

Acknowledgements

The Food Committee of the Michigan Association of Local Environmental Health Administrators [MALEHA] was tasked with creating a guidance document for those entities with potential involvement in large, multi-jurisdictional foodborne illness investigations. A subcommittee was formed that created the following document.

Thanks to the Multi-Jurisdictional Outbreak Workgroup members for their dedicated discussion and work on this guidance document:

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Thanks to the members of the Food Committee of MALEHA who reviewed many drafts of this document, making it the best it can be:

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Special thanks to Lisa Hainstock and Brenda Brennan for their knowledge and commitment to keep this project on track.

Special thanks to Dorothy Wicks for chairing the workgroup. Her knowledge, leadership and communication skills guided this document to completion. Without Dorothy's leadership and dedication this document would not be available.

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Michigan

Multi-Jurisdictional

Food Emergency Response Guidance

In recent years, multi-jurisdictional food emergencies have been occurring at an increased frequency, often straining the resources of Local, State and Federal regulatory and public health authorities in an effort to coordinate their investigations effectively and take appropriate measures to rapidly control the spread of illness.

Over the past three years, a group of individuals from many organizations involved in public health and disease investigation fields came together as a larger, national group known as the Council to Improve Foodborne Outbreak Response [CIFOR] and crafted a document recently released: *Guidelines for Foodborne Disease Outbreak Response*. Each federal, state and local agency involved in the detection or investigation of foodborne illness should have received a copy. The document is also available at www.cifor.us.

A group of Local, State and Federal representatives in Michigan has sought to develop guidance for public health agencies and regulatory partners to assist in improving multi-jurisdictional foodborne illness event response within the state. The following document has been written with liberal use of the CIFOR guidelines, but focuses on our needs in Michigan, as well as public health code requirements. We fully understand the uniqueness of departments, and that what works for one may not work for another.

Guiding Principles for this document

- **Regardless of incident level, foodborne illness responses are typically multi-disciplinary:**
 - Human health response - led and/or coordinated by communicable disease staff at state or local levels
 - Food supply response – led and/or coordinated by food regulatory staff
 - Criminal investigation response (as needed) – led and/or coordinated by law enforcement staff
- **Outbreaks are most efficiently investigated as close to the source as possible.** The majority of foodborne illness event responses are handled by individual local health departments utilizing standard operating procedures and/or emergency plans. State and federal agency involvement is minimal and usually limited to technical consultation and information sharing as needed.
- **As the incident level increases, transition in command/lead agency designation is expected to more effectively manage the multi-jurisdictional and multi-disciplinary resources that will be used.** A Unified Command

structure consisting of several agencies may be appropriate, and authority should be delegated.

- **Rapid and open sharing of information between public health and food-regulatory agencies is critical to the effectiveness of multi-jurisdictional investigations.** Because these activities build on each other, establishing information-sharing protocols during the earliest stages of the investigation is critical. State, local, and federal public health officials should ensure that their agencies have the legal authorities needed to share information and that their professional staff understand those authorities.

Definition

For our purposes, the definition of *multi-jurisdictional foodborne outbreak* is:

A foodborne illness event which requires the resources of more than one local, state, territorial, tribal, or federal public health or food-regulatory agency to detect, investigate, or control. A multi-jurisdictional investigation may involve a foodborne outbreak or the distribution or recall of a contaminated food product. Examples are: 1) ill persons occur in more than one local health department jurisdiction, or 2) the implicated food(s) are not regulated by the agency responsible for the human health investigation.

Summary of Guidelines

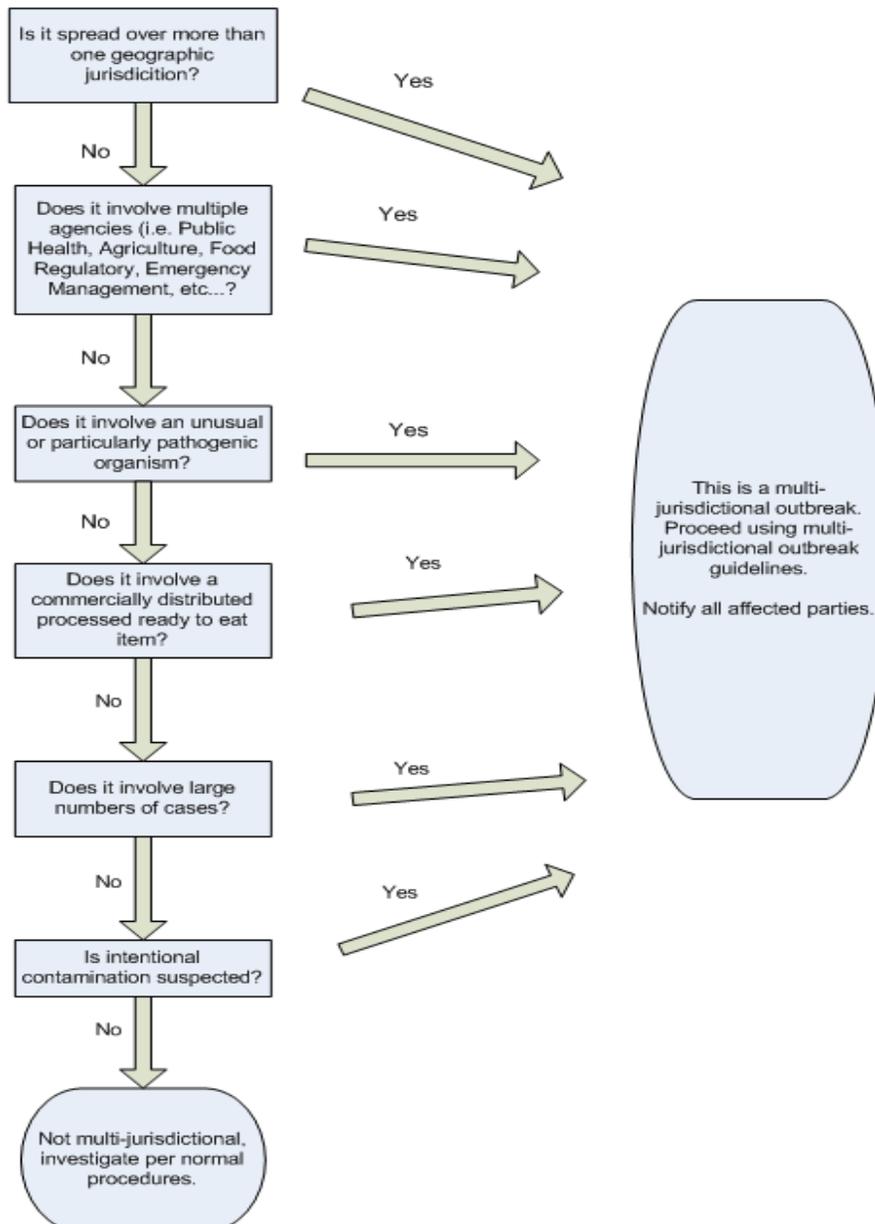
These multi-jurisdictional guidelines are designed to assist in:

1. **Assessing Scope of Outbreak**
Establishing a framework for rapidly assessing whether a given foodborne illness event affects multiple jurisdictions;
2. **Designating Lead Agencies**
Designate lead agencies and specific actions that might need to be taken in a multi-jurisdictional outbreak;
3. **Defining Roles for Lead and Supporting Agencies**
Provide guidance on roles for lead and supporting agencies;
4. **Communication and Coordination**
Promote early and effective communication and coordination among agencies involved in multi-jurisdictional investigations; and
5. **After Action Collaboration and Reporting**
Provide guidance on post-outbreak debriefing and dissemination of findings.

1. Assessment of Scope of Outbreak

The objectives of each multi-jurisdictional response will reflect the specific circumstances associated with the outbreak and available resources. Indicators of multi-jurisdictional outbreaks that would trigger communication and coordination with other agencies:

Multi-jurisdictional Outbreak Decision Tree for Primary Agency Investigating Foodborne Illness. [Guidelines for Foodborne Disease Outbreak Response, 2009]



In some of these scenarios (i.e. one case of botulism or many ill from a single catered event) the illness may be contained to one jurisdiction, but locals should still be communicating with state partners.

The following is a list of incidents considered multi-jurisdictional and includes examples of scenarios listed above:

Indicator	Example(s)
Widespread geographic area affected	Multiple cases and/or clusters in several counties, states, or even countries occurring over a similar time period
Implicated food widely distributed food	<ul style="list-style-type: none"> • Food purchased from multiple restaurants and/or grocery stores • Food contaminated early in production/distribution chain
Unusual agent	<ul style="list-style-type: none"> • Rarely encountered pathogen • Particularly severe disease (example: botulism). • Unusual signs or symptoms possibly indicating a chemical contaminant
Exposed population subsequently dispersed	Source of outbreak identified as: <ul style="list-style-type: none"> • An international or interstate airplane, bus, train, or vessel • A tourist facility, airport, convention center.
Unusual or suspicious circumstances	Events indicating potential intentional product contamination.

If any of the events listed above are taking place, a multi-jurisdictional outbreak is occurring. In each case, communication with other affected LHD's, MDARD, and MDCH should take place within the first 24 hours of the investigation.

2. Designation of Lead Agencies

Recommended Procedures: Designate lead agencies for the human health and food supply components of the response as soon as a multi-jurisdictional incident is identified. What if a lead agency is not capable of doing it all? It is expected that the agency would ask for help from other local or state agencies.

A. Human Health Investigations

- a. The jurisdiction/county where the exposure(s) occurred typically will be expected to take the lead
- b. When exposure occurred in multiple counties (e.g., commercially distributed food product or traveling tour bus) the MDCH typically will lead/coordinate the investigation between the LHDs.
- c. When the exposure is in one county and the majority of the ill reside in another county or are scattered around the state, the Environmental Health staff in the county of exposure is responsible

for the facility/exposure location investigation. The county with the majority ill may lead the epi investigation or MDCH may lead (or coordinate) due to geographic scattering or assist in surge capacity.

B. Food Supply Investigations

- a. The agency having jurisdiction over the source of exposure takes the lead
 - i. Food service establishment – Local Health Department (Environmental Health)
 - ii. Retail grocery, convenience store, food processor, farm and incidents involving food service establishments in multiple counties – MDARD
 - iii. When exposure occurred in multiple counties (intrastate food distribution) the MDARD takes the lead
 - iv. When exposure involves multiple states (interstate food distribution) the U.S. Food and Drug Administration or USDA Food Safety Inspection Service takes the lead depending on which agency has jurisdiction over the implicated product.

C. Options for Designating Alternative Lead Agencies

- a. When mutually agreeable, alternative lead agencies can be designated if they are thought to be in the best position to manage the response
- b. Typical reasons for identifying an alternative lead agency:
 - i. A different agency is committing a majority of the resources to the response (majority of ill reside outside exposed jurisdiction)
 - ii. A different agency has the technical expertise needed lead the response

Important to note:

The incident command structure (ICS) works well to organize and coordinate response to foodborne outbreak situations. The scope of food emergency responses addressed in this document can be thought of in 3

levels of magnitude: (See Appendix 8 for ICS Incident Types)

- a. Level 1 – Local Response (ICS type 4 or 5 incidents)
- b. Level 2 – State/Regional Response (ICS type 3 incidents)
- c. Level 3 – National Response (ICS type 1 or 2 incidents)

The coordinating office must have sufficient resources, expertise, and legal authority to collect, organize and disseminate data from the investigation. Some local agencies might not have sufficient resources to effectively coordinate a multi-jurisdictional investigation. In these situations, the coordinating office may be located at the state level or at another county that has sufficient resources and is also participating in the investigation.

