Health Reasons section)



What does surveying for the infection control practices of dietary services involve?



- **INITIAL TOUR (KITCHEN)**
- **MAIN TOUR (KITCHEN/KITCHENETTES/ETC.)**
- **FOOD PREPARATION OBSERVATIONS**
- **TRAY LINE/MEAL OBSERVATIONS**
- **ACTIVITIES**



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"You the tossed salad accident?"



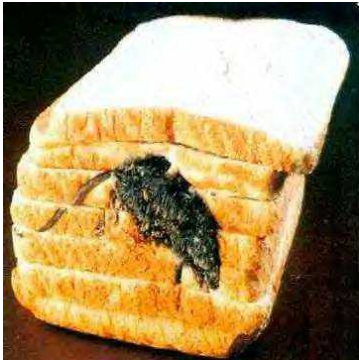
INITIAL TOUR

- Brief walk-through of the kitchen
 - Over-all cleanliness of the kitchen
 - Employee hygiene/sanitation practices
 - Cooler and freezer temperatures
 - Food storage, date marking
 - Dish machine



INITIAL TOUR OF RESIDENT ROOMS

- Observation of personal refrigerators:
 - Visit with resident/request permission to review contents of fridge.
 - Interview resident regarding maintenance of fridge and monitoring of contents.
 - Observe contents and ask questions of resident.
 - Note potentially hazardous food/sanitation (ex. spills) concerns for review if needed during main dietary tour.



EXAMPLES FACILITY CONCERNS 2005-2010

- Moldy, unidentified food
- Food beyond manufacturer's date
(dairy products/salad dressings)
- Food not dated (deli meat), some labeled use within seven days of opening
- Sherbet in freezer compartment, evidence of thawing and refreezing

MAIN DIETARY TOUR

- Complete tour of the entire kitchen and all areas in the facility where food is either prepared, stored, or served.
- Thorough review of food storage, preparation, sanitation, and food service.



COLD STORAGE

- **Thermometers** properly functioning
- Temperature of **coolers** maintained 41 degrees F.
- Temperature of **freezers** maintained at a temperature to keep food frozen solid/0 degrees F.
- Temperature Records/Logs.



EXAMPLES

- Thermometer located on top of the refrigerator rather than inside the refrigerator.
- Thermometer observations of readings between 44 and 46 degrees. Fridge contained potentially hazardous foods.



COLD STORAGE

- Cleanliness
- Fans, light bulbs, pipes
- Ice or frost buildup
- Containers/cases of food stored on floor
- Spoiled/moldy food
- Uncovered/opened food
- Unapproved food sources
- Employee food



EXAMPLES

- Nourishment fridge heavily soiled food debris
- Fan in walk-in cooler dusty
- Moldy food and moldy exterior bottles of condiments
- Open/cracked lid on container of deli meat, open nutritional supplement, open container of frozen vegetables/meats/dairy products



Applies to:



DATE MARKING

- Ready to Eat Food (RTE) – refers to food that is edible with little or no preparation to achieve food safety.
- Potentially Hazardous Food (PHF) – refers to food that requires time/temperature control for safety to limit the growth of pathogens or toxin formation.

DATE MARKING

POTENTIALLY HAZARDOUS FOODS ARE GENERALLY:

- Moist
- Neutral or slightly acidic
(ph 4.6 – 7.5)
- High in protein content



DATE MARKING

EXAMPLES OF POTENTIALLY HAZARDOUS FOODS:

- Milk/Dairy Products
- Meats
- Eggs
- Garlic and Oil Mixtures
- ***Cooked Rice***
- ***Whole Baked Potatoes***
- ***Sliced Melons***
- Sprouts and Sprout Seeds
- Texture Soy Protein in Meat Alternatives
- 2009 Food Code adds **Cut Leafy Greens***



DATE MARKING

DEFINITION: Cut Leafy Greens

- Means fresh leafy greens whose leaves have been cut, shredded, sliced, chopped, or torn. The term includes:

iceberg lettuce, romaine lettuce, leaf lettuce, butter lettuce, baby leave lettuce, escarole, endive, spring mix, spinach, cabbage, kale, arugula, chard.



The term “leafy greens” does not include herbs such as cilantro or parsley.



DATE MARKING

- Required for containers of **commercially prepared/packaged** ready-to-eat, potentially hazardous food that has been **opened** and **held** for **more than 24 hours** (*some exceptions)
- Required for ready-to-eat, potentially hazardous food **prepared at the facility** and **held** for **more than 24 hours**.

