

# Foodborne Illness Trends and Employee Health Requirements

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## Objectives

- To learn about common foodborne illnesses, trends and prevention
- To understand employee health regulations according to the 2005 FDA Food Code

## Outline

- ◉ Foodborne Illness (FBI)
  - > What is it?
  - > What are common FBIs?
  - > FBI trends in WV
  - > How is FBI prevented?
- ◉ Regulation
  - > Employee Health Policy
  - > 2005 FDA Food Code Requirements
- ◉ Hot topics
  - > Conference for Food Protection
  - > H1N1

## What is foodborne illness?

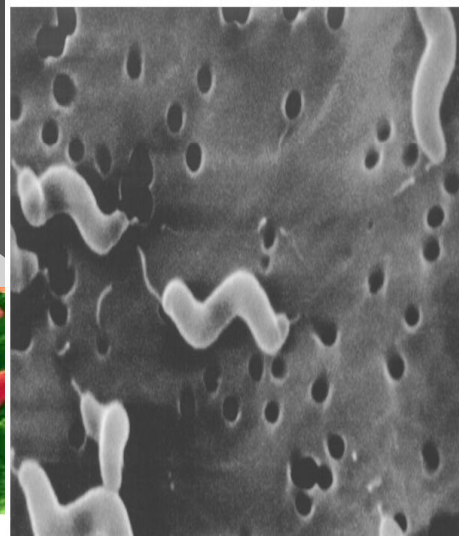
- ◉ According to CDC:
  - > Caused by consuming contaminated foods or beverages
  - > Can be biological
    - Bacteria
    - Viruses
    - Parasites
  - > Can be chemical

## Common FBIs

- Campylobacter
- Salmonella
- E. coli O157:H7
- Norovirus

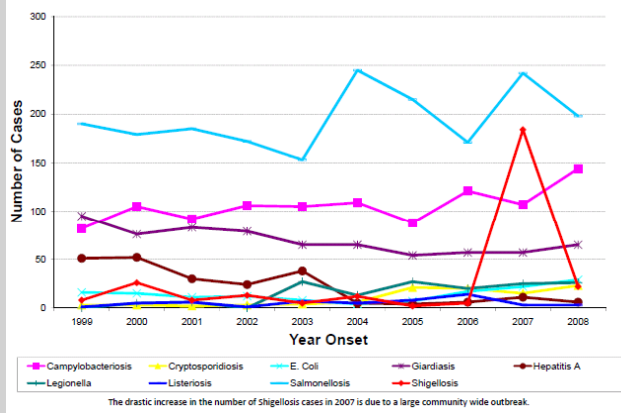


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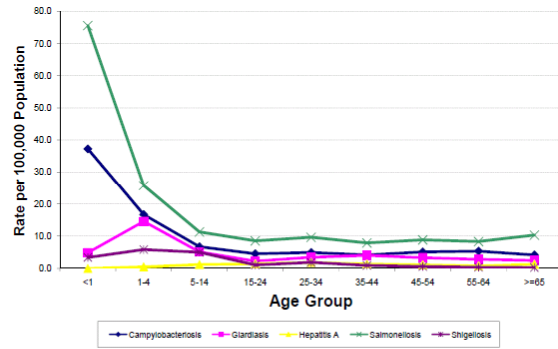
## FBI Trends in WV

Reported Cases of Food & Waterborne Diseases by Year of Onset, West Virginia, 1999-2008



## FBI Trends in WV

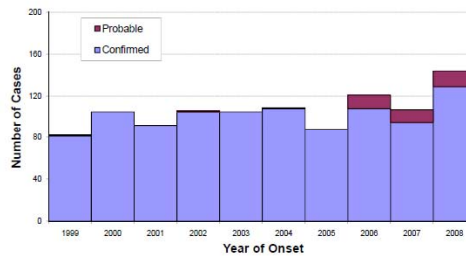
**Average Age Specific Incidence of Selected High Incidence Foodborne Diseases, West Virginia, 1999-2008**



\*United States Census 2004 data used for incidence calculations (<http://www.census.gov/census2004/states/wv.html>)