3. Roles for Lead and Supporting Agencies

Agency

Local health agencies

Responsibilities

- Conduct surveillance
- Receive and investigate complaints about potential foodborne diseases
- Investigate confirmed illness reports
- Communicate with local health-care professionals
- Regulate food-service operations
- Implement control measures to stop outbreaks
- Educate food workers on preventing outbreaks of foodborne disease

Michigan Department of Community Health

- Conduct surveillance
- Identify local and statewide outbreaks
- Coordinate multi-jurisdictional outbreaks
- Provide advanced laboratory testing
- Support or direct environmental, laboratory, and epidemiologic investigations with advanced expertise
- Serve as liaison and coordinate communication with other state, local, and federal agencies

Michigan Department of Agriculture & Rural Development

- Support or direct environmental and food testing
- Coordinate multi-jurisdictional regulatory investigations
- Provide advanced laboratory testing of food or environmental samples
- Ensure good manufacturing practices in commercial food operations
- Test dairy, meat, and food products for microbial contamination
- Monitor or assist in coordinating food recalls carried out by industry
- Stop sales of adulterated product within their jurisdiction
- Regulate retail establishments such as grocery stores, supermarkets, manufacturers and warehouses

FBO Investigation Core Team- Lead Agency Role

Team Leader Responsibilities

- Sets and enforces priorities
- Coordinates all activities associated with the investigation
- Serves as the point of contact about the investigation

Epidemiologic/Communicable Disease Investigator

- Identifies cases
- Develops hypotheses and strategies to test them
- Interviews both cases and healthy controls
- Collects clinical specimens
- Coordinates testing of clinical specimens and environmental samples
- Consults and coordinates with environmental and laboratory investigators

Environmental investigator

- Investigates food-preparation sites
- Collects environmental and food samples, begins chain of custody.
- Coordinates food sampling and testing
- Reviews food inventory and distribution records, food flow, and contributing factors
- Consults with epidemiologic and laboratory investigators
- Conducts trace back investigations

Laboratory investigator

- Understands classical or molecular microbiology (organic/inorganic chemistry or radiochemistry)
- Conducts testing of clinical specimens, food and environmental samples
- Determines optimal specimen or sample types with transport and storage conditions, including chain of custody, testing methodologies, and relevant laboratory-based networks

Public information officer

- Develops general and specific messages for the public through the media
- Responds to media inquiries or identifies the appropriate spokesperson

- Coordinates communication with multiple agencies

Additional team members may include

- Public health nurses
- Statisticians
- Health-care providers
- Health educators
- Clerical staff
- Law enforcement
- Others as needed

[Guidelines for Foodborne Disease Outbreak Response, 2009]

Additional support for large-scale outbreaks-Some outbreaks are too large for one agency to manage independently. Advance preparations can help mitigate the impact of a large-scale outbreak and ensure effective response.

- Identify individuals within the agency or from other organizations who would have minimal skills or knowledge and would be willing to help conduct interviews or provide other support during a large-scale outbreak.
 - other branches of government (MDCH, FDA, USDA, CDC)
 - university students, (PHAST/UM)
 - volunteers (e.g., Medical Reserve Corp)
- Develop a contact list and protocol for contacting these individuals when needed. Include after-hours and weekend contact information, and assign an individual or group to update it regularly.
- Develop training and job description(s) for these individuals. Use just-in-time training specific to their assigned tasks and their roles in the overall investigation. Such training could occur shortly before performance of the necessary task.

Appendix 4 identifies a Multi-jurisdictional Foodborne Illness Outbreak Response Checklist.

Important to note:

Outbreak investigations progress through phases of activity, and leadership of the investigation should reflect the focus of the investigation at the time.

The epi phase of the investigation may progress to the regulatory phase, and transition of leadership within the outbreak control team should be planned in advance by consensus and communicated to the entire team.

Determine how confidential information will be stored and whether, how, and when it can be shared. All confidential information will be shared in accordance with current HIPAA requirements.

03/21/2011

4. Communication and Coordination

Early communication is critical when a multi-jurisdictional outbreak is suspected. Other agencies that may need to be part of the investigation should be notified via email or fax as soon as possible and no later than 24 hours after the investigation begins.

Issuing an Early Notification

- a. Prepare concise written summary of available information:
 1. Early Notification Fax/Email Template – recommended when limited information is available (Appendix 2)

- b. Share written summary with all potentially involved jurisdictions via multiple and redundant communication channels. The following methods are recommended:
 1. Issue a MIHAN alert to local and state staff in Communicable Disease, Environmental Health, Agriculture, Epidemiology, Emergency Preparedness, Medical Directors, and Health Officers as all subscribe to the health alert network.
 2. FAX alert to all affected jurisdictions and agencies.
 3. Notify through established e-mail list serves (MALPH, MALEHA, MI-Food, NAF [Nurses Administrative Forum]).

Appendix 3 contains contact information for notification to staff in each local health department in Michigan as well as state and federal agencies.

The following are examples of scenarios and appropriate notifications steps at the local, State and Federal levels that must be taken when they occur:

Examples of key indicators and required notification steps.		
Outbreak Detection	Key Indicator	Notification Steps
Local level	Commercially distributed processed or ready-to-eat food contaminated prior to the point of service suspected or implicated as the vehicle in the outbreak.	LOCALS: Immediately notify MDARD/MDCH STATE: contact CDC, and FDA or FSIS, depending on product.
	Fresh produce item contaminated prior to the point of service is suspected or implicated as the vehicle in the outbreak.	
	Ground beef is implicated in an outbreak of <i>E. coli</i> O157:H7 infections.	