Item	Intls.		AM
Prep Date	Time		PM
Use By			AM
Use By			PM

Action	Date	Time
Pull		AM
		PM
Thaw		AM
		PM
UseBy		AM
		PM

Freezer Tape Freezer Tape Freezer Tape Freezer Tape

DATE MARKING

- The date the original container is opened should be counted as day one.
- Date may not exceed a manufacturer's use-by date.
- Potentially Hazardous Food: maximum opened storage time – 7 days.
- If combining with additional ingredients, retain the date of the earliest or first prepared ingredient.



DATE MARKING

- Date Marking (with date opened) does not apply to some foods packaged – by a processing plant.
- Deli salads, hard cheeses, semi-soft cheeses, cultured dairy products (yogurt, sour cream, buttermilk) and preserved fish products
(Based on Listeria Risk Assessment)

EXAMPLES

- **LABELING/DATE MARKING**
- Food not dated when opened or labeled with name of resident (resident food)
- Food supplements not labeled with date thawed and labeled by manufacturer to use with 14 days of thawing
- Dairy product not dated when opened and labeled by manufacturer to keep for 2 weeks in refrigerator



EXAMPLES

- **BEYOND STORAGE DATE OR MANUFACTURERS DATE/ RECOMMENDATIONS PER POLICY**
- Juice
- Eggs/eggnog removed from original container so no “sell by date”
- Dairy products - cottage cheese, yogurt, buttermilk, milk, parmesan cheese



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Have you seen the use-by date on this porridge?

THAWING

- Refrigerator
- Under running cool water (70 degrees or lower)
- Microwave (If cooked immediately)
- Cooking (As part of the cooking process)



THAWING

- Store **raw** animal foods in separate containers.
- Store **raw** meats below ready-to-eat foods
 - **Cooked and Ready-to-Eat Food**
 - **Whole Fish**
 - **Whole Meats**
 - **Ground Beef**
 - **Poultry**



EXAMPLES

- **THAWING**
- Thawed raw turkey roast/meat juices in same pan with thawed beef stew meat
- Thawed pans of raw ground beef and thawed raw turkey roasts stored on a wire shelf above pans of thawed raw pork ribs





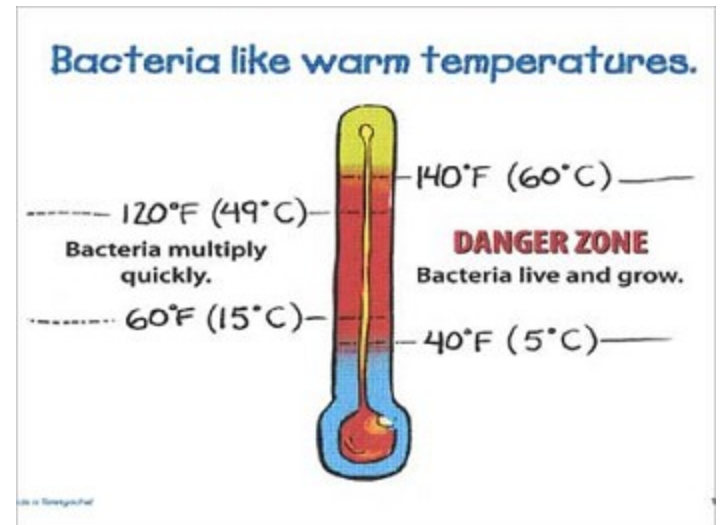
COOLING

- **COOLING PROCEDURES**

- Cool from **135 to 70 degrees F** within first **2 hours** and from **70 to 40 degrees F** within **4 hours** (Total of 6 hours).
- Cool to less than **40 degrees F** within **4 hours** if cooled from room temperature.

COOLING

- **COOLING METHODS**
 - Exchange hot pans for cool pans
 - Use shallow pans
 - Separate smaller portions
 - Use blast chiller or freezer
 - Ice water bath
 - Loosely cover
 - Allow air to circulate around pans



EXAMPLES



- **COOLING**

- Foil covered roast, cut three large sections, in cooking pan in cooler. Interview determined staff did not check temperature of roast after placing it in cooler.
- Deep 12 inch plastic container, creamed cabbage, observed warm to touch. The creamed cabbage measured a temperature of 94 degrees, 3 hours after placed in cooler. Temperature 88 degrees 4 hours after cabbage placed in refrigerator. Questioned accuracy of thermometer and calibrated thermometer found to be 8 degrees high. (40 instead of 32 degrees in ice)

HOT HOLDING

- STEAMTABLE/TRAY LINE

- ✦ FOOD TEMPERATURE
RECORDED?

How Often?

When?



