



#285 – Foodborne illness: What every adjuster needs to know

James Reuss, Esq.

Wednesday, March 30, 2011
2:30 to 3:30 p.m.



Carpenter Lipps & Leland LLP



**Foodborne Illness:
What Every
Claim Representative
Needs to Know**

Presented By
James K. Reuss, Esq.

EXPERIENCE

- Has served as special coordinating counsel for various food retailers in the defense of food product liability claims and litigation for over 15 years
- Has defended and coordinated the defense of serious foodborne illness claims and lawsuits in the context of Class 1 recalls

EXPERIENCE

- Has defended and coordinated the defense of serious foodborne illness claims, including those involving E. coli O157:H7, Listeria monocytogenes, Salmonella, the Norwalk virus, and others, throughout the U.S., including claims and lawsuits in Ohio, Michigan, Indiana, Kentucky, Tennessee, Georgia, Pennsylvania, Missouri, Texas, California, Washington, Minnesota, and Florida

EXPERIENCE

Has extensive experience in working with experts in the fields of:

- | | |
|--|---------------------------|
| □ Epidemiology | □ Product traceback |
| □ Food microbiology | □ Food process management |
| □ Molecular subtyping (DNA fingerprinting) | □ HACCP |
| | □ SSOP |

As well as medical experts in the fields of:

- Infectious disease
- Nephrology
- Public health medicine
- Allergy/immunology
- Medical epidemiology

EXPERIENCE

- Has presented before company management and claims representatives on issues relating to food safety and technology and the risk management of foodborne illness claims and litigation
- Member, International Association for Food Protection and Conference For Food Protection

HANDOUTS

- Matrix of Common Foodborne Diseases and their latency periods, principal symptoms, modes of transmission and contamination, and prevention methods
- Foodborne Illness Sample Case History Questionnaire
- Supplemental E. coli O157:H7 Outbreak Investigation Questionnaire

COMMON FOODBORNE ILLNESSES

- Listeriosis – a serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes*. The disease affects primarily pregnant women, newborns and adults with weakened immune systems.

COMMON FOODBORNE ILLNESSES

- Salmonellosis – a bacterial disease commonly manifested by acute enterocolitis, with a sudden onset of headache, abdominal pain, diarrhea, nausea, and sometimes vomiting. Many different serotypes (subtypes) of the Salmonella bacterium are pathogenic for humans.

COMMON FOODBORNE ILLNESSES

- Viral Gastroenteritis – Also known as the Norwalk Virus, gastroenteritis means inflammation of the stomach and small and large intestines. Viral Gastroenteritis is an infection caused by a variety of viruses that result in vomiting or diarrhea. It is often called the “stomach flu,” although it is not caused by the influenza viruses.

ESCHERICHIA COLI ("E. coli")

- Generic bacterium is ubiquitous in the environment



IT IS EVERYWHERE!

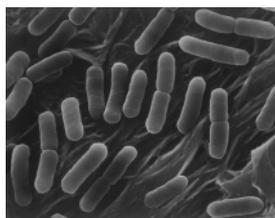
ONLY CERTAIN STRAINS CAUSE ILLNESS IN HUMANS

- 6 major strains of E. coli:
 - Enterohemorrhagic
 - Enterotoxigenic
 - Enteroinvasive
 - Enteropathogenic
 - Enteroaggregative
 - Diffuse-adherent



E. coli O157:H7

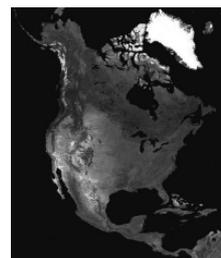
- Gram negative, rod-shaped bacterium
- First recognized as a disease causing organism in 1982
- Produces a toxin very similar to Shigella
- Estimated 73,000 cases in the United States annually
- Is one of several STECs (Shigatoxin producing E. coli) that causes significant illness



Source: CDC Division of Bacterial and Mycotic Diseases

E. coli O157:H7

- E. coli O157:H7 is the most common serotype in North America
- Though to cause over 90% of cases of diarrhea-associated hemolytic uremic syndrome (HUS)



E. coli O157:H7

- Clinical manifestations
 - Bloody diarrhea
 - Abdominal cramps
 - Lack of fever
 - Hemolytic Uremic Syndrome ("HUS")
 - 8% of cases



E. coli O157:H7

- Laboratory identification
 - Stool culture
 - Subtyping by pulsed field gel electrophoresis ("PFGE")



E. coli O157:H7

- ❑ Reservoir
 - ❑ Cattle
 - ❑ Humans (person-to-person)



E. coli O157:H7



- ❑ Modes of transmission
 - ❑ Mainly from food contaminated with ruminant feces
 - ❑ Ground beef, produce, unpasteurized dairy products
 - ❑ Direct person-to-person
 - ❑ Families and childcare centers
 - ❑ Waterborne
 - ❑ Contaminated drinking water and recreational waters

