Food Safety at Retail Food Establishments:

Preventing Food-borne Outbreaks Investigating Food-borne Outbreaks

Satellite Conference and Live Webcast Wednesday, July 26, 2017 2:00 – 3:30 p.m. Central Time

Produced by the Alabama Department of Public Health Distance Learning and Telehealth Division

Faculty

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Rules for Food Establishment Sanitation

- Each state develops its own retail food safety program
- Alabama law authorizes the State Board of Health to adopt rules and regulations governing the SALE of food at retail

Rules for Food Establishment Sanitation

- A PERMIT is required prior to opening a retail food establishment
- A PERMIT is required for continued operation of a retail food establishment

Rules for Food Establishment Sanitation

- Based on federal recommendations (the "Food Code")
- EXCEPT where contradictory to state law or general operations
- Administered and enforced by each county health department

Rules for Food Establishment Sanitation

- Critical Items
 - Priority 3 days to correct
 - -Other 10 days to correct
- · Core sanitation items

Rules for Food Establishment Sanitation

- Immediate closure
 - Emergency Order of the Health Officer
- Sewage backup, no refrigeration, leaks onto food prep areas, score less than 60, complete lack of hot water, ...

Rules for Food Establishment Sanitation

- Immediate closure Emergency Order of the Health Officer
 - -www.alabamapublichealth.gov/ foodsafety/closings.html

CDC Estimates:

- 48 million people get sick
- 128,000 are hospitalized
- 3,000 die from food-borne diseases each year in the United States

CDC Risk Factors For Foodborne Illness

- Unapproved source for the food
- · Inadequate cooking
- Improper hot / cold holding temperature
- Unclean equipment / cross contamination
- Poor employee health / hygiene (hand washing)

CDC Risk Factors For Foodborne Illness

- Unapproved source
- Foods must come from inspected production facilities, or from sources exempt by law; straight from the farm for example

CDC Risk Factors For Foodborne Illness

• Inadequate cooking

Minimum Cooking Temperatures									
FOOD	TEMPERA- TURE	TIME							
Potentially hazardous foods not otherwise specified, including eggs for immediate service	145°F	15 sec							
Inspected and approved game animals; ratites (emu, ostrich, rhea)	155°F	15 sec							
Poultry, poultry stuffing, stuffed meats and stuffing containing meat	165°F	15 sec							
Ground meats, ground fish, injected meats and eggs other than Part 1 above	156°F 155°F 150°F 145°F	c 1 sec 15 sec or 1 min or 3 min							

CDC Risk Factors For Foodborne Illness

- Improper hot / cold holding temperature
- Hot = 135°F or above, or hold no longer than 4 hours
- Refrigeration = 41°F or below

CDC Risk Factors For Foodborne Illness

Unclean equipment / cross contamination



CDC Risk Factors For Foodborne Illness

- Poor employee health / hygiene (hand washing)
- Keep hands washed and clean

Handwashing stations for employees must be located in the restrooms and in other convenient locations throughout the kitchen or food preparation area.



CDC Risk Factors For Foodborne Illness

- III employees report certain diagnoses to manager
 - Norovirus
 - Hepatitis A virus
 - Shigella spp
 - Shiga toxin producing Escherichia coli
 - Salmonella typhi, or
 - Non-typhoidal Salmonella

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Preventive Measures

- Clean
- Cook
- Chill
- Separate

What Happens When There is an Outbreak?

What happens when there is an outbreak?

- Situation is reported to the Health Department
- Infectious Diseases and Outbreaks (ID&O) leads the investigation
- Environmental investigates food preparation, collects food samples
- Lab runs the appropriate tests

Sunnyside Childcare Outbreak

Montgomery County Health Department June 2015



Sunnyside Daycare



Sunnyside Daycare

- Two locations:
 - -(A) 3874 South Court Street (B) 3784 Norman Bridge Road
 - Location (A) had a kitchen permitted by the health department but did not typically have kids
 - Location (B) did not have a permitted kitchen but had the kids for daycare so food was supposed to be transported daily

Summer Feeding Program



- The daycare was enrolled in the Department of Education's summer feeding program
- The Montgomery County Health Department was NOT notified as required
- There were over 300 children attending the two daycare locations

Day of Outbreak – June 23, 2015

- 3:30PM Received a phone call from a parent saying her child was attending summer camp at Sunnyside Childcare and was sick
 - She said there were several kids throwing up in the hallways when she picked her child up
 - -Emailed Area Investigator

Day of Outbreak – June 23, 2015

- 4:00PM Received a phone call from Area Investigator stating that 18 children were currently at the hospital
- 4:30PM Environmentalists departed from the Montgomery County Health Department to retrieve samples and complete an Environmental Assessment Report (EAR)

Day of Outbreak – June 23, 2015 3874 South Court Street



Spoke with Owner

- What foods were served for breakfast / lunch?
- Was there a copy of a menu available?
- How was the food prepared, held, and served?
- Were there any leftovers available for sampling?

