



MARION COUNTY
PUBLIC
HEALTH
DEPARTMENT

Prevent. Promote. Protect.

Department of Food & Consumer Safety

Foodborne Illness Outbreak

Investigations Manual

December 2017

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I. What is a Foodborne Illness Outbreak?

A foodborne illness outbreak is the manifestation of two or more cases of a similar illness resulting from the ingestion of a common food source. These cases can be relational or independent of another. Most of these illnesses are infections, caused by a variety of bacteria, viruses, and parasites that can be foodborne. Other diseases are poisonings, caused by harmful toxins or chemicals that have contaminated the food.

Goals of an Outbreak Investigation

The goal of an outbreak investigation is to prevent further cases of disease. The investigation and the information gathered help to dissect and understand the epidemiology of the outbreak. Foodborne outbreak investigation findings can be used to increase knowledge, identify potential hazards in food processing/ handling and help to correct the areas that are identified. The ultimate goal for public health is not just stopping outbreaks once they occur, but preventing them from happening through inspection, enforcement and education. The outbreak investigation team's focus is to:

- Stop an outbreak quickly if it is ongoing;
- Understand what happened to cause the outbreak (contributing factors);
- Implement immediate measures to prevent the ongoing contamination of food;
- Understand why the outbreak occurred (environmental antecedents);
- Implement long –term measures to prevent future outbreaks in the food establishment
- Use the information collected to shape policy and directives in the prevention of future outbreaks.

II. Notification of an Outbreak

Complaint intake occurs through several channels: email; in person; phone; referral or through the website complaint portal. Referrals include notification through the Indiana State Department of Health Food Protection Division or through other Marion County Public Health Departments (MCPHD), such as Epidemiology (EPI) or Infectious Disease (ID). Referrals may also be received through the MCPHD Duty Officer who responds to after normal business hour emergency calls.

Illness complaint information is entered into the Department of Food & Consumer Safety's (F & C S) inspection software. Illness complaints are entered under their own category. They are further subcategorized by type of reported foodborne illness (single person, multiple people/same household, or multiple people/different household). This categorization determines investigation routing and priority. The intake form follows the Environmental Health Specialists Network (EHS-Net) Foodborne Illness Complaint Form. All complainants are asked if there is leftover food or if they have sought medical care.

Illness complaints can involve food or drink consumed from a retail food establishment on site, through carry out or the consumption of packaged food from a retailer. F & C S software records the source of the food eaten, as well as areas for entry of lot numbers or other pertinent information for packaged foods.

Response to Notification

All illness complaints are to be investigated by the district Environmental Health Specialist (EHS) within a minimum of 24 hours from receipt unless there is insufficient information available to conduct an investigation (for example: time eaten, foods eaten, etc.). EHS staff would use the collected contact information (phone, email) to communicate with the complainant for additional information. If additional information is not provided, staff will perform a general complaint investigation based on the limited information provided, focusing on foodborne illness risk factors. Illness complaint investigations may be prioritized to be performed the same business day or after hours depending on illness details and number of persons affected.

Prioritization

Priority is based on the types of cases received. Cases that involve multiple people/different household illness, or those that meet outbreak guidelines will take the highest priority. These cases would have same day action and may be assigned to the Foodborne Disease Specialist for outbreak investigation. Cases confirmed by laboratory diagnosis and referred from MCPHD Infectious Disease would also take high priority.

Complaints that involve multiple people from the same household or single person illnesses would take lower priority. These cases would be inspected within twenty four hours following departmental guidelines. Facilities reported in their recent food history would be monitored for additional complaints.

Higher priority foodborne illness complaints would require further action and alerts to other departments or agencies. During an investigation of lower priority, cases may also determine the need to alert other agencies and prioritize the investigation. Lower priority cases must always be investigated as having the potential to be part of a larger foodborne illness outbreak.

Single Person or Multi-Person Same Household Complaints and Confirmed Case Investigations are routed to the district EHS for initial investigation. Staff reviews the complaint information prior to the investigation. A full

illness complaint investigation is conducted at the retail food establishment following illness investigation protocols, including: evaluation of sources and preparation of foods eaten; foodborne illness risk factors and public health interventions; and evaluation and review of employee health. EHS will obtain samples of leftover foods based on guidance from management and the Foodborne Disease Specialist. Additional actions, such as embargo or disposition of foods or license suspension will be determined based on the results of the investigation. These investigations may be elevated to a higher priority case at any point during the investigation.

Routing Referrals

Complaints involving wholesale food products or retail and wholesale food products in states other than Indiana are referred to the Indiana State Department of Health (ISDH) Food Protection division. Cases from other jurisdictions that are reported to MCPHD are referred to the responsible agency upon receipt by our office.

III. Conducting an Investigation of a Potential Foodborne Outbreak

Actions and investigative procedures used to assess an illness, injury, or outbreak closely follow the Council to Improve Foodborne Outbreak Response (CIFOR) guidelines. Information is collected from the complainant and recorded. MCPHD utilizes several elements to investigate foodborne illness outbreaks including: epidemiologic, trace back, environmental assessment, food and environmental testing; and stool sampling if applicable. MCPHD F & C S utilizes the GI Investigation Individual Illness and History (GI-IIH) form to gather information from consumers (see Appendix: C: Department of Food & Consumer Safety GI Investigation Individual Illness and History) the GI-IIH form is tailored to each individual case and is based on the CDC foodborne illness questionnaire CDC guidance document.

Illness complaints reported to the Department of Food & Consumer Safety (F & C S) are reviewed by the Foodborne Disease Specialist or a member of management. Information on a potential outbreak is then relayed to MCPHD Epidemiology and Infectious Disease. Roles, structure and communication routes are detailed within the Foodborne Illness Investigation Workflow (See Appendix A1) and Foodborne Illness Outbreak Incident Management Structure (See Appendix A2). Further notification to outside agencies (ISDH Food Protection or ISDH Epidemiology) is determined at initial intake.

MCPHD Epidemiology

Epidemiology supports the investigation by assisting in the modification of gastrointestinal illness surveys, working with F & C S staff during the administration of surveys and final statistical analysis of information gathered to determine foodborne illness causation.

At the conclusion of the outbreak investigation the Epidemiologist supplies an Outbreak Summary Report. This follows the timeline of the investigation, outlines any findings, discusses recommendations from F & C S, and reviews the corrective actions taken to stop disease transmission and prevent future outbreaks. This report is shared internally to F & C S with the MCPHD Administrator and Foodborne Disease Specialist, as well as any other people or agencies involved. F & C S shares the final report with the retail food establishments involved with the investigation.

Investigation/Environmental Assessment

Environmental assessments determine the contributing factors and environmental antecedents that led to the outbreak and/or to support the epidemiological investigation as needed. The environmental assessment reconstructs past events. It describes the outbreak influences of people, equipment, processes, food and economics on variables that may have contributed to the outbreak. An environmental assessment gathers data to develop a hypothesis regarding the cause of the outbreak and determine controls to prevent future outbreaks. This approach contrasts from a routine inspection, which focuses violations observed or measured at the time of inspection.

The first step in the investigation is planning and preparation. These activities are primarily conducted by the Foodborne Disease Specialist or a member of management. The foodborne illness reported information is evaluated to ensure all relevant facts and information is reported. Onset times and menu are evaluated. Food facility inspection history is reviewed. The Foodborne Disease Specialist determines if additional equipment or sampling supplies are needed. F & C S maintains a foodborne illness “go-kit” with necessary forms, sampling containers and equipment. (See Appendix: I: Field Investigation Epi Kit). In addition to the contents of the “go-kit” EHS will supply standard inspection equipment such as: thermometer, alcohol swabs, flashlight, chlorine and quaternary test strips to each investigation site.

The Foodborne Disease Specialist works in conjunction with the district EHS to conduct the foodborne illness investigation. The Foodborne Disease Specialist briefs the investigation team prior to action. The Foodborne Disease Specialist is the lead in the investigation, organizes activities, delegating responsibilities as needed to the other members of the team.

The team will conduct a site visit that involves extensive activities related to food flow, employee health and staffing, review of policies and practices, and interviews with management and employees. The objectives are to identify contributing factors and environmental antecedents. They will review and observe the food handling process for possible contributions to foodborne illness. The team evaluates the food flow (See Appendix B: “Critical Control Point Decision Tree” and Appendix B1: “Food Flow Example-Lasagna”) through the establishment, particularly with the food items of concern and processes on the day of the complaint. The food flow evaluates the flow of food through purchase, receiving, storing, preparing, cooking, holding, cooling, reheating and serving. Records will be evaluated, including food source records and temperature logs.

Contributing factories fall into three categories: Contamination, survival and proliferation/amplification. Contamination is how an etiologic agent got into the food. An example would be bare hand contact by an ill food handler. Survival factors are the processes or steps that would have eliminated or reduced an etiologic agent if conducted properly. Examples include improper cooking or reheating temperatures. Proliferation/amplification factors identify how an etiologic agent was able to increase and/or produce toxic products before ingestion. Examples would include improper hot or cold holding.

Staff will check if there is leftover food. Food samples will be collected and submitted to the MCPHD Public Health Laboratory. Food may be embargoed during the investigation for future testing or to prevent the distribution of the food. Food may also be disposed of during an investigation based on the findings of the Foodborne Disease Specialist and by the direction of management. Environmental sampling may also be conducted. The EHS reviews

conditions that may promote pathogen growth, prevent pathogen elimination, or allow for food and equipment contamination (from pathogens, toxins, chemicals, or foreign objects/substances).

Foodborne Illness Investigation Surveys

Survey forms will be modified from the MCPHD general Gastrointestinal Illness Investigation Form (See Appendix C: Department of Food & Consumer Safety GI Investigation Individual Illness and History), to reflect specific aspects of the suspected outbreak. Separate forms may be generated for consumers and for food service workers. This is primarily a function of MCPHD Epidemiology, but can also be an F & C S or Infectious Disease function based on the event.

Surveys will be administered using Survey Monkey, email, fax, telephone or in person. Translation is available through the MCPHD language resource or by members of staff depending on translation need.

Developing Food Flows & Critical Control Points

Developing a food flow diagram that map out the critical control points for potentially hazardous foods (PHF) is useful for understanding the food preparation procedures and can determine what may have contributed to an outbreak.