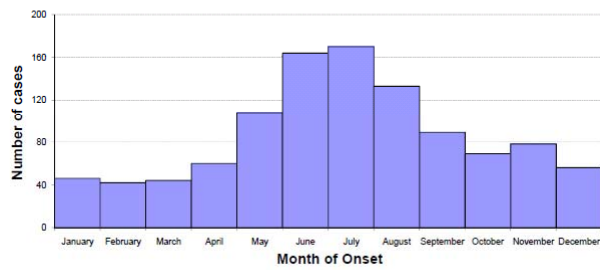
## WV Trends - Campy

**Reported Cases of Campylobacteriosis by Year of Onset, West Virginia, 1999-2008, (N=1059)**



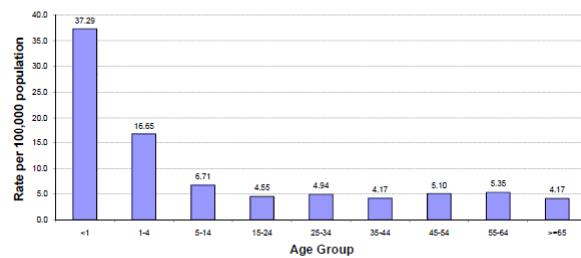
## WV Trends - Campy

**Reported Cases of Campylobacteriosis,  
by Month of Onset,  
West Virginia, 1999-2008, (N=1059)**



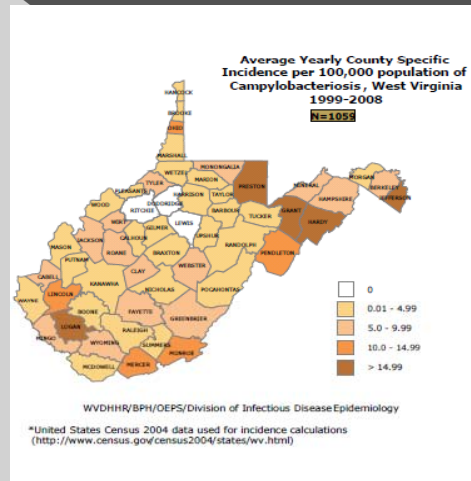
## WV Trends - Campy

**Average Yearly Age Specific Incidence\* of  
Campylobacteriosis,  
West Virginia, 1999-2008, (N=1059)**

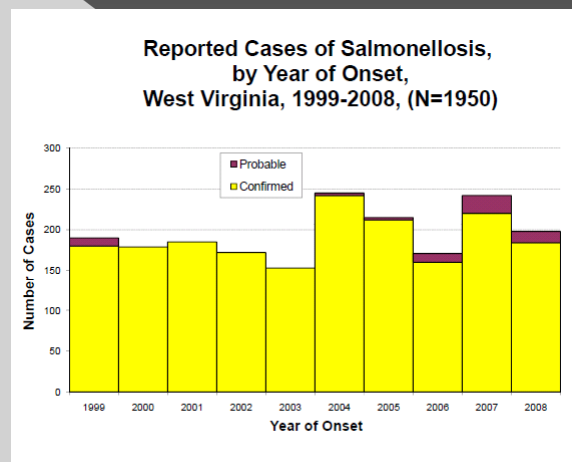


\*United States Census 2004 data used for incidence calculations (<http://www.census.gov/census2004/states/wv.html>)