Examples of key indicators and required notification steps.		
Outbreak Detection	Key Indicator	Notification Steps
	Molecular subtype characteristics of etiologic agent matches the pattern of an agent independently associated with other foodborne disease outbreaks.	
	Intentional contamination of food item is suspected or implicated.	<p>LOCALS: Immediately notify MDARD/MDCH and local law enforcement.</p> <p>STATE: contact CDC, and FDA or FSIS, depending on product; state law enforcement and FBI.</p>
State Level	Increase of sporadic infections with common subtype characteristics identified across multiple jurisdictions.	Immediately notify affected local agencies, CDC, state and federal food regulatory agencies.
	Multiple common source outbreaks linked by common agent, food, or water.	
	Microbiological food testing by state food regulatory agency prompts recall.	
Federal Level	Increase of sporadic infections with common subtype characteristics identified across multiple states.	Immediately notify affected state health and food regulatory agencies.
	Multiple common source outbreaks linked by common agent, food, or water.	
	Microbiological food testing by, or reported to FDA or FSIS prompts recall.	

Holding an Initial Conference Call or Meeting with other agencies involved:

Initial face-to-face meetings are strongly recommended if response personnel or agencies do not have pre-existing working relationships. Identify lead and supporting agencies and clarify agency roles and responsibilities.

Appendix 5 contains guidelines for conference call etiquette.

Important to note:

When an incident involves an agricultural commodity and the bulk of the commodity is produced in a limited number of states, those state agricultural agencies should be informed of the outbreak and its progress.

Identifying the source of a multi-jurisdictional outbreak represents a collaborative process among local, state, and federal agencies and industry. Individual food companies and trade associations should be engaged early on to help with the investigation.

Releasing public information about the outbreak should be coordinated with the lead investigating agency, when feasible. Identify the persons who will be responsible for communication on behalf of their organizational unit (epidemiology, environmental health, laboratory) and for the outbreak control team. A coordinated communications plan can help provide a consistent message about the progress of the investigation or the source of the outbreak

5. After Action Collaboration and Reporting

Post outbreak debriefing

The agency coordinating the investigation should conduct an after-action review, in addition to the investigation summary report. During the review, the coordinating agency should:

- a) review the conduct of the investigation with collaborating agencies;
- b) summarize the effectiveness of communication and coordination among jurisdictions, and;
- c) Identify specific gaps or problems that arose during the investigation. What worked well? Where can we improve? What additional resources are needed?
- d) Consider including industry representatives to share lessons learned.

Post outbreak conference call

The organizations involved should hold a conference call 1–3 months after the initial investigation ends to review lessons learned and to update participants on findings, conclusions, and actions taken.

- Consider including consumer groups in this conference call or hosting a conference call specifically for consumer groups, to help them understand what happened and what's being done to prevent recurrence.
- Also consider including industry representatives to help disseminate lessons learned from the investigation.

Closing investigation and final reporting

The lead agency(s) coordinating the investigation should prepare an after-action report after the conference call. The report should summarize the effectiveness of communication and coordination among jurisdictions and identify specific gaps or problems that arose during the investigation.

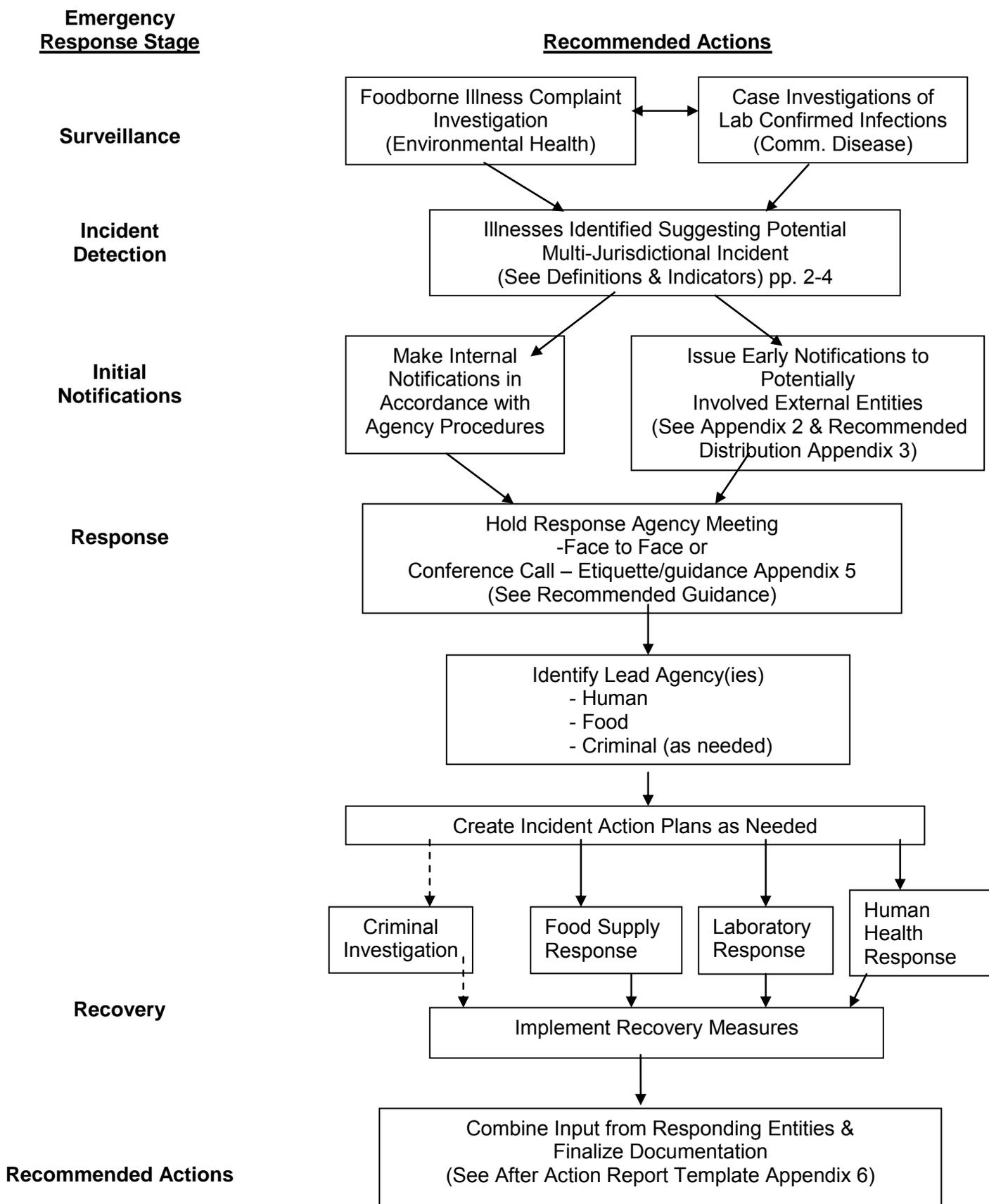
Appendix 6 contains an example After Action Report and format.