A food flow diagram begins with suppliers and delivery of food items. The diagram will map out flow from storage, to preparation, to service and if needed back to storage again. Critical control points (CCP) are to be included when crucial for each step. The Foodborne Disease Specialist will review the food flow with the person-in-charge (PIC) at the establishment; review the menu and any special menu that was served during complaint. F & C S will help the PIC to develop the food flow and CCP to prevent cross contamination and future outbreaks (See Appendix B; “Critical Control Point Decision Tree, Appendix B1: Food Flow Example- Lasagna”). The Foodborne Disease Specialist will also offer educational materials and resources for illness prevention.

Control Measures

Control measures need to be implemented to protect public health and prevent the spread of foodborne illness. Control measures will be determined during the on site evaluation. Control measures may include correcting violations on site, food embargo to prevent distribution, disposition of food, or license suspension. Follow up activities and preventions may occur, including retraining of staff, strengthening employee health policies, modification of menus and temperature logs.

Investigation Report

The Foodborne Disease Specialist or lead EHS produces an inspection report detailing violations, corrective actions and specifics of the foodborne illness investigation, including but not limited to; probable food-related injuries, possible contributing factors to the illness and if applicable, intentional contaminations. The report is presented to the retail food establishment, as well as any other applicable documents including license suspension, embargo form or a disposition form. Recheck inspections will be scheduled to verify compliance with any remaining violations.

IV. Laboratory/Sampling

Procedure for Preparation for Sample Collection

All staff is trained in sample collection and the investigation process. Complete foodborne illness investigation kits are maintained for a rapid response. Additional sampling supplies are maintained in the F & C S office as well as the MCPHD Public Health Laboratory.

The Foodborne Disease Specialist alerts the MCPHD Public Health Laboratory of potential samples as part of a foodborne illness investigation. The Foodborne Disease Specialist works with the MCPHD Public Health Laboratory to determine capacity based on volume of samples and testing requirements. Samples may need to be routed to the ISDH laboratory.

Food samples are to be taken with aseptic technique following the lab handbook guidelines as written (see Appendix D: “Lab Handbook: Environmental Microbiology Food Analysis Sample Testing Requirements”) by the Foodborne Disease Specialist.

Laboratory Services

Samples submitted to the MCPHD laboratory are submitted using the MCPHD Lab Food Sample Collection Report (see Appendix E2). Samples must be sealed/labeled using the MCPHD Lab Label (Appendix F). Labeling utilizes the MCPHD Food Sample Collection Report Form Definitions (see Appendix E).

The Consumer COC/Release form (see Appendix E1; “MCPHD Lab Consumer COC/Release Form” is utilized when obtaining a sample is obtained directly from the consumer. When a food sample is obtained for lab analysis the consumer information, product description and condition portion of the Release Form is completed with information as requested. Signatures are obtained as required with dates and times as specified. The MCPHD Public Health laboratory (MCPHD PHL) is located in the basement of the Hasbrook Building, 3838 N. Rural St. Samples may be temporarily held within the F & C S Department offices. Designated refrigerator and freezer areas are provided for storage of samples before transport to the MCPHD PHL.

The sample is signed over to the lab by completing the “Relinquished By” portion of the Release Form at the MCPHD laboratory. A label is attached to the sample container (see Appendix F & F1; “Lab Label and Lab Label Definitions”). In any event samples are handled between multiple persons, prior to submission to MCPHD laboratories, F & C S will utilize MCPHD Chain of Custody Record as verification of custody chain (see Appendix E3: “MCPHD Chain of Custody Record”).

The MCPHD PHL has sufficient sampling capacity under normal conditions. Some samples will need to be routed through the ISDH laboratory located at 550 W. 16th St., Indianapolis, Indiana. Examples would include product that would be under ISDH jurisdiction, including product where potential contamination occurred at the manufacture stage. The ISDH laboratory may also accommodate additional tests or can assist in testing samples when MCPHD PHL is at capacity. ISDH lab will test or refer to FDA/CDC/USDA agencies (see Appendix G: “Laboratory Support Documentation.” *Lab Handbook & Label* (See Appendix D & F). F & C S also has an agreement with Public Health Laboratory to send specimens to other accredited laboratories to test for pathogens not currently tested by PHL (see

Appendix G1: Customer PHL Methods Agreement). In any event samples are to be processed by ISDH laboratories MCPHD will utilize ISDH Consumer Complaint Report/ Chain of Custody (See Appendix E4: ISDH Consumer Complaint Report/ Chain of Custody”). MCPHD is required to coordinate ISDH laboratory testing through ISDH Food Protection’s Consumer Food Specialist.

V. Communicating with Other Organizations

The Investigation Process is detailed in the Illness Investigation Workflow Chart (See Appendix A: Foodborne Illness Investigation Workflow). This details the process in which complaints and information are communicated to other departments and agencies. Reporting of reportable foodborne illnesses to the Centers for Disease Control and Prevention (CDC) is a primary function of MCPHD Epidemiology or ISDH Epidemiology.

Publication of Data/Reporting Procedures

The Department of Food and Consumer Safety follows Indiana Code Title 16, Health §16-19-3-25 Inspection report; guidelines for release to public. The inspection report and records related to the inspection may not be released to the public for ten (10) calendar days. Records may be released earlier if it is determined by the regulatory authority the release is necessary to protect the public from an imminent threat to health or safety or if the retail food establishment’s license is suspended leading to its closure.

Inspection results and information are posted on <http://marionhealth.org/>. Requests for data are handled internally or through MCPHD Public Relations.

Information on individuals who file a complaint regarding a foodborne illness or report any health and sanitary condition in a retail food establishment is protected and confidential. Confidential information includes: name; address; telephone number; electronic mail address; personal health information; and any other information that could identify the complainant. This information will not be released. Individual survey results collected during an outbreak investigation will not be released. The epidemiological report summarizes the survey results and will be provided.

Media Management

The Department of Food & Consumer Safety refers media contact to the Marion County Public Health Department (MCPHD) Communications – Public Relations (PR) Department. PR will assess the information need and coordinate the response with the Administrator of F & C S.

Policy: General Media Information Request

Foodborne Illness Outbreaks and Food Safety Emergencies – Media and Public Management

F & C S coordinates all information provided to the media and public. Public Relations will manage the response and messaging, with input from other MCPHD departments (Legal, F & C S, Epidemiology) and outside agencies; ISDH, Federal Drug Agency (FDA), Centers for Disease Control (CDC), and United States Department of

Agriculture (USDA). F & C S staff has been instructed to refrain from making statements to the media or the public regarding any foodborne illness or outbreaks.

All media requests are forwarded to Curt Brantingham, Public Relations Coordinator (O) 317-221-2136, (C) 317-525-7450, or general PR number 317-221-2305. For written communication, forward the correspondence to PR, Hasbrook 6th floor/email cbrantingham@MarionHealth.org. Department Administrator, Janelle Kaufman is the main departmental contact for PR. Environmental Health Bureau Chief, Dana Reed Wise, is advised of information requests and media inquiries as needed.

VI. Food Tampering Defense

Tampering with consumer products is prohibited by The Federal Anti-Tampering Act (18 USC 1365). Penalties include up to \$100,000 and life in prison. Miriam Webster dictionary definition: “to render something harmful or dangerous by altering its structure or composition.” Tampering can involve the food or its packaging.

Overall Procedure

While conducting an inspection if EHS suspects tampering based on one or more of the tampering triggers, (see Appendix J: “FDA Food Defense Triggers” and Appendix J1: “Food Tampering Sheet for Employees and Vendors”) or F & C S receives alert from Indiana Health Alert Network (IHAN) or other agency or complaint, Department of Food & Consumer Safety management is notified. The investigation begins, focusing on potential tampering.

Activities are organized and monitored by the certified Food Defense Coordinator, who determines when sufficient information is available to notify local law enforcement.

The ISDH and FDA or USDA will also be notified along with the following agencies (when applicable):

*ISDH food security section - (317) 233-7360

*Food containing meat or poultry - USDA Meat & Poultry – (800)-535-4555

*All other food - FDA - (301) 443-1240

When tampering is suspected, food is embargoed. The public will be informed through MCPHD Public Relations (PR) as applicable. Food samples are identified, recorded and sent for analysis. Food samples can also be purchased if necessary. Product information such as: label information, quantity, name, lots, identifying dates, manufacturer, delivery company, dates of delivery, quantity delivered, and sales records. For non-food emergencies, self-reported suspected tampering at home consumers are instructed to report to local authorities.

Traceback Investigations

F & C S will conduct traceback investigations when necessary. Traceback investigations are initiated when investigations isolate a specific food product as a cause or when additional information is needed to finalize an investigation. Traceback investigations may also be initiated based on illness severity, illness symptoms, risk of ongoing exposure and resource availability. Traceback investigations follow the farm-to-fork continuum. The investigation evaluates the food product from its source, processing, distribution and point of final sale or service. The traceback investigation starts with an evaluation of the menu and ingredients.

The procedure for F & C S traceback procedures, including agency responsibilities and scope is detailed in Appendix K: “Trace-back of Wholesale/Source Food Products.”

Recall

In cases where recall is imminent; manufacturers and suppliers have the key responsibility to voluntarily recall food products with a known or suspected hazard. The United States Department of Agriculture (USDA) and FDA provide guidance for meat and poultry products and all other food products, respectively. The Food Protection Program notifies local health departments when Class 1, 2, and 3 recalls occur. The message is primarily provided via email to management. Information is also posted on the Food Protection web site. Recall classifications follow that of USDA or FDA. The definitions for recall classes are found in the ISDH draft February 21, 2008 for new recall procedures protocol. The recall classes are based on adverse health consequences.

VII. Final Reporting

Illness complaints for single or shared household sources that are determined to be isolated or undetermined have limited reporting compared to a larger scale investigation. The illness complaint investigation report is provided to the retail food establishment. Applicable violations are documented and follow up inspections are conducted until there is compliance.

