

- I. **What is our goal for this year?**
- II. **Identify food borne illness advocate groups with whom we can collaborate**
- III. **Consider networking to create our own epidemiological studies**
- IV. **Create data base for members on key issues;**
  - a. Not just foodborne issues, but also be aware of waterborne concerns
  - b. 250 different organisms and pathogens that can cause foodborne illness
    - i. Bacteria (*Salmonella*, *Escherichia Coli* [*E. coli*], *Campylobacter*)
    - ii. Viruses (Norovirus, Hepatitis A)
    - iii. Parasites (*Toxoplasma*, *Giardia*)
    - iv. Along with these pathogens, chemical and foreign materials contaminate foods
  - c. Many of these illness-causing pathogens are found in feces, but somehow are showing up in our food supply (*Salmonella*, *E. coli*, *Campylobacter*, *Shigella*, Hepatitis)
    - i. Contamination is coming from farms
      1. Food is grown in contaminated soil or with contaminated water  
(National spinach *E. coli* O157:H7 outbreak of 2006)
      2. Runoff water contaminating drinking water/well water (Oklahoma *E. coli* O111 outbreak in 2007)
    - ii. Coming from processors
      1. Slaughterhouses and packing facilities improperly processing animals  
(*E. coli* O157:H7 in hamburger meat)
    - iii. Coming from Manufacturers/distributors

1. Making goods from contaminated ingredients (*Salmonella* contaminated Peanut butter caused large outbreaks in 2006 & 2008)
  2. Cross contaminating products during handling/shipping
- iv. Coming from restaurants/food events
1. Unhygienic handling/practices (Recent *Shigella* outbreak at a Subway in Illinois)
  2. Insufficient warnings about potentially unsafe foods (*Vibrio vulnificus* from Raw Oysters)

**V. Food borne Illness and Outbreaks; how can we coordinate to identify the source?**

- a. Most victims of foodborne illness will not have their illness attributed to a particular food or particular outbreak
- b. It is difficult to identify a source since there can be many sources of transmission for a pathogen
  - i. Many of the bacteria and viruses are passed from casual human contact
  - ii. FBI pathogens can be passed along by pets (especially reptiles, birds and amphibians)
  - iii. Onset times vary from hours to days to weeks and identifying a particular food /food source is difficult (individuals often blame the incorrect food or food source)
  - iv. Some who ate a contaminated food may not become ill while others with lower resistance to FBI might become quite ill
  - v. People may carry and spread foodborne pathogens without showing signs of illness

- vi. Tests for foodborne pathogens can be expensive and are not completely accurate
- c. In an ideal situation, when a person tests positive for a foodborne pathogen, the positive sample is reported to the state health department and a Pulse field gel electrophoresis (PFGE) analysis is run
  - i. PFGE is a manner of genetically identifying individual sub strains of bacteria to a particular group
  - ii. While you may have two types of *E. coli* O157:H7, one PFGE might identify the one *E. coli* as a strain from cows in Wyoming and the other strain could be from a dairy in New Jersey
  - iii. Product tested bacteria positive PFGEs can be requested from the FDA, USDA and FSIS through FOIA requests
- d. Detailed epidemiological questionnaires and PFGEs are how health agencies can take random foodborne illnesses in various locations get link them to a common source and identify the illnesses as an outbreak

## **VI. Share protocols regarding how to screen potential cases**

- a. Many instances of “foodborne illness” are not serious enough to warrant representation
  - i. A person finds a bug in their packaged salad and vomits on their new suit is not a taker
  - ii. Person who is in possession of a recalled or contaminated product but has not seen a doctor is a non-taker
- b. Person has been hospitalized or been injured from a foodborne illness but there are no known food sources
  - i. Detailed epidemiological questionnaires can help filter potential clients

- ii. PFGE should be requested if not already done
  - iii. There is the potential that a food source will later be identified and the client's sample might match the outbreak PFGE
- c. Person was not hospitalized or treated for FBI, but was sickened along with others from an identified source
  - i. Norovirus on cruise ships, multiple clients in class action
  - ii. Hepatitis A outbreaks, people who seek immune globulin shots can be reimbursed in a class action
- d. Person has been medically treated for a FBI that has been PFGE matched to a particular outbreak
  - i. Detailed questionnaire is used to establish how client may have come into contact with product
  - ii. If there is not a direct link, look for links that may have come from secondary transmission or cross contamination
    - 1. Did the client eat food prepared on the same surface as a contaminated product?
    - 2. Did they eat at a restaurant that prepared contaminated food?
    - 3. Did they prepare a food that contained contaminated product?  
(*Salmonella* contaminated pepper)
- e. Person has been medically treated for an identified FBI, but there was no PFGE or the PFGE doesn't match the PFGE of a suspected contaminated food product
  - i. Not every person gets a PFGE
    - 1. Detailed questionnaire can help filter potential sources

- ii. Not every contaminated product is infected with only one strain of a particular bacteria
  - 1. Nestle toll house cookies not only contained two different PFGEs of *E. coli* O157:H7, but the dough also contained another strain of *E. coli* (*E. coli* O124) all together
- iii. Important to consult with trusted experts (epidemiologists, micro biologists) who can help identify likely causes

**VII. Consider Quarterly Newsletter**

**VIII. Plan seminars at Law Schools that offer this subject matter as part of their curriculum**