Spoke with Owner

- Were there any sick children / employees recently?
- What was the sick employee policy on file?
- Were there invoices / receipts for the food?

Conducted an Inspection of the Establishment to Check:

- Temperatures of refrigerators / freezers
- Hot water temperatures at hand sinks / three - compartment sink
- Hand sinks stocked with paper towels and soap
- Availability of bleach and chemical test strips

Conducted an Inspection of the Establishment to Check:

- Storage of chemicals
- Food sources / expiration dates

Day of Outbreak-June 23, 2015 3874 South Court Street

- · Stove was removed
- Building storage for a double oven



Day of Outbreak-June 23, 2015 3874 South Court Street

 About 5 - 6 crock pots were being used in place of a stove



Day of Outbreak-June 23, 2015 3874 South Court Street

• Using residential refrigerators



Collected Samples (from trash can, by that time)

- Apple slices
- Bread
- Bologna
- Noodles with chicken

Day of Outbreak-June 23, 2015 3874 South Court Street

- All leftover food was in the trash
- Samples were retrieved from

trash bins



Day of Outbreak-June 23, 2015 3874 South Court Street

Food was commingled



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

Traveled to the second location
 -3784 Norman Bridge Road



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

 No food was supposed to be prepared / stored / held at the second location

Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

• Refrigerator at second location



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

There was a milk cooler with several gallon jugs of milk



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

• A commercial microwave oven



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

 A microwave, toaster, and a slushie machine



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

ID&O requested samples of soiled diapers



Day of Outbreak-June 23, 2015 3784 Norman Bridge Road

 Everything was packaged using the DETECT Kit and labeled



Day after Outbreak – June 24, 2015

- Staff returned to the daycare to ask the cook questions about the kitchen and food preparation as well as retrieve more samples:
 - There was no thermometer available except for a meat thermometer
 - Cook stated that he never took food temperatures during preparation, serving, transport, or reheating

Day after Outbreak – June 24, 2015

- Timeline of food preparation prior to outbreak as told by owner:
 - -6/21/15 Frozen chicken leg quarters purchased from Food Outlet and thawed in kitchen refrigerator

Day after Outbreak – June 24, 2015

- -6/22/15 Thawed chicken placed in roasters with water and cream of chicken soup to cook
 - Cooked chicken was served
 - Leftovers put back in refrigerator

Day after Outbreak – June 24, 2015

- -6/23/15 Leftover chicken was taken from refrigerator, torn off bone and placed in roaster to reheat and cook with pasta
 - This was served for lunch the day of the outbreak

Environmental Assessment Report (EAR)

- Environmentalists competed the Environmental Assessment Report for both locations
- This covers items associated with the food borne illness risk factors

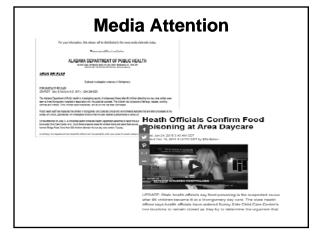
June 25-26, 2015

 One of the requirements for re-opening included Environmental and ID&O staff conducting an in-house training session with all employees of the daycares on June 26, 2015



The Lab Results

- Positive for Staph aureus in Chicken and Noodle sample
 - Staph is a toxin that is formed in food held at improper temperature and is heat stable
- PFGE results from clinical (stool) and environmental samples with matching bacterial DNA profiles



The Aftermath

- A total of 86 children went to the hospital with symptoms
 - 30 were hospitalized overnight
- Staph aureus tested positive in an environmental sample of chicken and noodles that matched six clinical samples

The Aftermath

- The daycare was reopened on June 29, 2015 after complying with the requirements set forth by the Montgomery County Health Department
- 4 separate lawsuits were filed

ADPH Food Safety Program

 Retail food – restaurants, grocery stores, convenience stores, schools, hospitals, day care centers, temporary events, jail and prison kitchens

ADPH Food Safety Program

- Other than retail food establishments:
 - -Milk and milk products, bottlers, bottled water, bakeries, ice, peanut butter, juice, vegetable processors, vending, candy, beer, wine, sweeteners, tea, yeast, containers,......
- NOT red meat and poultry processors