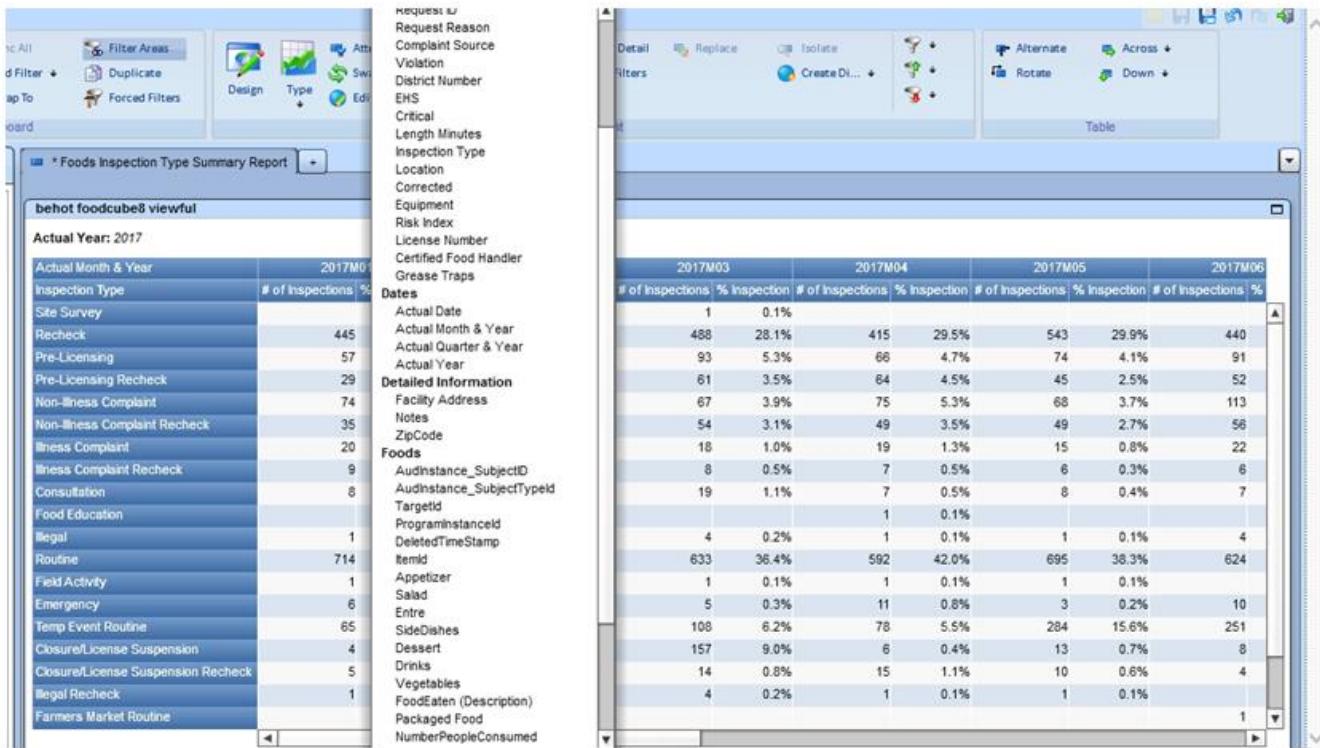
Inspection reports investigating facilities listed in a confirmed case's food history and distributed to Infectious Disease to supplement their investigation.

The Outbreak Summary Report prepared by Epidemiology is shared internally to F & C S with the MCPHD Administrator and Foodborne Disease Specialist, as well as any other people or agencies involved. F & C S shares the final report with the retail food establishments involved with the investigation and with the consumer. Copies of the environmental assessment and related food testing lab results may also be distributed.

After action meetings may be conducted to improve services and conclude ongoing activities. After action summaries may be shared with all staff as a training opportunity.

Data Review

Daily inspection reports, including complaint investigations are monitored daily by supervisory staff. The Department of Food & Consumer Safety will conduct annual and periodic reviews of the complaint data within the department's inspection software in order to identify trends and possible contributing factors that are most likely to cause foodborne illness. As outlined within the Retail Food Regulatory Program Standards, the review will concentrate on a myriad of foodborne illness qualifiers; multiple complaints on the same establishment, complaints on the same establishment type, complaints implicating the same food, complaints associated with similar food preparation processes, number of confirmed foodborne disease outbreaks, number of foodborne disease outbreaks and suspect disease outbreaks, contributing factors most often identified, number of complaints involving real and alleged threats of intentional food contamination, number and complaints involving the same agent and any complaints involving unusual agents when agents are identified. The data will be exported and analyzed utilizing Futrix 8.1 Enterprise Viewer software (pictured below).



Futurix 8.1 Enterprise Viewer Software Data extracted 12/12/2017

In the event that F & C S has had zero multiple person/multiple household foodborne illnesses investigations during the twelve months prior to analysis, a mock investigation will be completed using the above standard operating procedures. A mock exercise will be administered by the Foodborne Disease Specialist utilizing an internally created script or an online scenario.

Planning and Analysis

An after action meeting may be scheduled following a foodborne illness investigation. This meeting can be called by any of the departments involved with the investigation. This meeting will review relevant data, discussion on outbreak cause, determination if additional information is needed, conclusion of the investigation, finalizing documentation and evaluation of the investigative process. Training needs and areas of improvement can be determined after the event.



Appendices

- A: Foodborne Illness Investigation Workflow
- A1: Foodborne Illness Outbreak Incident Management Structure
- B: Critical Control Point Decision Tree
- B1: Food Flow -Lasagna
- C: Department of Food & Consumer Safety GI Investigation Individual Illness and History
- D: Lab Handbook: Environmental Microbiology Food Analysis Sample Testing Requirements
- E: Food Sample Collection Report Definitions
- E1: MCPHD Lab Consumer COC/Release Form
- E2: MCPHD Lab Food Sample Collection Report
- E3: MCPHD Chain of Custody Record
- E4: ISDH Consumer Complaint Report/ Chain of Custody
- F: MCPH Lab Label
- F1: Lab Label Definitions
- G: Laboratory Support Documentation
- G1: Customer PHL Methods Agreement
- H: Food Safety Emergency Illness Outbreak Contact List
- I: Field Investigation Epi Kit
- J: FDA Food Defense Triggers
- J1: Food Tampering Sheet for Employees and Vendors
- K: Trace-back Procedure of Wholesale/Source Food Products



A: Foodborne Illness Investigation Workflow

INITIAL NOTIFICATION

Through F & C S, Infectious Disease or Outside Agency

Complaint or referral of ill persons; possible foodborne

Contacts: Janelle Kaufman, Administrator, Food & Consumer Safety 317-221-2242;
Foodborne Disease Specialist 317-221-2239 or On Call F & C S 317-370-3031

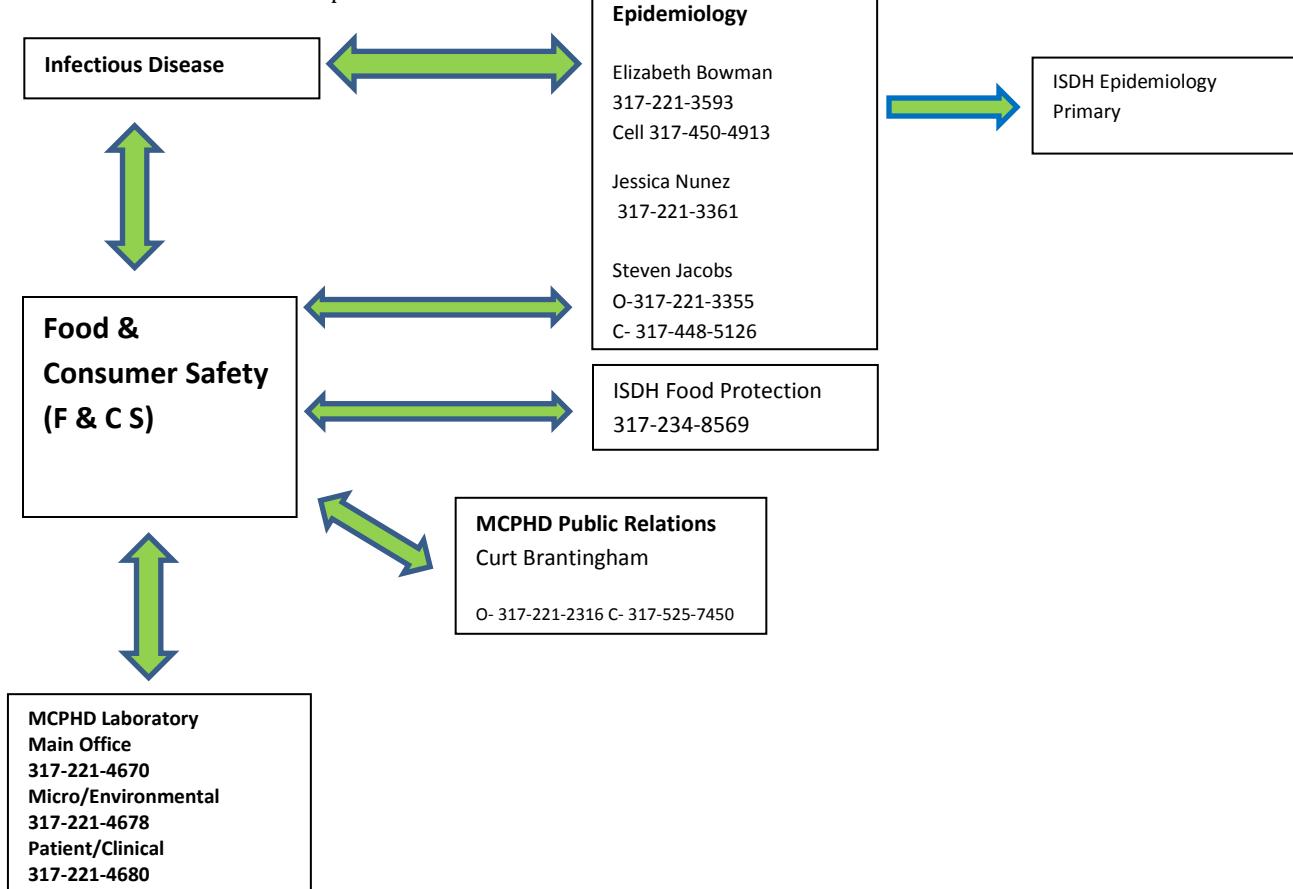
Lab Result of Positive Case

Contacts: Nurse Epidemiologist RN (open) 317-221-2117; After Hours 317-373-2477
Melissa McMasters Coordinator Infectious Disease 317-221-2119