Cooking temperatures vs. Holding Temperatures?
(varies 145°-165° F) ($\leq 41^{\circ}$ F or $\geq 135^{\circ}$ F)

MINIMUM COOKING TEMPERATURES

- **COOKING TEMPERATURE GUIDE**

- **145° F/15 seconds** - raw shell eggs made to order for immediate service, pork, fish.
- **155° F/15 seconds** - raw shell eggs for later service, all ground, injected meats, mechanically tenderized.
- **165° F/15 seconds** - poultry, stuffed meats, pasta, microwave foods, and all dishes with previous cooked ingredients.



HOLDING

- **Holding Temperatures**
 - **Hot Holding** - minimum 135 degrees Fahrenheit during tray service
 - **Cold Holding** - maximum 41 degrees Fahrenheit during tray service
 - ✦ Temperature Logs
 - ✦ Calibrate Thermometers



EXAMPLES

- **HOLDING TEMPERATURES**
- Observations of meal service included a coleslaw salad, containing milk, not maintained less than 41 degrees F (not on ice) and fried eggs not maintained at greater than 135 degrees F (not covered between service)



REVIEW

- **TEMPERATURE CONTROL . . .**

is key to killing microorganisms that can cause food borne illness . . . The minimum internal temperatures at which food borne microorganisms are destroyed varies from product to product . . .

- Cooking Temperatures

However. . . cooking cannot destroy possible spores and toxins. Handling food safely before and after it is cooked will prevent microorganisms from producing these spores or toxins.

- Holding Temperatures

- Cooling Temperatures

FOOD PREPARATION OBSERVATIONS

- EMPLOYEE HEALTH

observe for employees with the symptoms food establishments should be most concerned about:

- **Vomiting**
- **Diarrhea**
- **Jaundice (yellow skin or eyes)**
- **Sore throat with fever**
- **Infected cuts and burns with pus on hands and wrists**



(FDA's Employee Health and Personal Hygiene Handbook)

FOOD PREPARATION OBSERVATIONS

Washing hands/minimizing bare hand contact?

- When **entering** a food preparation area.
- Before **putting on** clean **gloves** and between glove changes.
- **Before** engaging in food **preparation**
- Before **handling clean equipment** and serving utensils
- When **changing tasks**, esp. between handling raw & RTE food
- After handling **soiled dishes**, equipment, utensils
- After touching bare human **body parts**
- After using the **toilet**
- After **coughing, sneezing, blowing nose, using tobacco, eating, or drinking**
- After caring for or handling **services animals or aquatic animals**.
- **Minimize bare hand contact**

EXAMPLES



- **HANDWASHING**

- Staff member entered kitchen, obtained a pitcher of milk from refrigerator, proceeded to the dining room to pour milk for residents. Staff member did not wash hands when entering kitchen.
- Staff member did not wash hands after working with soiled dishes, before stacking clean dishes, with fingers touching the eating surfaces.

EXAMPLES

BARE HAND CONTACT

- Staff member sliced baked potatoes open at tray line with bare hands
- Staff member served hamburger buns at tray line with bare hands



FOOD PREPARATION OBSERVATIONS

- **PERSONAL HYGIENE**

- Aprons
- Hair Restraints
- Jewelry



EXAMPLES

- **APRON USE**
- Staff member used a sprayer to rinse soiled utensils, no apron, then handled clean dishes and served food
- Staff member used sprayer to rinse soiled dishes, front of staff member's shirt wet, handled clean dishes/utensils
- Staff member used a sprayer on soiled pans, including a pan which had contained raw hamburger, then handled clean dishes, wearing the same apron

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WHY CATS DON'T COOK.

EXAMPLES

- **HAIR RESTRAINT USE**
- Staff members served food at tray line with hair not restrained in hairnets, including staff member with chin length hair dropping forward as leaned over food
- Staff member prepared sandwiches with hair not completely restrained in frontal/forehead area

EXAMPLES

- **HAIR RESTRAINT USE CONTINUED**
- Staff members with hair nets and bangs, neckline hair, or long strands of hair unrestrained. Resident identified he/she had found a hair in his/her soup recently
- Staff members with hair nets with bangs and the hair at back of their heads not restrained removed clean dishes from the dishwasher

FOOD PREPARATION IN ACTIVITIES

- **HAIR RESTRAINT USE**
- **GLOVE USE**



SANITATION



- **DISHMACHINES**
- Know what type of machine you have :
 - Chemical Sanitizing
 - Hot Water Sanitizing

SANITATION

- **HOT WATER SANITIZING**

Typically

- Wash Cycle minimum **160 degrees F**
- Final Rinse Cycle minimum **180 degrees F**
- At Dish Level minimum **160 degrees F**



SANITATION

- **CHEMICAL SANITIZING**

For both the Final Rinse Cycle Chemical Concentration and Temperature Requirements

*FOLLOW MANUFACTURER'S RECOMMENDATIONS

Generally the concentration requirements are

- 50-100 parts per million (chlorine)
- 150-400 parts per million (quaternary)

Will have staff/manager test dish machine water with pH paper strip.