E. coli O157:H7

- ❑ Incubation period
 - ❑ 2-10 days with median of 3-4 days



E. coli O157:H7



- ❑ Susceptibility
 - ❑ Infectious dose very low
 - ❑ Children under 5 years old at greatest risk of developing HUS
 - ❑ Elderly and immune-compromised (HIV, diabetes, chemotherapy patients) at increased risk of complications

E. coli O157:H7

- ❑ Methods of control
 - ❑ Cooking temperature control
 - ❑ Low heat resilience
 - ❑ EASY TO KILL!
 - ❑ Cook ground beef to internal temperature of 160 degrees F for 15-16 seconds
 - ❑ Wash fruits and vegetables thoroughly
 - ❑ Wash hands thoroughly and frequently using soap
 - ❑ Avoid cross-contamination



OUTBREAK

- ❑ Outbreak (Epidemic) – Any time the incidence of a particular disease increases above the expected or background rate
- ❑ Foodborne Outbreak – 2 or more sick people are epidemiologically linked to a common food

TWO CASES



Dackis

This matter involved the defense of a serious foodborne illness claim filed against a major hotel chain, arising out of an incident in which a 4-year-old boy developed a severe neuropsychiatric disorder following his exposure to contaminated food at a hotel banquet. The defense contended that the young boy's severe neuropsychiatric symptoms had been triggered by a recent streptococcal infection unrelated to the food exposure. The case was settled for nuisance value on the eve of trial.

Shunnarah



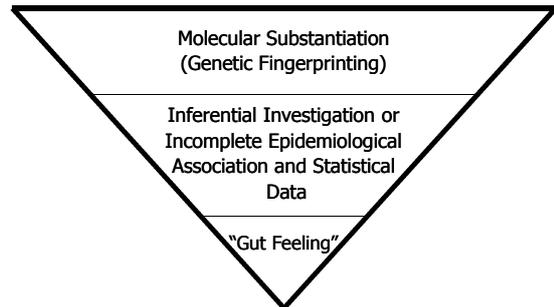
This matter involved the defense of a foodborne illness action filed in federal court in Louisville, Kentucky, arising out of an incident in which a 4-year-old girl was hospitalized with hemolytic uremic syndrome (HUS) secondary to E.coli O157:H7 infection. DNA analysis of the plaintiff's clinical E.coli specimen demonstrated that the source of contamination was a wholesale supplier which has also supplied contaminated product to another retail food chain in Illinois. Following expert discovery, the claim against the defendant food retailer settled for a nuisance value.

TRADITIONAL FOODBORNE OUTBREAK INVESTIGATION



- ❑ Epidemiology – the basic science of public health. A highly quantitative discipline based on principles of statistics and research methodologies
- ❑ Microbiological Confirmation – the laboratory-confirmed identification of the pathogen (i.e., E. coli O157:H7 vs. L. monocytogenes)
- ❑ Molecular Substantiation – the genetic fingerprinting of isolates used to identify a common strain (i.e., PFGE, AFLP, or ribotyping)

INAPPROPRIATE FOODBORNE OUTBREAK INVESTIGATION



FOODBORNE ILLNESS CASE HISTORY

Austin 2

1. Investigator/ Interviewer: _____
Date/Time: ____/____/____ a.m. p.m.

2. Name of Claimant: _____
Age: _____ Sex: _____
Address: _____
Area Code: _____ Area Code: _____
Telephone Numbers: ____/____ (Residence) ____/____ (Business)
Place of Employment: _____
Occupation: _____

3. Have you had any of the following symptoms?

	YES	NO	If "YES," Date and Time Symptoms Began	Date and Time Symptoms Ended
Nausea	_____	_____	_____	_____
Vomiting	_____	_____	_____	_____
Stomach cramps	_____	_____	_____	_____
Diarrhea	_____	_____	_____	_____
Fever or chills	_____	_____	_____	_____
Bloody stool	_____	_____	_____	_____
Headache	_____	_____	_____	_____
Dizziness	_____	_____	_____	_____
Other	_____	_____	_____	_____

4. Were you seen by a physician? YES NO

Elia 1

If "yes," state:
Name and Address of Physician: _____
Dates on Which Seen: _____
Nature of Examination and Treatment: _____
Medications Prescribed: _____
When taken? _____
Length of time taken: _____

5. Were you treated at a hospital? YES NO

If "yes," state:
Were you seen in the emergency room? _____
Name of doctor: _____
Nature of examination and treatment: _____
Were you admitted to the hospital? _____
If "yes," state:
Name of admitting physician: _____
Nature of examination and treatment: _____

Medications/Antibiotics Prescribed in Hospital

Names of drugs: _____
 Dosages/amounts: _____
 Period of time taken: _____

Laboratory Specimens Taken? YES NO

If "yes," state:

Rectal swab: _____ _____
 Stool: _____ _____
 Blood: _____ _____
 Nasal: _____ _____
 Other: _____ _____

Results: _____

6. Suspect Meal

Date/time consumed: _____
 Where consumed: _____
 Others who consumed suspect meal: _____

By whom prepared: _____
 How prepared: _____
 Pre-preparation storage of perishables: _____
 Cooking times/temperatures: _____

3

METHODS OF GENETIC OR DNA FINGERPRINTING

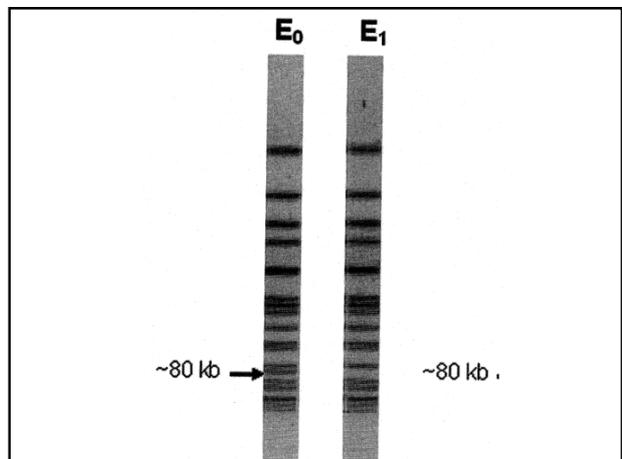
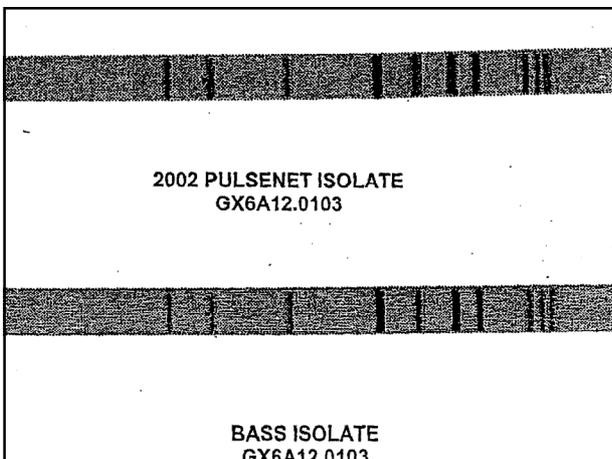
- Pulsed field gel electrophoresis ("PFGE")
- Amplified fragment length polymorphism ("AFLP")
- Ribotyping
 - Used to create a DNA fingerprint which can be compared to other cases in order to identify a common point source of contamination
- Multiple-Locus Variable number tandem repeat Analysis ("MLVA")

PFGE

- Separate DNA of bacterial isolate into components
- Cut DNA into pieces with restriction enzymes
- Cause alternating electrical current to run DNA through gel matrix
- TAKE A PICTURE!

CENTERS FOR DISEASE CONTROL ("CDC") PULSENET DATA BASE

- National genomic pattern network
- CDC posts digitalized PFGE banding patterns on isolates submitted to it
- PulseNet allows state microbiology laboratories and other federal and state agencies to compare PFGE patterns
 - Clinical and product specimens
 - To identify common source of contamination



Pre-incident illnesses within immediate family? _____
 If "yes," describe: _____
 Exposure to water-borne organisms (lakes, ponds, streams, etc.)?
 If "yes," describe: _____
 Exposure to daycare or institutional-living facility?
 If "yes," describe: _____

9. Prior History of Gastrointestinal Illnesses or Conditions?

	YES	NO
If "yes," state:	_____	_____

Nature of illness/condition: _____
 Any history of illness or indication of:

- (1) small intestine _____
- (2) bowel or large intestine _____
- (3) colon/rectum _____
- (4) stomach _____
- (5) inflammatory bowel disease/ulcerative colitis/Crohn's disease _____
- (6) gastric or duodenal ulcer _____
- (7) gastritis _____
- (8) urinary tract infection or blockage _____

5

- (9) recent infection _____
- (10) recent surgery _____
- (11) diabetes _____
- (12) other _____

Medical Treatment/Hospitalization: _____
 Medications/Prescriptions: _____

Any permanency/residual? YES NO
 If "yes," describe: _____

6

- ## Deposition Video
- Austin Title 2
 - Elia Title 1
 - Price Title 1
 - Price Title 2
 - Price Title 3
 - Price Title 4
 - Buck Title 1
 - Buck Title 5
- Elia Title 3
 - Austin Title 3

Points of view, ideas, products, demonstrations or devices presented or displayed at the Ohio Safety Congress & Expo do not constitute endorsements by BWC. BWC is not liable for any errors or omissions in event materials.

OSC 11
 Ohio Safety Congress & Expo