COMMUNICATION

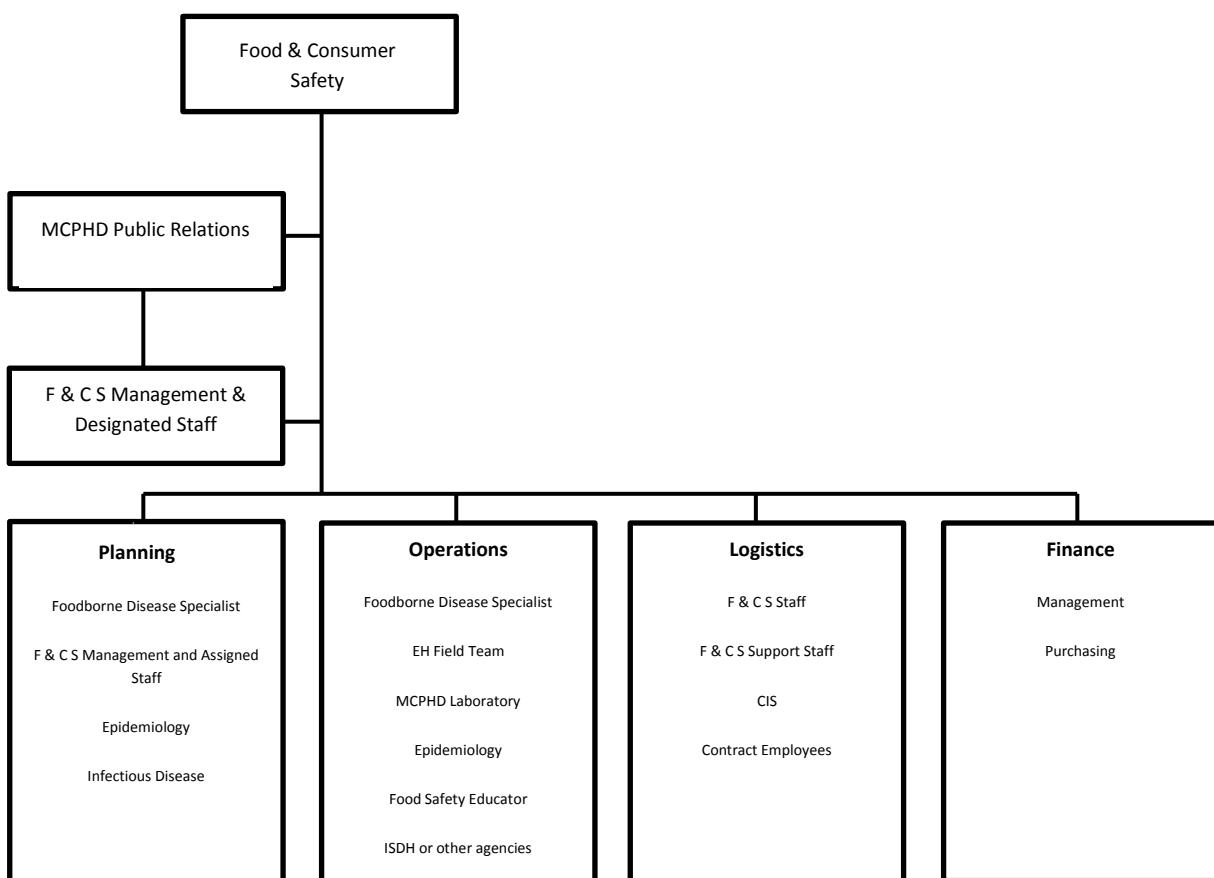
Timeline: Notify within day received; communicate possible large scale events to on call personnel on nights or weekends

Method: Secure email or phone.





A1: Foodborne Illness Outbreak Incident Management Structure



INVESTIGATION

Infectious Disease:

- Receives lab results of positive cases
- Notifies F & C S and Epidemiology of cases for restriction or exclusion
- Follows up with F & C S to release restricted or excluded employee
- Follow up with residential care settings to exclude symptomatic employees
- Coordinate with ISDH to determine protocol for other counties or states
- Contact MCPHD lab to notify lab personnel of possible outbreak
- Coordinates laboratory testing of stool samples
- Investigation Case Contact- Client Interview Conducted

Epidemiology:

- Modifies GI Illness Investigation Form(s) to specific incident (Epi, Infectious Disease or F & CS function) via Survey Monkey
- Administers food history/GI illness investigation forms to food staff and public (Epi, Infectious Disease or F & C S function depending on size and agent)
- Enters/analyzes completed surveys
- Writes final epidemiological outbreak summary, forwards to F & C S and Infectious Disease

Food & Consumer Safety:

- Coordinates and communicates actions with Epidemiology, Infectious Disease and other agencies
- Briefs MCPHD Public Relations and Bureau Chief
- Modifies GI Illness Investigation Form to specific incident (Epi, Infectious Disease or F & C S)
- Retrieves menu, detects implicated foods
- Administers food history/GI illness investigation forms to staff and public (Epi, Infectious Disease or F & C S)
- Conducts an environmental assessment of establishment
- Monitors incoming complaints for similar symptoms
- Notifies MCPHD lab of possible food samples
- Collects food samples for lab analysis
- Coordinates with Infectious Disease to collect stool samples
- Completes final environmental assessment report
- Maintains contact with food establishment owner/person-in-charge
- Delivers final epidemiological outbreak summary to food establishment

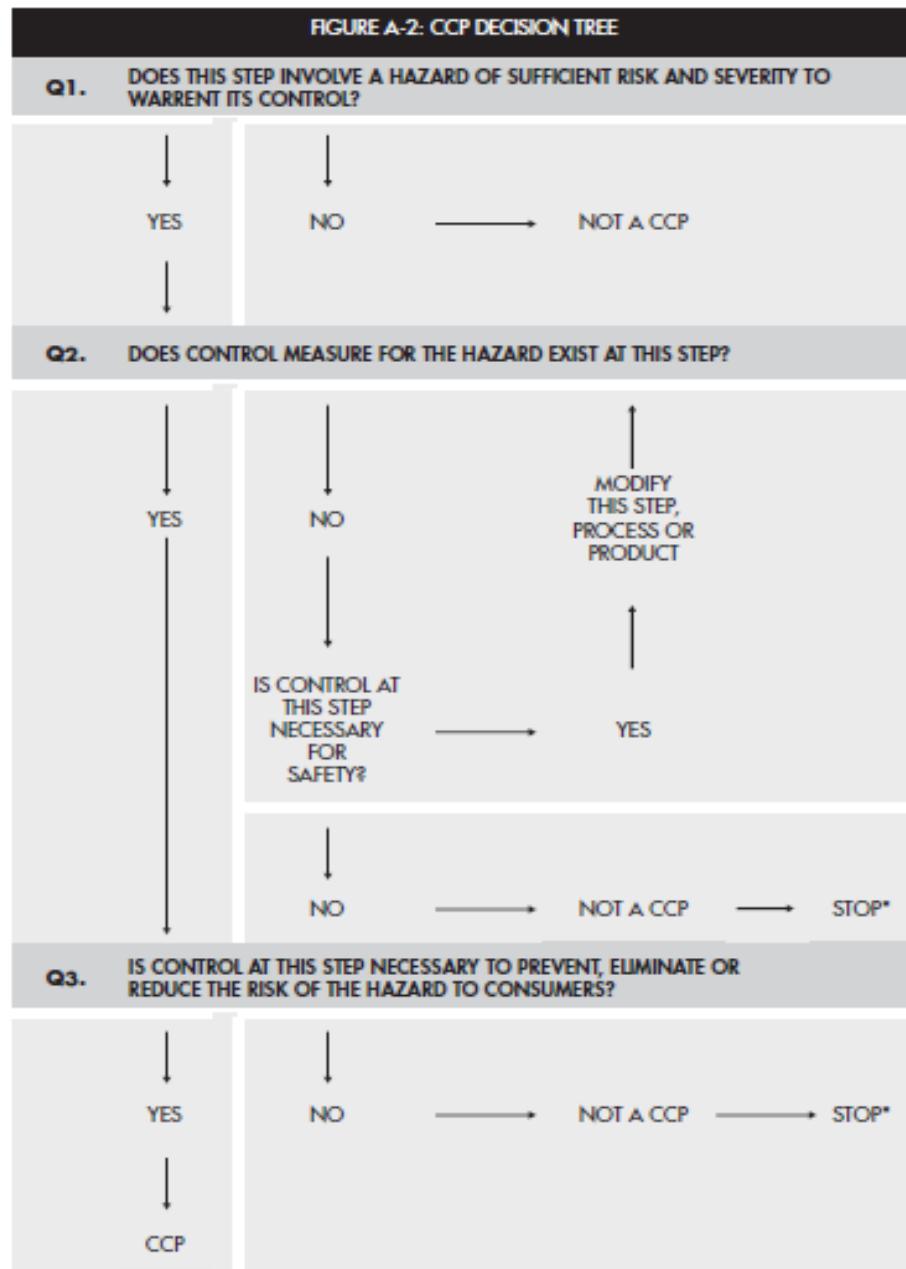
MCPHD Laboratory:

- Lab sends food sample results to F & C S; stool samples to nurses
- Maintains chain of custody for all samples
- Coordinates forwarding of samples onto ISDH labs when necessary