## WV Trends - Campy

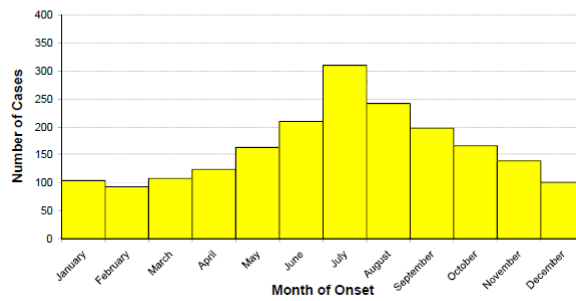


## WV Trends - Salmonella



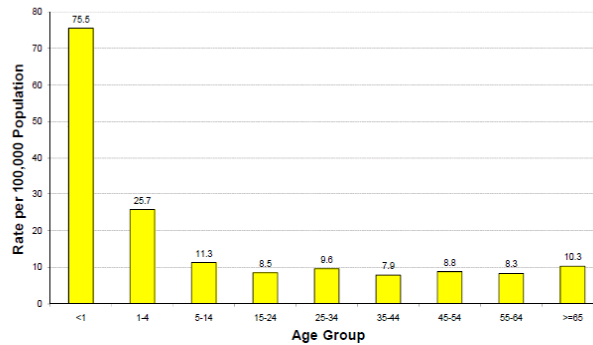
## WV Trends - Salmonella

**Reported Cases of Salmonellosis,  
by Month of Onset,  
West Virginia, 1999-2008, (N=1950)**



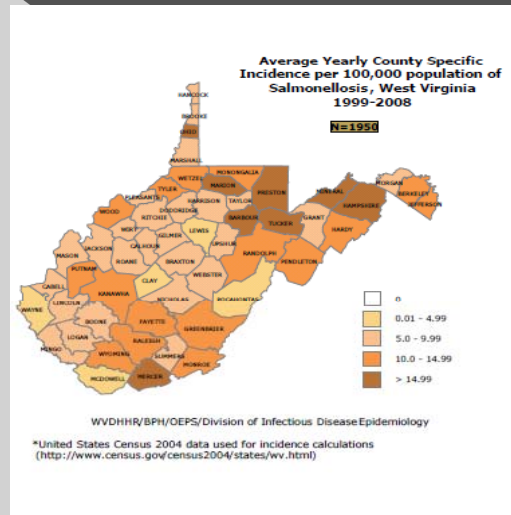
## WV Trends - Salmonella

**Average Yearly Age Specific Incidence\* of  
Salmonellosis,  
West Virginia, 1999-2008, (N=1944\*\*)**



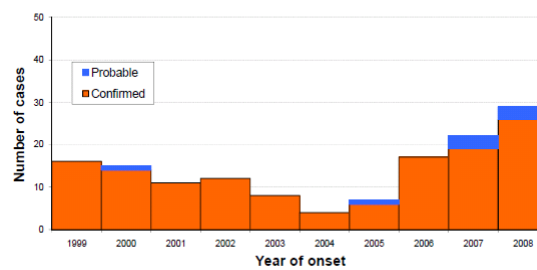
\*United States Census 2004 data used for incidence calculations (<http://www.census.gov/census2004/states/wv.html>)  
\*\* Six cases did not have age data available.

## WV Trends - Salmonella



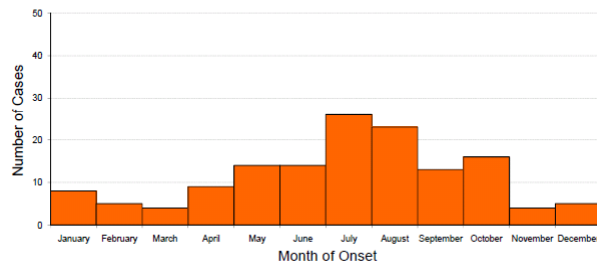
## WV Trends – E. Coli

Reported Cases of Shiga Toxin-Producing *Escherichia coli* (STEC), by Year of Onset, West Virginia, 1999-2008, (N=141)



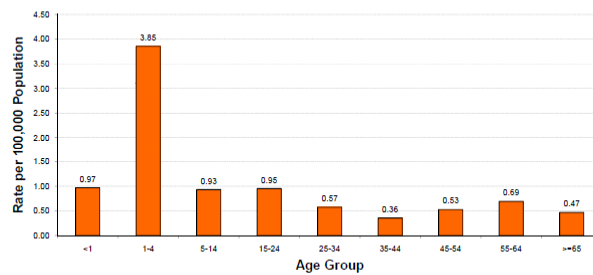
## WV Trends – E. Coli

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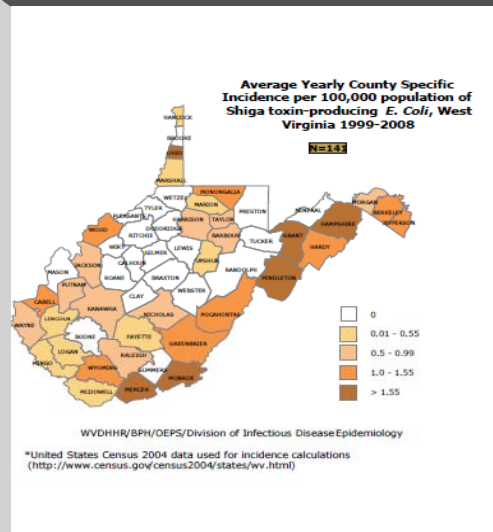
## WV Trends – E. Coli