All participating agencies should have the opportunity to review and comment on the report before it is more widely distributed.

The lead agency(s) should review after-action reports periodically to determine whether common problems in investigation or response are occurring over time. This can help with an agency's quality improvement efforts.

All multi-jurisdictional outbreak investigations should be reported by the lead agency using the NORS/CDC 52.13 form (recently updated – attached as appendix 7) and sent to MDARD. MDARD will in turn send to MDCH for entry into the National Outbreak Reporting System (NORS) database. Please use the CDC 52.12 for waterborne investigations and submit to MDCH.

Stages of a Multi-Jurisdictional Foodborne Illness Outbreak



State of Michigan
Multi-jurisdictional Illness Outbreak
Early Notification Fax/Email Template

Date:	To:	Fax:	
	cc:	Fax:	
	cc:	Fax:	
Date LHD First Notified:	State notifications sent to: <input type="checkbox"/> MDARD, Food & Dairy Division, Fax: 517-373-3333 FOODBORNE CONTACT		
County of Exposure:	<input type="checkbox"/> MDCH, Communicable Disease Division Fax: 517-335-8263 FOODBORNE CONTACT <input type="checkbox"/> Other		
	From:	Phone:	
<p>This is an early warning/notification on an investigation we are conducting. The information contained in this notice should be considered <i>preliminary</i> and <i>confidential</i>. This information should not be shared or distributed without permission from the sender. If you have similar cases, please notify us and other appropriate agencies immediately.</p> <p>The _____ Health Department is currently investigating an outbreak that is suspected to be</p> <input type="checkbox"/> foodborne <input type="checkbox"/> waterborne <input type="checkbox"/> of unknown source/vehicle			
Number of Cases: _____		Number of Clusters: _____	
Earliest Onset Time/date, if known: _____		Latest Onset Time/date, if known: _____	
Incubation : _____ <input type="checkbox"/> Hours <input type="checkbox"/> Days			
Main Symptoms:		Pathogen/Agent:	<input type="checkbox"/> suspected <input type="checkbox"/> confirmed
Food/Water Product(s): <input type="checkbox"/> suspected <input type="checkbox"/> confirmed	Suspected Place(s) of Exposure:	Date(s) of Exposure:	
Details:			
Our Agency's Lead Contact Is: Name: Phone Number: Fax Number: Email:			

LOCAL HEALTH DEPARTMENT CONTACTS

LOCAL HEALTH DEPARTMENT Phone & Fax Numbers	AFTER HOURS CONTACT INFORMATION	Health Officer and Medical Director	Environmental Health Director
Allegan County 269-673-5411 Fax: 269-673-4172	Central Dispatch 269-673-3899 ask for Bill Hinz	Rashmi Travis, M.P.H. rtravis@allegancounty.org Richard Tooker, M.D., M.P.H.	William Hinz, R.S., B.S. bhinz@allegancounty.org
Barry-Eaton District (*EATON) 517-485-7110 517-485-7111 517-541-2615 Fax: 517-541-2686	On Call Staff 517-541-2683	Stephen R. Tackitt, R.S., M.P.H. stackitt@bedhd.org Colette Scrimger, M.S.W. scrimger@bedhd.org Deputy Health Officer Robert G. Schirmer, M.D. rschirmer@bedhd.org	Eric Pessell, R.E.H.S., B.A. epessell@bedhd.org Regina Young, Supervisor ryoung@bedhd.org
Bay County 989-895-4009 Fax: 989-895-4014	Central Dispatch 989-892-9551	Barbara MacGregor, B.S.N. macgregorb@baycounty.net Howard F. Hurt, D.O.,	Joel Strasz, straszj@baycounty.net 989-895-2018 Bob Hill, Senior Sanitarian
Benzie-Leelanau District (*BENZIE) 231-882-4409 Fax: 231-882-2204	231-633-9544	William A. Crawford, R.S. wrcrawford@bldhd.org Michael P. Collins, M.D., M.S.	William A. Crawford, R.S. (Benzie) wrcrawford@bldhd.org
Berrien County 269-927-5623 Fax: 269-927-2960	Berrien County 911 Central Dispatch 269-926-2638	Michael A. Mortimore, Ed.M., M.P.H. 269-927-5600 mmortimore@hline.org Two Medical Directors: Frederick A. Johansen, M.D. John R. Spriegel, M.D., M.P.H.	Gary T. Witkowski, R.S., gwitkowski@bchdmi.org
Branch-Hillsdale-St. Joseph District 269-273-2161 x233 Fax: 269-273-2452	Answering Services 269-441-2869	Steve Todd, R.S., M.P.A. todds@bhsj.org James Phillips, M.D.,	Rebecca Burns, R.S. burnsr@bhsj.org Karen Griffith, Coordinator
Calhoun County 269-969-6341 Fax: 269-969-0035	Bob Overly 269-420-9354 Cell 517-767-3746 Home	Jim Rutherford, R.S., M.P.A. 269-967-2590 jrutherford@calhouncountymi.gov Gregory Harrington, D.O. 269-967-7788	Paul Makoski, M.P.A., R.S. 269-967-6512 pmakoski@calhouncountymi.gov