Updated 8/22/2017

B: Critical Control Point Decision Tree

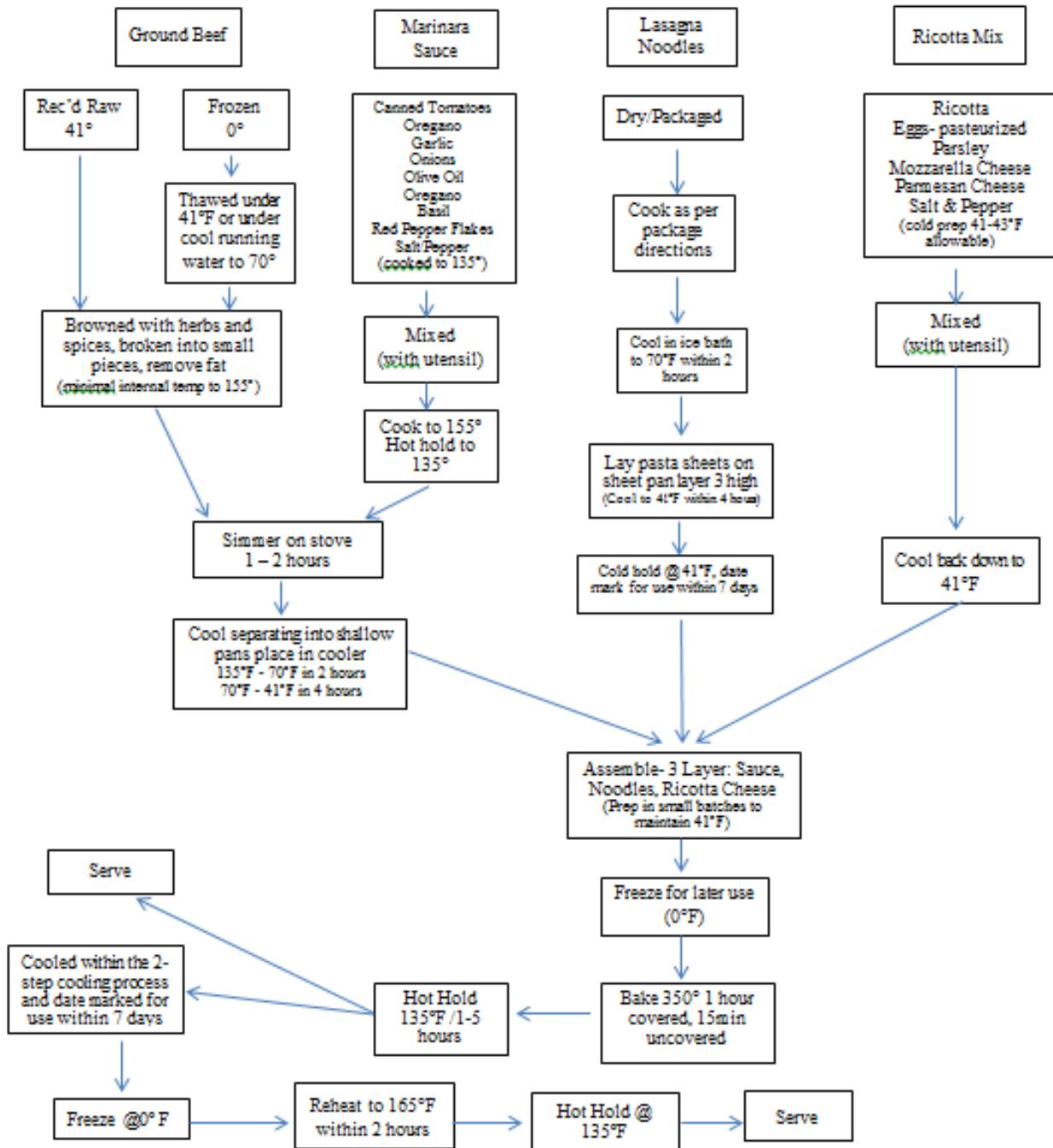
Critical Control Point (CCP) is a step at which control can be applied. The following is an example of an FDA CCP decision tree to confirm whether the hazard requires more safety controls.



This decision tree is derived from one that was developed by the National Advisory Committee on Microbiological Criteria for Foods.

National Advisory Committee on Microbiological Criteria for Foods. 1992. Hazard Analysis and Critical Control Point System. Int'l. J. Food Microbiol. 16:1-23.-

B1: Food Flow Example (Lasagna)





C: Department of Food & Consumer Safety Gastroenteritis Investigation Individual Illness and History

The Marion County Public Health Department is currently investigating an outbreak of gastrointestinal illness involving individuals who _____
(Describe common location/event). This illness is characterized primarily by _____ (symptoms).

In order to determine if these cases are related information is imperative from those individuals involved.
Please fill out this questionnaire as completely as possible.

Section A. Demographic Information

Please fill-in blanks/circle when appropriate.

- 1) Today's date: ____/____/____
- 2) Name of person completing this form: _____
- 3) Relationship to the patient: _____
- 4) Name of patient: _____
- 5) Patient date of birth: ____/____/____
- 6) Gender: MALE FEMALE
- 7) Race: _____
- 8) Ethnicity: _____
- 9) Occupation: _____
- 10) Employer Name: _____
- 11) Employer Address: _____
- 12) Name of Parent or Guardian (if patient is under 18): _____
- 13) Patient Address: _____
- 14) Room/Floor Number (if a resident of a dorm, nursing home, etc.): _____
- 15) Phone #: (____) _____
- 16) City: _____
- 17) State: _____
- 18) Zip: _____
- 19) County: _____

- 20) Are you employed as a Food handler? NO YES
IF YES ⇒ A16 (a) Where? _____
⇒ A16 (b) Last date you worked in this capacity? ____/____/____

- 21) Are you employed as a Child Care Worker? NO YES
IF YES ⇒ A17 (a) Where? _____
⇒ A17 (b) Last date you worked in this capacity? ____/____/____

22) Are you employed as a Health Worker? NO YES

IF YES ⇒ A18 (a) Where? _____

⇒ A18 (b) Last date you worked in this capacity? ___/___/___

Section B. Symptoms

1) Were you ill in the week before ___/___/___? NO YES

2) When did your first symptom begin? Date: ___/___/___

3) Time: _____ AM /PM

4) Please explain which symptoms you have been experiencing:

	Symptoms	Did you have this symptom? Please circle YES or NO	Onset Date	Onset Time, Include am or pm	Currently having symptom? Please circle YES or NO	Date symptom ended	Time symptom ended, Include am or pm
B4a	Cramps	NO YES	___/___/___		NO YES	___/___/___	
B4b	Diarrhea	NO YES	___/___/___		NO YES	___/___/___	
B4c	Blood in stool	NO YES	___/___/___		NO YES	___/___/___	
B4d	Nausea	NO YES	___/___/___		NO YES	___/___/___	
B4e	Vomiting	NO YES	___/___/___		NO YES	___/___/___	
B4f	Headache	NO YES	___/___/___		NO YES	___/___/___	
B4g	Body aches	NO YES	___/___/___		NO YES	___/___/___	
B4h	Fever	NO YES TEMP ____°F	___/___/___		NO YES	___/___/___	
B4i	Chills	NO YES	___/___/___		NO YES	___/___/___	

B4j	Fatigue	NO YES	____ / ____ / ____		NO YES	____ / ____ / ____	
B4k	Tingling/Numbness	NO YES	____ / ____ / ____		NO YES	____ / ____ / ____	
B4l	Dark urine	NO YES	____ / ____ / ____		NO YES	____ / ____ / ____	
B4m	Jaundice (yellowing of eyes or skin)	NO YES	____ / ____ / ____		NO YES	____ / ____ / ____	
B4n	Light stool color	NO YES	____ / ____ / ____		NO YES	____ / ____ / ____	

5) Did you have any other symptoms? NO YES

IF YES ⇒ please list _____

Onset date: ____ / ____ / ____

Onset time: ____ am pm

Still have this symptom? 0 NO 1 YES

Date symptom ended: ____ / ____ / ____

Time symptom ended: ____ am pm

6) Did you consult a doctor or clinic? NO YES

IF YES ⇒ Name of clinic or doctor: _____

⇒ Phone: (____) _____

7) Was a stool specimen collected? NO YES

IF YES ⇒ date of collection: ____ / ____ / ____

Results: To be completed by the Marion County Public Health Department

Stool	<u>Stool Culture</u>	<u>Stool Ova and Parasites</u>
	Salmonella (MCPHD) ____	Giardia (ISDH=stool) ____
	Shigella (MCPHD) ____	Cryptosporidia (ISDH= stool) ____
	E. coli (MCPHD) ____	Cyclospora (ISDH= stool) ____
	Campylobacter (MCPHD) ____	
	Listeria (ISDH=stool) ____	<u>Stool Virology</u>
	Yersinia (MCPHD) ____	Norovirus (ISDH=PCR) ____
	Clostridium botulinum ____	Enteric adenovirus (ISDH=stool) ____

	Vibrio Vulnificus (ISDH) _____	
	Clostridium difficile _____	
Blood	Hepatitis (ISDH) _____	
	Clostridium botulinum (ISDH) _____	
	Clostridium difficile _____	
	Listeria (ISDH=blood) _____	
	Salmonella _____	
Other	Listeria (ISDH = CSF) _____	
Food	Coliform (MCPHD) _____	
	Salmonella (ISDH) _____	
	Clostridium perfringens (MPCHD) _____	
	Bacillus cereus (MCPHD) _____	
	Staph aureus (ISDH=stool) _____	
	E. coli (MCPHD) _____	
	E. coli 0157:H7 (ISDH) _____	
	Strep _____	

8) Were you seen in an ER? NO YES

IF YES ⇒ Where: _____

⇒ Date: _____

9) Did you receive IV fluids? NO YES

IF YES ⇒ how many bags? _____

10) Did you receive oral fluids? NO YES

11) Were you admitted to a hospital? NO YES

IF YES ⇒ Where: _____

⇒ Date Admitted: _____

⇒ Date Discharged: _____

12) Were you given any medication for treatment? NO YES

IF YES ⇒ Medication name: _____

⇒ Date started: ___/___/___

13) Were you taking an antibiotic before onset of this illness? NO YES

IF YES ⇒ Medication name: _____

⇒ Date started: ___/___/___

Section C. Food/Event History

1) Please list all locations (including home) where you ate during the week before your illness began with date and foods:

Food Service Name and Location	Date	Time	Foods Eaten	List any foods that looked, smelled, tasted bad or appeared undercooked?	List any leftovers
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			
	____ / ____ / ____	AM PM			

	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		
	____ / ____ / ____	AM PM		

2) Do you know anyone with a similar illness or symptoms? NO YES

IF YES ⇒ fill in information below and indicate if these persons attended the same events or ate at the same food providers

Name/ relationship	Contact information	Occupation	Symptoms	Onset date	Events attended
				__/__/__	
				__/__/__	
				__/__/__	
				__/__/__	
				__/__/__	
				__/__/__	

3) In the week before your illness began, did you attend any events or gatherings? Please describe below with date, location and responsible person or organization:

Event #1: _____

Location: _____

Contact Person (if known): _____

Contact person's phone number: _____

Event date: _____

Name of person(s) who attended event with you: _____

Is this person(s) ill? NO YES DO NOT KNOW

Total number of people attending the event: _____

Foods you ate: _____

Event #2: _____

Location: _____

Contact Person (if known): _____

Contact person's phone number: _____

Event date: _____

6) Did you have contact with any animals or birds? NO YES

IF YES ⇒ Please explain: _____

7) Did you go swimming? NO YES

IF YES ⇒ Where: _____

7) What are the sources of the water you drank during the last seven days before the onset of your illness?

