




# Alabama DETECT II Training: Foodborne Illness Response Strategies

Epidemiology Division

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## DETECT I and II Training Goals

- Define Foodborne Outbreaks (FBOs)
- Identify roles, responsibilities, and legal requirements in response to FBO
- Promote teamwork and consistency in FBO response
- Answer commonly asked questions

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## DETECT I FBO Training

- Conducted eleven PHA 2-day trainings
- Trained ~250 staff
- Implemented FBO Protocols
- Utilized electronic standardized questionnaires
- Provided 110 DETECT Kits
- Provided additional resource materials
- Purchased new equipment – tablets

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## DETECT II FBO Training

- Conduct three 1-day trainings
- Train ~230 ADPH and non-ADPH staff
- Educate on outbreak procedures
  - Foodborne Outbreak Protocols
  - Epidemiology Outbreak Investigation Report (EIOR) ★
  - Environmental Assessment Report (EAR) ★
  - Hypothesis generating questionnaires ★
- Utilize electronic outbreak specific questionnaires
- Provide DETECT Kits supplies
- Provide additional resource materials

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## Unofficial DETECT II FBO Logos









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# Module 1: Surveillance

Epidemiology Division

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## Module Learning Objectives

- Define Notifiable Disease Reporting Process
- Identify process used to document foodborne illness.
- Discuss reasons whether or not to investigate complaints further.

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## Why Investigate Foodborne Outbreaks?

- ADPH Mission: “To serve the people of Alabama by assuring conditions in which they can be healthy.”
- Prevent additional foodborne illness
- Fulfill federal grants
  - Epidemiology and Laboratory Capacity (ELC)
  - Public Health Emergency Preparedness (PHEP)
    - Core Capability 13: Public Health Surveillance and Epidemiological Investigation

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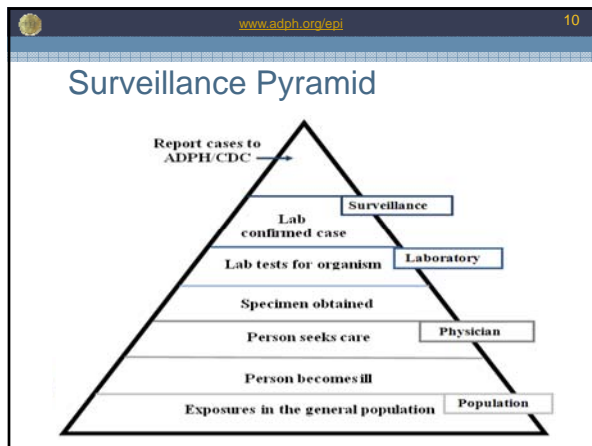
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## Notifiable Diseases/Conditions

- Purpose of Notifiable Diseases
  - Prevent disease
  - Assist with medical decisions
  - Patient education
  - Required by law
- ADPH administrative code authorizes and requires reporting  
<http://www.alabamaadministrativecode.state.al.us/docs/hlth/420-4-1.pdf>
- ADPH is exempt from HIPAA Privacy Rules,  
<http://www.cdc.gov/mmwr/pdf/other/m2e411.pdf>

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## HIPAA

ADPH is a public health authority as defined by the Health Insurance Portability and Accountability Act (HIPAA) to collect or receive protected health information (PHI) for the purpose of surveillance, investigations, and interventions of notifiable diseases, without authorization of the patient.

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<http://www.cdc.gov/mmwr/preview/mmwrhtml/m2e411a1.htm>

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## Report within 24 hours diagnosis Extremely Urgent

Brucellosis	Pertussis
Cholera	Poliovirus infection, nonparalytic
Diphtheria	Rabies, human and animal
Haemophilus influenzae, invasive disease*	Rubella
Hepatitis A	Tuberculosis
Measles (rubeola)	Typhoid fever
Meningococcal Disease (Neisseria meningitidis)*	Yellow fever
Novel influenza A virus infections (Not seasonal flu)	Outbreaks of any kind
	Cases of potential public health importance

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## Report within 7 days of Diagnosis Standard Notification

Arboviral disease	Legionellosis
Babesiosis	Leptospirosis
Campylobacteriosis	Listeriosis
Chancroid	Lyme disease
Chlamydia trachomatis	Malaria
Cryptosporidiosis	Mumps
Dengue	Plaintiffs
E. coli, shiga toxin-producing (STEC), including O157:H7	Q Fever
Ehrlichiosis/Anaplasmosis	Salmonellosis
Encephalitis, viral	Shigellosis
Giardiasis	Spotted Fever Rickettsiosis
Gonorrhea	Staphylococcus aureus, Vancomycin-intermediate (VISA)
Hansen's disease (Leprosy)	Staphylococcus aureus, Vancomycin-resistant (VISA)
Hemolytic Uremic Syndrome (HUS), post-diarrheal	Streptococcus pneumoniae, invasive disease*
Hepatitis B, C, and other viral	Syphilis
Histoplasmosis	Tetanus
Human Immunodeficiency Virus infection (including asymptomatic infection, AIDS, CD4 counts, and viral load)	Toxic shock syndrome
Influenza-associated pediatric mortality	Trichinellosis (Trichinosis)
Lead, exposure screening test result	Varicella
	Vibriosis