LOCAL HEALTH DEPARTMENT Phone & Fax Numbers	AFTER HOURS CONTACT INFORMATION	Health Officer and Medical Director	Environmental Health Director
Central Michigan District (*ISABELLA) 989-773-5921 Fax: 989-772-8147 Administration Fax 989-773-4319	24/7 Contact Number 989-339-0682 Mari Pat Terpening, R.N., B.S.N.	Mary L. Kushion, M.S.A. mkushion@cmdhd.org Robert W. Graham, D.O., M.P.H.	Michelle Patton, R.S. (Isabella) mpatton@cmdhd.org Mark Janeczko, Supervisor Ext. 8324 Steve King, Supervisor
Chippewa County 906-635-1566 Administration Fax: 906-253-1466	906-635-1568	Dave Martin, R.S., M.P.H. dmartin@chippewahd.com 906-635-3621 Joseph Garlinghouse, M.D. 906-635-3631 jgarlinghouse@chippewahd.com	Dave Martin, R.S., M.P.H. dmartin@chippewahd.com 906-635-3621
Delta & Menominee District 906-786-9692 Fax: 906-786-1962	Mike Snyder 906-420-6831	Barbara Chenier, M.P.H. bchenier@phdm.org Dr. Teresa Frankovich, M.D., MPH tfrankovich@hline.org	Mike Snyder, R.S. msnyder@phdm.org
City of Detroit 313-876-4502 Fax: 313-876-4236	Security Office 313-874-4100 Cedric Marks, Manager 313-876-4508	Yvonne Anthony 313-876-4300 Fax: 313-876-0906 Melinda Dixon, M.D., M.P.H., 313-876-4040	Bruce King 313-876-4821
Dickinson-Iron District 906-774-1868 Fax: 906-774-9910	Sheriff Department 906-774-6262 (Contact List)	Stephen Markum Dr. Teresa Frankovich, M.D., MPH tfrankovich@hline.org	Daren Deyaert (Dickinson) ddeyaert@hline.org
District No. 2 989-345-5020 Fax: 989-343-1899	Pager 1-800-399-4504	Lynette Benjamin, B.S. lbenjamin@dhd2.org Dennis Smallwood, D.O.	Douglas Getty, R.S. (Tawas) dgetty@dhd2.org
District No. 4 989-356-4507 Fax: 989-356-3529	Answering Service: 1-800-221-0294	John Bruning jbruning@hline.org Joshua Meyerson, M.D., M.P.H.	Scott J. Smith, R.S., M.A. (Alpena) ssmith@hline.org 989-354-4230
District No. 10 231-873-2193 Fax: 231-873-4248	Emergency Preparedness Coord. (810) 931-2340	Linda VanGills lvangills@dhd10.org James Wilson, M.D.	Thomas Reichard, R.S., M.P.A. (Wexford) treichard@dhd10.org 231-876-3820
Genesee County 810-257-3612 Fax: 810-257-3147	Dorothy Wicks (810) 730-3566	Mark Valacak, M.P.H. mvalacak@gchd.us Gary K. Johnson, M.D., M.P.H., F.A.A.P.	Dorothy Wicks dwicks@gchd.us 810-257-3603

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Grand Traverse 231-995-6051 Fax: 231-995-6033	Pager: 231-318-0415	Frederick L. Keeslar, R.S., M.S.P.H. fkeeslar@co.grand-traverse.mi.us Michael P. Collins, M.D., M.S.	Thomas A. Buss, R.S. tbuss@co.grand-traverse.mi.us
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Kent County 616-632-6900 Fax: 616-632-6892	Brian Hartl Pager: 616-680-0975 Al Kramer Pager: 616-680-5392	Catherine Raevsky Cathy.raevsky@kentcountymi.gov Mark Hall, M.D., M.P.H.	Adam London Adamlondon@kentcountymi.gov Brian Hartl, Epidemiologist 616-632-7287 Al Kramer, Supervisor 616-632-6917
Lapeer County 810-667-0392 Fax: 810-667-0283	Mitch Caskey 810-724-8895	Stephanie Simmons, R.N., B.S.N., M.P.A. ssimmons@lapeercounty.org Russell Bush, M.D., Med, MBA	Mitchell Caskey, R.S. mcaskey@lapeercounty.org
Lenawee County 517-264-5202 Fax: 517-264-0790	Sheriff Department 517-263-0524 (H.D. Contact List)	Patricia Bourgeois, R.N., M.S. Dennis Chernin, M.D., M.P.H.	Martha Hall mhall@hline.org 517-264-5222

LOCAL HEALTH DEPARTMENT Phone & Fax Numbers	AFTER HOURS CONTACT INFORMATION	Health Officer and Medical Director	Environmental Health Director
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Luce-Mackinac-Alger-Schoolcraft District 906-293-5107 Fax: 906-293-5453	Nick Derusha 906-293-3053 906-420-1867 Cell	Nick Derusha nderusha@lmasdhd.org Dr. James C. Terrian jterrian@lmasdhd.org	Nick Derusha nderusha@lmasdhd.org
Macomb County 586-469-5236 Fax: 586-469-6534	Answering Service 586-296-4499 Steve Gold	Steve Gold, M.P.H. Steve.gold@macombcountymi.gov Kevin P. Lokar, M.D., M.P.H.	Gary White, R.S., M.S. Gary.white@macombcountymi.gov Steve Lichota, Associate Director Steve.lichota@macombcountymi.gov Sherry LaBelle, Associate Director Sherry.labelle@macombcountymi.gov
Marquette County 906-475-4195 Fax: 906-475-9312	Central Dispatch 906-475-9912	Fred Benzie, R.S., M.P.H. fbenzie@mgctcty.org 906-475-6500 Dr. James C. Terrian jterrian@lmasdhd.org	Fred Benzie, R.S., M.P.H. fbenzie@mgctcty.org 906-475-6500
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Mid-Michigan District (*MONTCALM) 989-831-5237 Fax: 989-831-5522 Env. Health 989-831-3607 Fax: 989-831-9227	Pager 24/7 989-276-0260	Kimberly Singh, M.A. ksingh@mmdhd.org Robert Graham, D.O., M.P.H.	Bob Gouin, (Montcalm) bgouin@mmdhd.org