Address (where the water was consumed); brand (if water is bottled water)		Source of water (Place a check mark for each address/brand)					
		City water	Private well	Untreated surface water (river, lake, stream)	Bottled water	Other	Explain other
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

7) Is your home, you on a (please circle one):

Sewer or Septic System

8) Please list **all** household members:

Name	DOB	Secondary Home Address	Relationship	Occupation (Write "None" if Not Employed)	Employer Address	Supervisor Name and Phone Number (if employed in a food setting)	Illness Onset Date (if any)	Stool Result Date (to be completed by MCPHD)
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____
	____/____/____						____/____/____	____/____/____

D: Lab Handbook

Current Status: Active

PolicyStat ID: 4671667



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Effective:	03/2016
Reviewed:	03/2018
Revised:	02/2017
Next Review:	03/2019
Owner:	John Jai: ENVIRONMENTAL MICROBIOLOGIST
Policy Area:	BPH Public Health Lab Environmental
Legal Authority:	

Lab Handbook: Environmental Microbiology Food Analysis Sample Testing Requirements

ENVIRONMENTAL MICROBIOLOGY

Food Analysis Sample Testing Requirements

The Marion County Public Health Department Environmental Microbiology Laboratory is certified by the American Industrial Hygiene Association (AIHA) to test for bacteriological analysis of foods, Certification #100944.

The following food analysis test procedures are currently being performed in the Marion County Health Department Laboratory in support of the Department of Food Safety:

1. Examination of food for filth and foreign material.^{2,3}
2. Aerobic Plate Count.¹
3. Total coliform test.¹
4. Identification of E. coli and/or E. coli O157:H7¹
5. Identification of Listeria sp.¹
6. Identification of Campylobacter.¹
7. Identification of Salmonella.¹
8. Identification of Staphylococcus aureus.¹
9. Identification of Bacillus cereus.¹
10. Direct microscopic count.
11. Yeast and Mold count.
12. Commercial sterility.
13. pH.
 - A. Sample:
 - B. Whenever possible, at least 100 grams of sample should be obtained for each sample unit. Use aseptic technique when collecting sample. (A minimum of 25 grams is needed for each analysis.)
 - C. Dry or canned products should not be refrigerated during transport to the laboratory. A frozen sample should be transported in a pre-chilled container in order for it to arrive at the laboratory unchanged.

- Refrigerated samples should be transported in an ice chest at 0-4°C. Do not freeze refrigerated samples. Ice packs are available from the laboratory.
- D. Food samples should be submitted to the laboratory in the original, unopened containers. If bulk samples, or non-prepackaged samples are collected, or if containers are too large for submission to the laboratory, collect representative samples in a clean, sterile container provided by the laboratory or use a sterile plastic Whirl-Pak bag. Please collect liquid or semi-solid samples in sterile, wide mouth jars provided by the laboratory. All samples will be discarded 15 days after the report is issued unless otherwise requested.
1. Transport and examine samples promptly without freezing, if possible, and store at about 10°C for ≤ 8 hours or at about 4°C for ≤ 4 hours.

B. Food Sample Collection Report:

A completed "Sample Test Request/COC" and a label listing the Environmental Health Specialist's sample identification number must accompany all food samples. The same ID number should be on the food sample.

C. Notification:

1. Foodborne Illness Specialist

Alert the Foodborne Illness Specialist of the Department of Food Safety (221-2239), or in his/her absence, the Administrator of Department of Food Safety (221-2242) of an intent to sample, or that a sample has been collected.

1. Public Health Laboratory

Alert the Environmental Microbiologist of the Marion County Health Department (221-4673), or in his/her absence the Manager, Environmental Laboratories (221-4678) before sample collection or delivery, if possible. This is necessary in order to prepare media and reagents, which are required for initiating the analysis within 24 hours.

METHOD REFERENCES

1. FDA Bacteriological Analytical Manual, 1995, 8th Ed.
2. FDA Technical Bulletin No. 1, 1985, "Principles of food analysis for filth, decomposition, and foreign matter."
3. AOAC, 1995, Official Methods of Analysis, 16th Ed.
4. APHA, 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed.

Attachments:

No Attachments

Approval Signatures

Approver

Date

Michael Davis: DIRECTOR, LABORATORIES-PUBLIC HEALTH 03/2018

Andrea Olson: MANAGER, ENVIRONMENTAL LABORATORIES 03/2018

E: Food Sample Collection Report Form Definitions

Collector:

This person is the representative from F & C S that obtains the food sample from the retail food establishment or takes possession of the food sample from the consumer.

Sample ID #:

This is the unique identification number of the food sample. (Example: First and last initials of your name (TP); Date that you obtained the sample (3-6-15); Number sequence of the sample (1); Sample ID # would be: TP3-6-15-1

Description & Identification of Sample:

Describes exactly what the food sample is. Provide a generic description of the product (Example: Beverage, Sandwich, Fruit, Steak, etc.). Define the type of container (Example: Can, Box, Bottle, Plastic sample bag, etc.). Provide product label information when available: (Name of Product, Net Contents, and Name and Address of Manufacturer/Distributor.) Example: Beverage in clear plastic bottle, labeled as, "Harrison Farms Natural Cranberry Juice", 24 fl. oz., manufactured by Harrison Farms, Cincinnati, Ohio 42001. Sections on the label do not remain blank, if necessary code as "unlabeled," and define what the sample product is based on the information available. Example: Consumer food sample, Cranberry juice beverage in clear plastic bottle, unlabeled, in opened 24 oz. container.

Enter product code number, any expiration dates, and plant or establishment numbers found on the container, package, or label.

Note: List ingredients of the sample only if they have specific significance relative to the analysis requested.

Collection from Lot:

This is the original quantity of food from the sample itself. Include a brief description or statement of where/how the sample is obtained. Description or statement should include the name and amount of food sample obtained from the retail food establishment, or consumer. (Example: One 24oz. container of cranberry juice brought to the health department by consumer for lab analysis.) (Example: One unopened 24oz. container of cranberry juice randomly selected for lab analysis from display shelf of the retail food establishment.)

Manufacturer:

Enter the name and complete address of the manufacturer or distributor as listed on the product label.

Dealer/Firm or Person from whom you Obtained Sample:

Enter the name and complete address of the retail food establishment where the food sample came from.

Reason for Sampling: Define the specific reason why laboratory analysis is needed.

Analysis Requested: Check appropriate box or boxes, for the specific lab analysis needed on the food sample. If necessary write the analysis request in the space provided on the sample collection report form.



E1: Food & Consumer Safety

MCPHD Lab Consumer COC/ Release Form

Prevent. Promote. Protect.

Consumer COC/ Release Form

Marion County Public Health Department
Department of Food Safety
3840 North Sherman Drive
Indianapolis, IN 46226
Ph: (317) 221-2222

Ph: (317) 221-2222



Prevent. Promote. Protect.

CONSUMER INFORMATION		
Last Name		
First Name		
Address		
Street		
City	State	Zip
Phone number		
Product Description & Condition <hr/> <hr/> <hr/> <hr/> <hr/>		
<input type="checkbox"/> Received by: _____		
<input type="checkbox"/> Sample ID# _____		
<small>EDH Certified Lab ID# M-40-02 EDH Certified Lab ID# C-40-04 AIHA Certified Lab ID# 100044</small>		
<small>LAB USE ONLY Date _____ Time _____ Lab No. _____</small>		
<p>➤ All samples become the property of the Marion County Public Health Department, Division of Public Health, for action as may be deemed appropriate and may not be returned.</p> <p>➤ The Marion County Public Health Department will not initiate legal actions on opened consumer samples where product integrity may have been compromised.</p> <p>I, hereby agree to release the sample(s) described above into custody of the authorized Representative of the Marion County Public Health Department, Division of Public Health, for investigation and/or analysis:</p>		
<hr/>		
Consumer Signature _____ Date ____ / ____ / ____ Time: _____		
Food Safety Representative _____ Date ____ / ____ / ____ Time: _____		
Relinquished By _____ Date ____ / ____ / ____ Time: _____		



E2: Food & Consumer Safety MCPHD Lab Food Sample Collection Report

Food Sample Collection Report		
Collector:	Sample ID #:	
Description & Identification of Sample:		
Collection From Lot of:		
Manufacturer:		
Dealer:		
Reason for Sampling:		
Analysis Requested: <input type="checkbox"/> Aerobic Plate Count <input type="checkbox"/> B. cereus <input type="checkbox"/> Campylobacter <input type="checkbox"/> Clostridium <input type="checkbox"/> Coliform MPN <input type="checkbox"/> E. coli <input type="checkbox"/> E. coli O157:H7 <input type="checkbox"/> Listeria <input type="checkbox"/> Filth and Foreign Material <input type="checkbox"/> Salmonella <input type="checkbox"/> S. aureus <input type="checkbox"/> Yeast /Mold <input type="checkbox"/> Other _____		
Laboratory Sample Record		
Analysis started:	Analysis Completed:	LAB ID
Date Seal Broken:	Initials of Seal Breaker:	
Resealed By:	Date Resealed:	
Food category rating:	_____	
Report of Laboratory Analysis/Remarks		
Laboratory Conclusion:		
Item as graded by CDPH 2000 PHLS guidelines is: <input type="checkbox"/> Satisfactory <input type="checkbox"/> Acceptable <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Unacceptable/Potentially Hazardous <input type="checkbox"/> Not graded/Undefined		
Analyst(s): _____		Date _____
Sig.: _____ Manager, Environmental Lab / Director, Public Health Lab		Date _____

Released to Consumer/Agent Date ____/____/____ Time _____

Sample Released By Date ____/____/____ Time _____



E3: Marion County Public Health Department (MCPHD) Chain of Custody Record

**Chain of Custody Record**

Public Health Laboratory

3838 N. Rural Street

Indianapolis, IN 46205

Ph: (317) 221-4670

Fax: (317) 221-4683

Prevent. Promote. Protect.