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## EPI Investigations from 3/11-4/12

Diseases	Investigations	Cases		
Babesiosis	2	1	Hepatitis C, acute	223
Botulism	4	0	Histoplasmosis	56
Brucellosis	9	1	Legionellosis	37
Campylobacteriosis	345	231	Listeriosis	10
Cryptosporidiosis	142	138	Lyme Disease	390
Dengue Fever	6	5	Malaria	12
Ehrlichiosis/Anaplasmosis	21	10	Q Fever, chronic	1
Encephalitis, St. Louis	3	1	Salmonellosis	5294
Encephalitis, West Nile	18	5	Shigellosis	380
Encephalitis/meningitis, California serogroup viral	2	1	Shiga Toxin-producing Escherichia coli (STEC)	112
Giardiasis	200	174	Streptococcus pneumoniae, invasive disease (PID)	75
Haemophilus influenzae, invasive	58	52	Toxic-shock Syndrome, staphylococcal	1
Hansen's Disease (Leprosy)	1	0	Varicella (Chickenpox), adults aged 18 and older	63
Hemolytic Uremic Syndrome, post-diarrheal	11	9	Vibriosis (non-cholera Vibrio species infections)	13
Hepatitis A, acute	93	11	West Nile Fever	26
Hepatitis B, acute	752	112	Yersiniosis	6
			Total 4/3/2011-3/31/2012	4369

<http://adph.org/epi/Default.asp?id=5455>

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## Who Must Report

- Physicians
- Dentists
- Nurses
- Medical Examiners
- Hospital Administrators
- Nursing Home Administrators
- Laboratory Directors
- School Principals
- Day Care Center Directors

We expect and want multiple reports

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## Minimum Data Elements

- Name disease or health condition
- Patient name
- Patient DOB
- Patient gender
- Patient address
- Patient phone number
- Date of onset, date of lab results, and/or date of diagnosis
- Reporter's Name
- Reporter's Phone
- Facility/Organization Name

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## Notifiable Disease/Condition Awareness Campaign

- DETECT - Decrease Epidemiological Threats with Environmental Controls and Testing
- TEST - Take Epidemiological Specimens Today
- REPORT - Rules for Every Provider and Organization to Report on Time

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## Online REPORT Card

### REPORT Notifiable Disease Card

**Rules for Every Provider and Organization to Report on Time**  
Louisiana Department of Public Health, Epidemiology Division, adph.org/epi, 1-800-235-4131

**\* Reportable Disease/Health Condition:**  
For Immediate Report or Standard Notification Diseases, select from the drop-down. For Immediate, Extremely Urgent Diseases, please call 1-800-235-4131 within 2 hours of diagnosis. Please Select.

**\* Patient's First Name:**

**\* Patient's Last Name:**

**\* Patient's Date of Birth:**

**\* Patient's Address:**

**\* Patient's City:**

**\* Patient's State:**

**\* Patient's Zip:**

**\* Patient's County of Residence:**

**Date of Onset:**

**Date of Diagnosis:**

**Date of Lab Results:**

**\* Reporter Type:**

**\* Reporter Facility Name:**

**\* Reporter's First Name:**

**\* Reporter's Last Name:**

**\* Reporter's Area Code and Phone:**

You must submit at least 1 of 2 date fields listed below.

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## Module 2: Outbreak Determination and Investigation

Epidemiology Division

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## Module Learning Objectives

- Describe information to determine the source of an outbreak
- Identify means for searching for additional ill persons
- Describe methods to ensure consistency of interview data
- Describe methods for overcoming interview barriers

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## Foodborne Outbreak (FBO) Definition

CDC and IAFP Definition

An outbreak is an incident in which two or more persons have the same disease, have similar clinical features, or have the same pathogen – thus meeting the case definition - and there is a time, place or person association among these persons.

A foodborne outbreak is one that is traceable to ingestion of a contaminated food.

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## FBO Definition

**Alabama Definition**

An incident in which two or more persons from different households experience a similar illness resulting from the ingestion of a common food.

Exceptions: botulism and chemical poisoning (1 case = outbreak).

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## How to Report Outbreaks

- Call 1-800-338-8EPI
- Online [www.adph.org/epi](http://www.adph.org/epi), REPORT Card
- Fax Green Card to 334-206-3734
- Contact ADPH Field Surveillance Staff (FSS)

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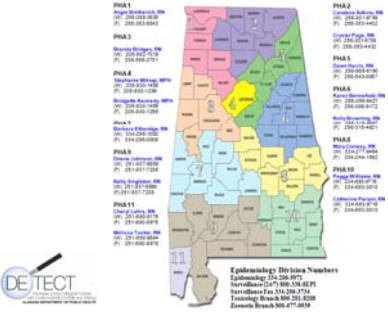
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

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## EPI Field Surveillance Staff (FSS)



**Epidemiology Division Numbers**  
 Epidemiology: 334-206-8871  
 Surveillance: 217-500-576, 576-8EPI  
 Investigation: 334-206-3734  
 Training Branch: 334-206-8208  
 Research Branch: 334-277-8839

[http://www.adph.org/epi/assets/FSS\\_Web\\_Map.pdf](http://www.adph.org/epi/assets/FSS_Web_Map.pdf)

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## Who Has Reported Outbreaks?

