FDA Training Committee Found...

“80% of all foodborne illnesses can be traced to a procedural problem due to the action of employees who either did not know or understand the value of using designated procedures to keep food from becoming contaminated.”

Source: Employee Education. Rhode Island Food Safety Education, Cooperative Extension.
Today's Agenda & Objectives

- Foodborne Illness Overview
  - Define foodborne illness
  - Name 2 most common symptoms of foodborne illness
  - List customers at greater risk

- Leading Risk Factors
  - Recognize risk factors that lead to foodborne illness

- Prevention Matters
  - Describe 3 benefits of safe food

What is Foodborne Illness? (Food Poisoning)

- Illness caused by consuming food or beverage that contained a contaminant
  - Chemical = ex: cleaners, lubricants, nail polish
  - Physical = ex: foreign objects - hair, insects, pens, metal fragments, fish bones
  - Biological = ex: virus, bacteria, parasites, fish toxins, fungi

Name That Contaminant Matching Quiz

Match the type of contaminant to the correct description.

- Glass, wood chips, stones, plastic, shells, pits, insect, dirt, hair
  - Physical

- Bacteria, viruses, parasites, yeast, mold
  - Chemical

- Herbicides, pesticides, fertilizers, antibiotics, hormones, lubricants, paint, cleaners, sanitizers
  - Biological

Source: Centers for Disease Control, December 10, 2012
http://www.cdc.gov/features/dsnorovirus/figure1.html
Foodborne Illness in the U.S.

- 128,000 hospitalizations or 350/day
- 3,000 deaths or 8 per day
- 2-3% = long-term illnesses
  - *Shigella, Salmonella* can cause chronic arthritis
  - *Listeria* can cause brain and nerve damage

Source: Stueven, H. Food Safety Edigest, 1/21/14

Foodborne Illness In Minnesota

Statistics:
- 1999-2011: 656 outbreaks
- 3 deaths in MN in 2009

Most don’t get reported!
For every reported case of *Salmonella* there are 30 unreported cases

Source: University of California, Food Safety for Volunteers

What are the TWO Most Common Symptoms of Foodborne Illness?

- Diarrhea
- Vomiting
- It’s not the stomach ‘flu’
- Symptoms appear ½ hour to 6 weeks after eating unsafe food
- Symptoms last 1-7 days
- Minnesota Foodborne Illness Hotline
  - 1-877- FOOD ILL

Who Are Your Customers?

- 20% of U.S. population at risk for serious illnesses

- Diabetics:
  - *Salmonella* (3x more likely to be affected)
  - *Listeria* (25x more likely to be affected)

Source: University of California, Food Safety for Volunteers
Higher Risk Populations Should Not Eat:

- Raw (unpasteurized) milk or milk products
- Raw or partially cooked eggs and foods containing raw eggs
- Raw and undercooked meat, poultry, fish, shellfish
- Unpasteurized juices
- Raw sprouts

Why do Foodborne Illnesses Occur? What are the Contributing Factors?

1. Ill food workers
   - 1 out of 3 outbreaks linked to infected food handler
2. Poor personal hygiene
3. Time and temperature abuse
   - Foods not heated to a safe temperature or kept at a safe temperature
4. Contaminated raw product
   - Pathogens on food or added during handling
   - Can’t see them
   - Food doesn’t smell or taste bad
5. Using contaminated equipment
   - Poor cleaning and sanitizing

Who Am I?

- I’m found in human hair, nose, throat, sores and cuts.
- I transfer to food by unwashed hands.
- I produce toxins not killed by heat.
- Cover cuts and wear gloves to prevent me.

A. Salmonella
B. Staphylococcus aureus
C. Bacillus cereus
D. Listeria
Safe Food Handling Practices To Prevent Staphylococcus Aureus

- Good personal hygiene
- Daily inspection of hands/arms for cuts
- Cover cuts
- Don’t pick your nose
- Limit jewelry on hands
- Hair restraint
- Barriers to avoid bare hand contact

Who Am I?

- I cause yellowing of skin called jaundice.
- It may take weeks for my symptoms to appear.
- I spread to food by infected food handlers.
- I tolerate heat but do die at boiling temps.

- A. E.Coli 0157:H7
- B. Clostridium perfringens
- C. Hepatitis A
- D. Bacillus cereus

Safe Food Handling Practices To Prevent Hepatitis A

- Hand washing
- Barriers to avoid bare hand contact
- Don’t work with jaundice and/or diagnosis
- Vaccinations

Who Am I?

- People I infect become contagious within 12 to 48 hours of ingesting me.
- Diarrhea and vomiting are my main symptoms.
- Infected food handlers transfer me to food via bare hand contact with ready-to-eat food.
- I can contaminate shellfish if I’m in the water.

- A. Giardia
- B. Mold
- C. Norovirus
- D. Listeria
Norovirus

- Low infectious dose
- Very contagious--oral/fecal route and airborne
- Incubation period 12-48 hours
- Rapid onset vomiting and watery, non-bloody diarrhea w/ abdominal cramps
- Symptoms last 24-60 hours

Source: Norovirus in Healthcare Facilities Fact Sheet, Centers for Disease Control

What Is The Top Contributing Factor Of A Norovirus Foodborne Illness Outbreak?

1. Ill food workers
2. Time and temperature abuse
3. Contaminated raw product
4. Cross-contamination

Prevention Matters

Commitment to food safety:
- Protects public health
- Protects your business
- Prevents expensive problems
- Improves quality
Summary

Foodborne illness:
- Happens more often than reported
- Can cause long-term effects
- Most are preventable!
- Most caused by human error
- Ill or infected food workers responsible in 1 out of 3 outbreaks
- You can protect public health and prevent foodborne illness

THANK YOU

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References