EXAMPLES



- **DISH MACHINES**
- Dish machine temperature measured at less than the manufacturer's recommendations and less than required by regulation with no sanitizing solution used. Staff had not checked the temperature of the dish machine
- Staff had not checked the dish machine to ensure it dispensed the correct concentration of chemical sanitizer. Policy did not reflect need to check chemical concentration for this low temperature, chemical sanitizing machine

EXAMPLES

- **DISH MACHINES CONTINUED**
- New dish machine installed. Previous dish machine chemical sanitizing, now hot water sanitizing. No holding thermometer or no temperature test strips. Policy identified daily temperature log to be maintained. QA evaluation stated temperature not checked as “No gauges”



EXAMPLES

- **DISH MACHINES CONTINUED**
- Staff member interviewed regarding dish machine, hot water or chemical sanitizing, Staff member unsure, identified dish machine as chemical sanitizing. Staff member not aware how to check chemical concentration and referred to maintenance man. Maintenance man identified dish machine as hot water sanitizing. No method for checking temperature on an ongoing basis with no reliable dish machine gauges

SANITATION



● THREE COMPARTMENT SINK

1. Wash in clean, hot (not less than 110 degrees F) detergent water until all food is removed from utensils and dishes.
2. Rinse in clean water to remove detergent.
3. Sanitize in an approved chemical solution or hot water.
4. Air dry utensils and dishes before stacking or storing.

EXAMPLES

- **THREE COMPARTMENT SINKS**
- Faucet for first compartment of three compartment sink not working. Employee revealed sink faucet broken several weeks. Middle compartment contained soapy water and last compartment contained two inches water. Employee not aware of correct procedure to wash, rinse, and sanitize
- Pots, pans, and utensils stored on hooks above three compartment sink/sprayer
- Utensils suspended above the sink
- Staff member used a towel to dry dishes.

SANITATION

- **SANITIZING WIPE CLOTHS**
- Educate staff to submerge wiping cloths in sanitizing solution when not in use.
- Educate staff to change the solution routinely.
- Educate staff on the type of chemical used, preparing solutions, and testing for the required concentrations.



EXAMPLES

- **WIPING CLOTHES/CLEANING SURFACES**
- Bucket with wiping cloths and sanitizing solution tested at a lower than required concentration. Employee interviewed/demonstrated procedure. Immersed wiping cloths in soapy water, rinsed rag under running water, squeezed out excess, and immersed same wiping cloth in bucket of sanitizing solution.
- Employee not aware of procedure to sanitize surfaces and equipment in kitchen. “I just wipe them down.”



SANITATION

- CLEAN AND DRY EQUIPMENT
- CLEANABLE SURFACES
- STORED TO PREVENT CONTAMINATION
- CLEANING SCHEDULES/MANUFACTURERS INSTRUCTIONS



EXAMPLES

- **CLEAN EQUIPMENT/STORAGE**
- Cleanable surfaces (corroded, soiled meat slicer blade, chipped surfaces of cupboards)
- Equipment not stored covered/inverted if not in enclosed storage (cake pans, electric frying pans, equipment in cupboards with missing doors or doors not closing fully)
- Employee observed storing bowls - placed fingers into inside surface of bowls
- Containers of food with scoops stored with their handles in the product



EXAMPLES

- **CLEAN EQUIPMENT CONTINUED . . .**

- Soiled fan, refrigerator, microwave, dish machine, shelf, mixer, and floor
- Utensils/equipment stored in drawers/cupboards with food debris
- Cleaning schedules not followed



- **DRY EQUIPMENT**

- Stacked glasses, bowls, cups, dinner plates, pitchers, mugs and lids, stored wet
- Food processor's blending chamber, stored wet

SANITATION

- TRAYLINE AND MEAL OBSERVATIONS
- EXAMPLES
- Facility dog observed at a staff member's side, as she was frying hamburgers
- Spoons stored in drawers with dog hair present



SANITATION

- CHEMICAL STORAGE AREA

Separate

Labeled

Mop Buckets

Backflow Valves



- WASTE DISPOSAL

Closed Lid and Free of Debris and
Pests



EXAMPLES

- **CHEMICAL STORAGE**
- Employee swept and mopped floor with uncovered food on counter
- White powdered substances not labeled to identify product
- Accessible to wandering residents in kitchenette
- **WASTE DISPOSAL**
- Outside dumpsters uncovered and/or overflowing, dumpster lid not closed



SUMMARY



- Review basic food safety principles and discuss examples.
- Review infection control practices for food service/dining and discuss examples.

Thank You