- *Serratia marcescens* – Infection Preventionists
- *Escherichia coli* (*E. coli*), Shiga-toxin producing (STEC) – Hospital ED
- *Salmonella* – Public Complaint
- Norovirus – School
- Hand-Foot-Mouth (CVA6) – Pediatrician




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## Case Characteristics

Number of cases	19
Number of healthcare facilities	6
Age (years) Median (Range)	56 (38-94)
Sex Female Male	11 8
Higher level of care required	11
Deaths	9


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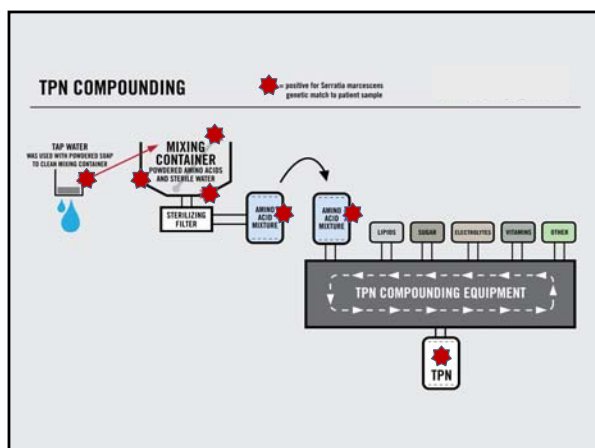
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## Total Outbreaks

AL Outbreaks	2011	2012**
Adenovirus*	1	0
Bacillus cereus*	1	0
E. coli 0157:H7	1	0
Campylobacter	1	0
Coxsackievirus (CVA6)*	0	1
Influenza	0	2
Multi-organism	1	0
Norovirus*	9	25
Public Health Importance	0	1
RSV	0	1
Salmonella	3	1
Serratia marcescens*	1	0
Shigella	4	6
Undetermined	10	13
Total Outbreaks	32	50

\*Not reportable diseases, but reportable as an outbreak  
\*\*As of 5/15/12

<http://www.adph.org/epi/index.asp?id=5548>

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## ADPH Outbreak Partners

- ADPH programs involved in outbreak investigation:
  - Bureau of Communicable Diseases (BCD)
    - Epidemiology Division
    - Field Surveillance Staff
  - Bureau of Clinical Laboratories (BCL)
  - Bureau of Environmental Services (BES)
    - Environmentalist

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## Private Sector Partners

- ADPH works closely with the community involved in outbreak investigation:
  - Hospitals:
    - Infection Preventionists
    - Laboratorians
    - Emergency Department
  - Private Providers
  - Schools/Colleges/Daycares
  - Food industry





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## State & Federal Outbreak Partners

- ADAI - AL Department of Agriculture and Industries
- ADEM - AL Department of Environmental Management
- CDC- Centers for Disease Control and Prevention
- FDA -Food and Drug Administration
- USDA- United States Department of Agriculture





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## Determine Source

- Information in Epidemiology Outbreak Investigation Report (EOIR)
- Hypothesis-generating Questionnaires
- Healthcare provider medical records
- Clinical and food specimen test results
- Outbreak-specific Questionnaires
- Environmental Assessment Report (EAR)

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## Search for Additional Cases

- Communicate with Community
- Exposure Location
- Health Care Facilities
- Private Providers
- Schools Absenteeism
- ALERTs
- News Releases
- Epi-X





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## ADPH Interviews

- Completes Hypothesis-generating or Outbreak-specific Questionnaire
- Follows Case Definition
- Seeks Others to Interview
- Solicits Specimens from Ill

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## ADPH Questionnaire Format

- Demographic information
  - Age, gender, address, other identifying data
- Exposure history
  - Food consumption
- Disease information
  - Symptoms/signs

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## Consistent Interviews

- Train FSS in interview techniques
  - Be familiar with questionnaire
  - Practice with someone on team
  - Be specific
  - Accurate and complete data required
  - Obtain answers for all questions, even if “unknown”
  - Interview 3 “not ill” for every 1 “ill”

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## Be Specific

- Location of facility (be specific)
  - Chain X store in Anytown, AL
  - Chain X store on corner of Main and Fourth in Anytown, AL
  - Chain X store located at 245 Main Street in Anytown, AL



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## Overcome Interview Barriers

- Ask about food preferences
- Rule in/out some foods
- Show calendar to identify key days and jog memory
- Review receipts and/or checkbook
- If buffet, clearly describe each food
- Show the menu if available



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## Think Non-FB Routes of Disease Transmission

We can't rule out anything:

- Petting Zoos
- Day Care Centers
- Drinking Water
- Swimming Pools



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