LOCAL HEALTH DEPARTMENT Phone & Fax Numbers	AFTER HOURS CONTACT INFORMATION	Health Officer and Medical Director	Environmental Health Director
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Ottawa County 616-393-5645 Fax: 616-393-5643	Jennifer Sorek 616-886-8205 616-298-4024	Lisa Stefanovsky lstefan@miottawa.org Paul Heidel, M.D.	Deb VandeBunte, Supervisor
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Sanilac County 810-648-2150 Fax: 810-648-2646	Sheriff Department 810-648-2000 or 911 (Environmental Health Contact List)	Dianna Schafer schaferd@sanilachealth.com Dennis A. Smallwood, D.O.	Steven Aguinaga aguinagas@sanilachealth.net

LOCAL HEALTH DEPARTMENT Phone & Fax Numbers	AFTER HOURS CONTACT INFORMATION	Health Officer and Medical Director	Environmental Health Director
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Tuscola County 989-673-8114 Fax: 989-673-7490	Central Dispatch 989-673-8738	Gretchen Tenbusch, R.N., M.S.A. gtenbusch@tchd.us Russell I. Bush, M.D., M.P.H.	Tip MacGuire tmacquire@tchd.us 989-269-9721 x 137
Van Buren/Cass County District 269-621-3143 Fax: 269-621-2725		Jeffery L. Elliott, B.B.A. jeffe@vbcassdhd.org Two Medical Directors: Frederick A. Johansen, M.D., John R. Spriegel, M.D., M.P.H.	Michael W. Laufer, R.S. (ext. 317) Michaell@vbcassdhd.org
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Western Upper Peninsula District 906-482-7382 Fax: 906-482-9410	Dr. Terry Frankovich 906-482-7382	Guy St. Germain, M.P.A. gstgermain@hline.org Dr. Teresa Frankovich, M.D., MPH tfrankovich@hline.org	Lynne Madison, R.S. (Houghton) lmadison@hline.org
City of Holland 616-355-1330 Fax: 616-355-1333			Cindy Osman c.osman@cityofholland.com

State and Federal Contacts

Department Name And Contact Numbers	After Hour Contact	Agency Contact	Agency Contact
Michigan Department of Agriculture & Rural Development (MDARD) FDD fax 517- 373-3333	MDARD after hours Emergency contact (517) 373-0440 or (800)393-2929	Lisa Hainstock or Brenda Brennan HainstockL@michigan.gov brennanb@michigan.gov MDA Food and Dairy Division Main 517-373-1060	
Federal/USDA Office: 248-968-0230 Fax: 248-968-1420 Greenfield Rd, Suite 203 Oak Park, MI 48237	USDA after hours Emergency contact 248-968-0230	Steve Parker FSIS Regional Supervisor Steven.parker@fsis.usda.gov Cell: 248-388-0256 Dr. Allison Khroustalev, Midwest Regional Director Emergency: (312) 415-5967	Connie Kiefiuk Senior Compliance Investigator Constance.kiefiuk@fsis.usda.gov Cell: 248-388-0305
FDA Detroit District Office FDA Product Complaints	(313) 393-8100 Fax# (313) 393-8139 (313) 393-8198		
MDCH Communicable Disease Division MDCH Environmental Epidemiology Division (Chemical Agents) MDCH After Hours	(517) 335-8165 (517) 335-8350 (517) 335-9030		

Multi-jurisdictional Foodborne Illness Outbreak Response Checklist

Description:

- This checklist identifies information gathered during a complete foodborne illness outbreak investigation. Not all items apply to all investigations (example: an analytical study is sometimes not possible).
- Lead agencies typically are responsible for:
 - Development of the investigation design/response action plan
 - Coordination of investigation implementation
 - Adjusting the plan with response partners as needed
 - Writing the final report

These tasks are identified with ** below

- Supporting agencies are responsible for:
 - Fulfilling their legal jurisdictional requirements
 - Completing commitments in accordance with agreed to response plan
 - Timely notification of the lead agency when they become aware that the plan must be adjusted
 - Completion of case interviews for ill persons residing in their jurisdiction
 - Taking regulatory actions needed to control sources under their jurisdiction.

Human Health Epidemiologic Investigation:

- ___ **Development of investigation
- ___ **Response action plan (in coordination with other responding agencies)
- ___ **Definition of illness (case definition)
- ___ Number of ill persons
- ___ Number hospitalized and any fatalities
- ___ Number exposed (if known)
- ___ Dates, times of onset of illness and exposures
- ___ Location(s) of illness occurrence
- ___ **Questionnaire development and administration
- ___ List of foods and other variables assessed
- ___ Portion size of food consumed (if available)
- ___ **Analysis and Results – Plot of the epi curve & food-specific attack rates
- ___ [** = lead agency responsibilities]

Laboratory Investigation

- ___ **Identify appropriate lab testing based on evidence provided
- ___ Clinical samples from symptomatic individuals (Stools, Serum, Urine, Other)
- ___ Specimen(s) from food workers (Stools, swabs from hands, nose and throat)
- ___ Food, environmental and water samples from point of service
- ___ Communicate lab findings

Food Supply & Environmental Investigation:

- ___ Conduct environmental assessment of site(s) implicated by the human health/epidemiologic investigation.
 - Identification of suspected agent and vehicle. If a pesticide is suspected, collect the exact product name and EPA registration number and active ingredients (if known).

- Review of food worker illnesses and absences
- Collection of food worker specimens (if appropriate). See food worker under “Laboratory samples”.
- Food preparation review of implicated foods, including times and temperatures.
- Assessment of water supply, potential cross connections.
- Assessment of sewage disposal system and any opportunities for wastewater backup into food, sinks, or equipment
- Assessment of traps and drains as a potential source of contamination
- Results of surface swabs, if collected.
- Labels and descriptive information on products, where available
- Records of sale/shipment for one shelf life of product (harvest-to-table shelf life)
- Results of samples of the implicated food, where available and appropriate
- Results of environmental swabs (surface and utensil swabs)
- Results of sample controls
- Food worker/food safety training/knowledge
- List possible contributing factors

_____ sample collection

_____ **traceback/trace forward investigations

_____ rapidly public communication (in coordination with human health investigation)

_____ controlling contaminated products

_____ disposal of affected food and/or agricultural products

_____ decontamination of affected food facilities

_____ **oversight of recalls of affected food or agricultural products.

Guidelines for Conference Call Etiquette

Multi-jurisdictional conference calls are an important tool for improving coordination and communication among different agencies.