Sample Collection I.D. Number	Date Collected	Time	Type of Sample	Number of Containers	Assigned Lab Number	Remarks	
Signature of sampler:							
Relinquished by: (signature)		Date	Time	Received by: (signature)		Date	Time
Relinquished by: (signature)		Date	Time	Received for lab by: (signature)		Date	Time
Additional comments:							

P-79 PH Lab (408); Revised 8/12 Chain of Custody Record

**E4: ISDH Consumer Complaint Report/
Chain of Custody**

**CONSUMER COMPLAINT REPORT**

State Form 14993 (R3/6-04)

**INDIANA STATE DEPARTMENT OF HEALTH
FOOD PROTECTION PROGRAM****Health Department**

1. <input type="checkbox"/> Bacterial <input type="checkbox"/> Suspected Tampering <input type="checkbox"/> Establishment <input type="checkbox"/> Chemical <input type="checkbox"/> Foodborne Illness <input type="checkbox"/> Other _____ <input type="checkbox"/> Foreign Material <input type="checkbox"/> Mislabeling				
Date	Reported by	Phone		
Complainant		Phone (H) _____		
Address _____		City _____	State _____	Zip _____
Complaint _____ _____				
Injury/Illness	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, symptoms		
Date/Time of meal	Date/Time of symptoms		Number exposed	Number ill
Duration of illness	Physician/hospital		Address	
2. Establishment Name			Food involved	
Address		County	Date of visit	Time of Visit
3. Product label		Code/expiration date		
Mfg. <input type="checkbox"/> Name Dist. <input type="checkbox"/>		Address		Pkg. size
Place of purchase			Address	
Date of purchase		Number purchased	Number on hand	
Police/firm notified			Contact	
Additional info. _____ _____				
Sample collected		<input type="checkbox"/> Yes <input type="checkbox"/> No	Complaint taken by _____	

**E4: ISDH Consumer Complaint Report/
Chain of Custody pg. 2**

ESTABLISHMENT FOLLOW-UP

Establishment name	Phone	
Person contacted	Title	
Action: <input type="checkbox"/> LHD <input type="checkbox"/> Retail <input type="checkbox"/> Wholesale <input type="checkbox"/> Other _____	Number on hand	Other complaints
Findings/comments 		
Follow-up sample collected	<input type="checkbox"/> Yes <input type="checkbox"/> Not	Environmental Health Specialist

Note: Complaint form should be used for initial complaint even if a sample is not involved. If a manufactured food product or foodborne illness is involved, please forward to ISDH.

INDIANA STATE DEPARTMENT OF HEALTH

Food Protection Program
2 North Meridian Street
Indianapolis, IN 46204

SAMPLE RELEASE DOCUMENT

I, _____
(Name) _____
(Street Address) _____

(City) _____
(State and Zip Code) _____

hereby agree to release the sample(s) described below into the custody of the authorized representative of the Food Protection Program, Indiana State Department of Health, for investigation and/or analysis:

(Customer Signature) _____
(Date) _____

(Food Protection Representative) _____
(Date) _____



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**F: Marion County Public Health Department (MCPHD)
Lab Label**



Sample # _____
Lab # _____
Received _____
Date (mm/dd/yyyy) _____

Collected By _____
By _____



Sample # _____
Lab # _____
Received _____
Date (mm/dd/yyyy) _____

Collected By _____
By _____



Sample # _____
Lab # _____
Received _____
Date (mm/dd/yyyy) _____

Collected By _____
By _____



F1: Lab Label Definitions

Description & Identification of Sample:

Describes exactly what the food sample is. Provide a generic description of the product (Example: beverage, sandwich, fruit, steak, etc.). Define the type of container (Example: can, box, bottle, plastic sample bag, etc.). Provide product label information when available: (name of product, net contents, and name and address of manufacturer/distributor.) Example: beverage in clear plastic bottle, labeled as, "Harrison Farms Natural Cranberry Juice", 24 fl. oz., manufactured by Harrison Farms, Cincinnati, Ohio 42001. Sections on the label do not remain blank, if necessary code as "unlabeled," and define what the sample product is based on the information available. Example: consumer food sample, cranberry juice beverage in clear plastic bottle, unlabeled, in opened 24 oz. container.

Enter product code number, any expiration dates, and plant or establishment numbers found on the container, package, or label.

Note: list ingredients of the sample only if they have specific significance relative to the analysis requested.

Control Sample:

An unopened sample that is submitted for testing, along with the original sample, for the purposes of comparison (every attempt should be made to obtain a control sample from the same lot as the original sample. The control sample may be from a different lot, with a different production date, code, etc.). When collecting a control sample from a foodservice establishment, obtain the sample from an unused portion of food.

Lot:

The original quantity of food from which the sample is taken; it is a quantity of food product at a specific location. (A lot may include more than one code, and more than one size container of a product, but not more than one specific food product.)

Sample:

A portion of a lot, collected as representative of the original amount. (The sample is the item or items that are submitted to the laboratory for testing.)

Sub:

An individual item or unit that is one portion of the whole sample; it is normally in a container such as a bag, bottle, box, or can. When two or more units are submitted together as a sample, they may be identified as two or more subs of the same sample. Each distinct unit/item is assigned a separate sub number such as 1, 2, etc.)



G: Laboratory Support Documentation

The Marion County Public Health Department Environmental Microbiology Laboratory is certified by the American Industrial Hygiene Association (AIHA) to test for bacteriological analysis of foods.

The following food analysis test procedures are currently being performed in the MCPH Lab.

Environmental Sample	Food Sample	Clinical Sample
Examination of food for filth and foreign material	Listeria	Aerobic Plate Count
Yeast and Mold Count	E. Coli and or E. Coli 0157:H7	Commercial Sterility
	Staphylococcus Aureus	Direct Microscopic count
	Salmonella and Shigella	pH
	Bacillus Cereus	
	Clostridium Perfringens	
	Total Coliform Test	
	Campylobacter	

The MCPHD utilizes Indiana State Department of Health (ISDH) Public Health Laboratory for norovirus testing and substantial sample sizes.

When collecting samples use aseptic technique, if possible sample sizes should be at least 100 grams for each sample unit, a minimum of 25 grams is needed for each analysis. Each food sample should be transported and maintained in its original unchanged state. Food samples should be submitted to the laboratory in their original unopened containers. Utilize sterile containers and jars when necessary to preserve sample integrity.

Marion County Public Health Department has an AIHA accredited environmental microbiology laboratory that conducts analysis for the Food & Consumer Safety Department. Food analysis test procedures, sample protocol, collection reports, and notification processes are maintained in the laboratory's client service manual.

The MCPHD lab has an agreement with the ISDH public health laboratory. This agreement allows the ISDH lab to conduct tests when MCPHD lacks the competency or needs assistance due to staffing issues or time considerations. Alternate in-state and out-of-state, private laboratories are maintained on the ISDH Food Protection Department website and are updated periodically. F & C S also has an agreement with Public Health Laboratory to send specimens to other laboratories to test for pathogens not currently tested by PHL. (See Appendix J1: Customer PHL Methods Agreement)



G1: Customer PHL Methods of Agreement

Customer PHL Methods Agreement

Marion County Public Health Department
Public Health Laboratory
3838 North Rural Street
Indianapolis, IN 46205
Ph: (317) 221-4678



I accept the utilization of the following test methods used by the Public Health Laboratory for the testing of food samples as described below. I further agree that the Public Health Laboratory may send food samples to laboratories outside of MCPHD with consent of the Department of Food & Consumer Safety for testing. This may include testing for pathogens not currently tested by the PHL and may include, but not limited to, Norovirus, Clostridium, Shigella, Vibrio, Yersinia or microbial toxins. The subcontracted laboratory utilized for food analysis will meet all the requirements regarding subcontracted testing as stated in the accreditation requirements of AIHA-LAP, LLC. See <https://portal.a2la.org/search/resultscurrentnewformat.cfm> for a current list of approved laboratories.

Quantitative

Test Method Name	Policy Stat ID	Reference Method
Aerobic Plate Count	3919175	FDA BAM Ch. 3 Online
Bacillus cereus	3629093	FDA BAM Ch. 14 Online
Escherichia coli (MPN)	3627405	FDA BAM Ch. 4 Online
Staphylococcus aureus	3628948	FDA BAM Ch. 12 Online
Total Coliforms (MPN)	3627405	FDA BAM Ch. 4 Online
Yeast and Mold	3562514	AOAC 2014.05 FDA BAM Ch. 18 Online

Qualitative

Test Method Name	Policy Stat ID	Reference Method
Campylobacter	3629042	FDA BAM Ch. 7 Online
Escherichia coli O157:H7	3627423, 3628567	FDA BAM Ch. 4, 4A Online
Microscopic Examination	3608838	See References in Policy Stat
Listeria monocytogenes	3492619	FDA BAM Ch. 10 Online
Salmonella	3628654	FDA BAM Ch. 5 Online

Signature

 9-25-17

Janelle Kaufman, MA, MPH

Administrator

Food and Consumer Safety

Marion County Public Health Department

ISDH Certified Lab ID# M-49-02
ISDH Certified Lab ID# C-49-04
AIHA Certified Lab ID# 100944

S:\Laboratory\Environmental Testing\Forms Tables & Signs\P-83 Customer PHL Methods Agreement 09/08/17