**Average Yearly Age Specific Incidence\* of Shiga Toxin-Producing *Escherichia coli* (STEC), West Virginia, 1999-2008, (N=141)**



\*United States Census 2004 data used for incidence calculations (<http://www.census.gov/census2004/states/wv.html>)

## WV Trends – E. Coli



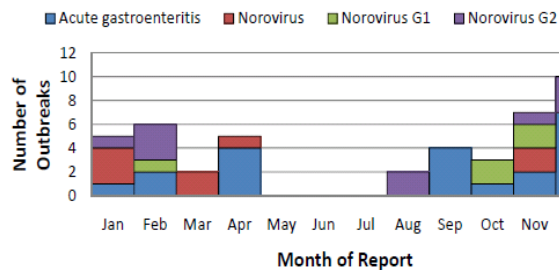
## WV Trends - Norovirus

**Table 3 Etiology of Enteric Outbreaks, West Virginia, 2008**

Etiologic Agent or Clinical Syndrome	TOTAL	PERCENT
Acute gastroenteritis	21	37.5%
Campylobacter	3	5.4%
Clostridium difficile	1	1.8%
Diarrhea, unknown etiology	2	3.6%
Norovirus	23	41.1%
Salmonella Species	5	8.9%
Shigella species	1	1.8%
TOTAL	56	100.00%

## WV Trends - Norovirus

**Figure 2 Outbreaks of Norovirus and Acute Gastroenteritis by Month of Report, West Virginia, 2008; N=44 outbreaks**



## FBI Prevention

- Campy, Salmonella, E. coli
  - > Cross contamination
  - > Proper cooking
  - > Hand washing
- Norovirus
  - > Employee Health
  - > Bare hand contact
  - > Hand washing



## Regulation

- ◉ 2005 FDA Food Code
  - > Employee Health
    - Big 5 Symptoms
    - Big 5 Foodborne illnesses
    - Employee responsibilities



## Big 5 Symptoms

- ◉ Vomiting
- ◉ Diarrhea
- ◉ Jaundice
- ◉ Sore throat with fever
- ◉ Lesion containing pus/infected, draining wound



## Big 5 Illnesses

- Salmonella typhi
- Shigella
- Shigatoxin-producing E. coli
- Hepatitis A
- Norovirus



## Big 5 Symptoms/Illnesses Employee Responsibilities

- Food Employee
- Person in Charge
  - > Exclusion and Restriction
  - > Please see handout

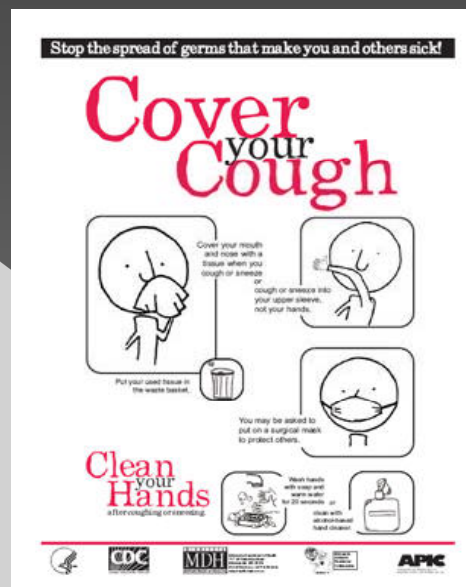


## Hot Topics

- Conference for Food Protection
  - > Biannual
  - > Regulators, Industry, Academia
  - > Councils
  - > Voting
  - > Recommendations move forward to FDA

## Hot Topics

- H1N1
  - > 2-401.12 Discharges from the Eyes, Nose and Mouth
  - > FDA FAQs



## Summary

- Many types of FBI
- Trends in WV similar to national trends
- Requirements for managing employee health can be found in Food Code
- Foodborne Illness is preventable

## References

- [www.cdc.gov](http://www.cdc.gov)
- [www.fda.gov](http://www.fda.gov)
- [www.wvidep.gov](http://www.wvidep.gov)
- 2005 FDA Food Code