H: Food Safety Emergency/Illness Contact List

Epidemiology

Name	Job Title	Phone/Email
Joe Gibson	Director	317-221-3142
Steven Jacobs	General Epidemiologist	O- 317-221-3355 C- 317-448-5726
Elizabeth Bowman	Epidemiologist	317-221-3593
Jessica Nunez		317-221-3361
Infectious Disease		
General Office		317-221-2117 After Hours Cell: 317-373-2477
Jordan Lyons, RN jlyons@marionhealth.org	RN Epidemiologist	317-221-2113 Fax: 317-221-2076
Paul Britton, RN pbritton@marionhealth.org	RN Epidemiologist	317-221-2111 Fax: 317-221-2076

Water Quality/Hazardous Materials Management

Name	Job Title	Phone
Jeff Larmore	Supervisor, Hazardous Materials	317-221-2272
Adam Rickert	Supervisor, Water Quality	317-221-2298
Hazmat Primary		317-491-5681

Public Relations

Name	Job Title	Phone
Curt Brantingham	Public Relations Coordinator	O-317-221-2316 C-317-525-7450

Legal

Name	Job Title	Phone
Greg Ullrich	Assistant General Counsel	317-221-2436

Bureau of Environmental Health

Title	Name	Phone
Environmental Health Bureau Chief	Dana Reed Wise	317-221-2290
Executive Assistant	Chrisney Ball	317-221-2260

H: Food Safety Emergency/Illness Contact List p. 2

Marion County Public Health Department (MCPHD)				
Food & Consumer Safety				
Name	Title/ Assignment	Home Phone	Work Phone	Work Cell Phone
Janelle Kaufman	Administrator	317-607-0339	317-221-2242	317-373-2740
Derek Trackwell	Team Lead	317-300-0386	317-221-2244	317-373-2406
	Team Lead		317-221-2252	
JoAnn Xiong-Mercado	Health Educator/E.H.S. District 5	317-373-2434	317-221-2292	317-450-7215
	Foodborne Specialist/ District 4		317-221-2239	
Kelli Whiting	Temporary Events Coordinator	317-885-9378	317-221-2256	317-373-2718
On Call Phone				317-370-3031

Food & Consumer Safety Departmental Phone List and District Assignments can be found on the MCPHD Network. (I:\Food Safety License Desk\Department Phone Lists\Phone Lists with personal mobiles.xls).

Indiana State Department of Health (ISDH)				
Retail Food Protection Program				
Name	Title	Phone	Fax	Email
General Number		317-234-8569		
Krista Click	Director	317-233-8475	317-233-9200	kclick@isdh.in.gov
Kris Gasperic	Consumer Specialist	317-233-3213	317-233-9200	kgasperic@isdh.in.gov
Laurie Kidwell	Rapid Response Team Supervisor	O- 317-233-3213 M- 317-296-1573	317-233-9200	lkidwell@isdh.in.gov

Board of Animal Health (BOAH)				
Name	Title	Phone	Fax	Email
State of Indiana	General Number	317-544-2400	317-974-2011	Animalhealth@boah.in.gov

H: Food Safety Emergency/Illness Contact List p. 3

FDA				
Name	Title	Work Location	Phone/ Fax	Email
Kris Moore	Regional Retail Food Specialist	FDA/Louisville Resident Post, 9600 Brownsboro Rd., Ste.302 Louisville, KY 40241	502-425-0069 ext. 13 Fax 502-425-0450	kmoore@fda.hhs.gov

FBI				
Name	Title	Work Location	Phone	Email
Bruce Guider	Special Agent/WMD Coordinator	FBI	317-845-2312	Bruce.guider@ic.fbi.gov

Updated 12/06/2017

I: Field Investigation Epi Kit

Foodborne disease outbreak investigation kits (Epi Kit)
are to be maintained in ready-to-use condition

ITEM	MINIMUM NEEDED
A Large Cooler	1
Refrigerants: (Ice, Ice Packs (Frozen), heavy duty plastic bags for ice)	3
Sterile Containers & Bags	15ea
Sterile Sampling Utensils (Tongs & Scoops)	15ea
Non-cotton Swabs or Swab Test Kits	15ea
Sterile Specimen Collection Containers	4ea
Properly Calibrated temperature-measuring device	1
Sterilizing Equipment: (Isopropyl alcohol 70% solution)	20
Personal Protective Equipment (PPE): gloves	6 sets
Hand Sanitizer (1 bottle)	1
Hair Restraint (hair nets)	5
Ballpoint Pen with waterproof ink	1
Fine point waterproof permanent marker (Sharpie)	1
Roll of Adhesive or Masking Tape	1
MCPHD & ISDH Labels & Investigational Forms	as listed
(3) Closure Sign	
(5) Short Sheets	
(5) Disposition of Condemned Articles	
(5) Adulterated or Misbranded Merchandise	
(5) License Suspension	
(3) MCPHD Lab Labels	
(1) MCPHD Instructions & Guidance for Lab Labels	
(1) FDA Foodborne Illness Organism Chart	
(3) ISDH 35212 Virology Request Form & Instructions (blue)	
(5) ISDH Instructions for Collection of Stool Samples	
(English & Spanish)	
Small Notepad	1
Communication Flow chart	1
Food Safety Emergency Contact List	1
MCPHD Quick Guide	1
Current Food Code Book	1

**Items in FBI Epi Kit are the responsibility of the MCPH Food & Consumer Safety Department;
Foodborne Disease Specialist. After each use, items are to be inventoried and replenished.**

**In the event that an FBI Investigation has not occurred for 4 months,
The Foodborne Disease Specialist is to account for the Epi Kit in its entirety in regular cycles,
Including but not limited to, replacement of missing and expired materials and existing equipment.**

J: FDA Food Defense Triggers

For Regulators:

- Unusual findings during routine inspections and/or laboratory testing of food
- Discovery of physical characteristics of a food item that suggests possible contamination
- Report of unusual clusters or types of illness among employees or consumers
- Observation of suspicious behavior or activity by an employee or customer
- A known security breach within a food system or receipt of a threat

For Establishments:

What to look for:

- Person(s) taking notes, drawings, photos, or videos of your business
- Person(s) attempting to gain information in person, by phone, or by email about your business operations (specifically about security measures and personnel)
- Person(s) conducting surveillance of self-service areas (i.e., salad bars, condiment areas, and open bulk containers)
- Person(s) attempting to gain access to restricted or unauthorized areas
- Thefts of employee uniforms, badges, or packaging labels
- Employees changing working behavior or working irregular hours
- Unattended vehicles illegally parked near your business
- Unattended items (e.g., backpacks, boxes) within or near your business

Food indicators:

- off or unexpected odors, colors, or flavors
- crushed, broken, or damaged
- contains foreign object or other food
- soiled

Packaging indicators:

- missing/damaged safety devices (buttons) or vacuum seals
- changed, overprinted, missing, etc. – ex. labels
- signs of re-sealing
- stained or discolored
- signs of leaking
- corrosion
- bulging
- opened
- soiled
- torn
- cut
- holes



J1: Food Tampering Sheet for Employees and Vendors

A. Vendors and deliveries:

- i. Does the establishment have recent new vendors?
- ii. When vendors or delivery drivers are changed, do they ask for ID?
- iii. Are supplies checked upon delivery?
- iv. Do shipping boxes have the appropriate labels and information?

B. Employees:

- i. Does the establishment conduct initial and periodic employee background checks?
- ii. Are employees trained to be on the lookout for unusual situations?
- iii. Are employee personal items and break areas separated from food preparation, storage, and related areas?
- iv. Is employee access to various areas limited to their job duties?
- v. Is food protected during storage, preparation and service?
- vi. Has there been a recent change in menu items or ingredients?
- vii. Does the establishment monitor self-service areas?
- viii. Is access to storage areas limited to those who are relevant?
- ix. Is inventory documented and monitored?
- x. Is new food added to old food in containers?
- xi. Is package labeling badly printed, overprinted or missing usual information?

What can you do?

- i. Notify management if you observe something suspicious
- ii. Secure open containers of food or ingredients in food preparation areas appropriately
- iii. Control access of all employees, delivery personnel, and patrons to food storage and preparation areas
- iv. Keep doors locked as appropriate and prevent access to food preparation and storage areas, including loading dock
- v. Monitor self-service areas (i.e., salad bars, condiment areas, open bulk containers) for evidence of tampering
- vi. Monitor products for retail sale for evidence of tampering (i.e., damaged packages, evidence of resealing of packages, leaking packages)
- vii. Monitor the security of the premises as appropriate
- viii. Conduct background checks on employees
- ix. Train employees on awareness of suspicious activity and reporting procedures
- xii. Handle the food and packaging, minimally, or not at all.
- xiii. As applicable, have the establishments seal it in a container and label.

K: Trace-back of Wholesale/Source Food Products

Procedure for trace-back of foods implicated in illnesses, outbreaks, and intentional food contaminations.

- A. ISDH has primary responsibility for the trace-back of food products with a wholesale/source concern.
 1. F & C S monitors the food safety practices of retail food establishments in Marion County.
 2. An F & C S investigation implicates a food product through epidemiological evidence or laboratory detection.
 - i. Management notifies ISDH as to known facts. or;
 - ii. ISDH requests a coordinated effort. F & C S responds to updates, recall and research requests.
 3. Management coordinates the department's responses to, and from, the outside agency. This includes using department resources, such as on-site visits/other contact, to facilitate information gathering.
 4. Findings are conveyed to the agency per management instructions.
 5. F & C S documents incidents in paper and computer files.
 6. ISDH provides updates and documentation to other key agencies (FDA, CDC, and USDA).

References

CIFOR Guidelines for Foodborne Disease Outbreak Response

<https://cifor.us/products/guidelines>

FDA – Food Tampering Defense

<https://www.fda.gov/downloads/Food/FoodDefense/UCM245306.pdf>

The Federal Anti-Tampering Act (18 USC 1365)

www.fda.gov

FDA ALERT initiative brochure

Canadian Food Inspection Agency

Canadian Partnership for Consumer Food Safety Education

Centers for Disease Control (CDC)

Foodborne Disease Outbreak Investigation and Surveillance Tools

<https://www.cdc.gov/foodsafety/outbreaks/surveillance-reporting/investigation-toolkit.html>

National Advisory Committee on Microbiological Criteria for Foods. 1992. Hazard Analysis and Critical Control Point System. Intl. J. Food Microbiology. 16:1-23.

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