Early response efforts focus upon the human illness (epidemiologic) investigation and may convene regularly to provide status updates, epidemiologic/laboratory guidance and technical support as needed.

Impacted food regulatory agencies (local, state, federal, and tribal) should be included on the calls to understand the methods, findings and conclusions so the implicated product(s) can be removed from the market as rapidly as possible.

Conference calls in the early phase of a multi-jurisdictional food emergency response:

- Calls may be initiated by a local jurisdiction or state agency
- Epidemiologic information discussed
- Epidemiologic and laboratory guidance provided
- There should be a clear understanding of action item expectations
- Information exchanged on methods, findings and conclusions
- Discussion and coordination of media issues

Later response efforts focus on the food supply or environmental investigation – provide environmental/regulatory guidance and technical support.

Disease control and epidemiology staff should be included in these conference calls to provide updates on the ongoing epidemiologic investigations.

Conference calls in the later phase of a multi-jurisdictional foodborne emergency response:

- Calls may be initiated by a local jurisdiction or state agency (usually hosted by the designated lead agency for the food supply component of the investigation)
- Facility inspections, product sampling and analysis, food preparation reviews, trace back and source investigations discussed
- Environmental and food laboratory guidance provided
- Information exchanged of methods, findings, conclusions, and regulatory actions
- Discussion and coordination of media issues

Conference Call Etiquette Checklist

Host

- Make and distribute agenda before the conference call, when possible. The agenda should include:
 - Name and affiliation of the facilitator/convener
 - Format for reporting information
- Distribute handouts in advance
- Identify host/leader of call.

- Identify and notify point of contact in all relevant agencies.
- Take attendance, make introductions.
- Explain jargon, abbreviations.
- Stay on topic, stay on time.
- Solicit everyone's input.
- Record and distribute a summary of the call including action items and plans for the next meeting, if known.

All Participants

- **Do not** put the conference call on **hold**. Some phones will play background music when on hold, disrupting the call.
- Do not use a cell phone, as this often disrupts the call and makes other participants unable to hear.
- Identify yourself and affiliation when you log on to the call.
- After identifying yourself, please put your phone on **mute** and leave it on mute until you wish to speak. After speaking, return the phone to mute.
- Identify self and organization before speaking.
- Explain jargon, abbreviations.
- Stay on topic, stay on time.

GENESEE COUNTY HEALTH DEPARTMENT AFTER ACTION REPORT

EXAMPLE

Catered Business Luncheon Outbreak Investigation

Event Date
November 15, 2006



Report Date
November 29, 2006

Prepared by:

K DeSnyder, Emergency Preparedness Coordinator (EPC)

In Consultation with:

M Valacak, Community Health Director

D Kremlick, Public Health Nursing Coordinator

D Gonzales, Environmental Health Supervisor

P McKenna, Sanitarian

S Hudson, Nursing Supervisor

F Mamou, Epidemiologist

Distribution List:

MDCH OPHP
 C-DIRT
 DPG Supervisor

Summary

On Thursday, November 16, the Environmental Health Food Safety Supervisor at Genesee County Health Department was notified by an employee of 'The Business' of a catered luncheon served on Wednesday, November 15, at 'The Business' in which approximately 30 individuals became ill. See the affiliated outbreak report for a full account of the investigation.

Incident Summary

Date	Time	Event
11/16/06	1515	Notified via phone of potential outbreak at 'The Business'
11/16/06		'The Business' began compiling contact information for those who attended the luncheon
11/17/06	900	C-DIRT convened to develop an action plan for outbreak
11/17/06		Catering company interviewed and information collected on food preparation
11/17/06	1130	Outbreak Specific questionnaire developed and staff trained on utilization of the questionnaire
11/17/06		'The Business' contacted to ensure capability to do large group self-administered questionnaires
11/17/06	1300	Sanitarians and nurses paired to go on site and direct questionnaire completion
11/17/06	1600	~100 questionnaires completed onsite
11/17/06		Catering company employees interviewed
11/17/06		Identified potential sources of contamination and implemented control measures with the catering company- i.e. reiterated proper thawing and cooking
11/20/06	1300	Access database created for data entry to begin
11/20/06	1300	Stool samples collected
11/20/06		Turkey sample collected
11/21/06		Stool and Turkey samples sent to lab for testing
11/22/06		Data entry complete
11/27/06		Data analysis begun
11/27/06		Report writing to begin, still pending final lab results

Functional Area Reports

N/A

Lessons Learned

- Unclear when to use Chain of Custody Form
- Training for staff administering questionnaires is beneficial. Noticed a difference in data completeness when staff were not trained versus when they were trained.
- Quick response by GCHD to interview patients at 'The Business' was acknowledged and appreciated.
- GCHD staff were professional during administration of the questionnaire.

- It was beneficial to be able to do a group self-administered questionnaire. Group self-administered questionnaires should remain an option depending upon the population to be surveyed.
- Combination of having a nurse and sanitarian facilitate questionnaire completion was a good choice easier to answer patient questions.
- GCHD staff reviewed completeness of questionnaires before patient departed. Noticed a big difference in data completeness.
- Discrepancies among GCHD staff on whether or not the state lab would accept food specimens for testing.
- Access database was created for data entry. Analysis would have been faster if the data could have been entered directly into Epi Info. Few staff have Epi-Info installed on their computers.
- ICS structure was not utilized as well as could be.

Enclosures

None

Corrective Action Plan

- Chain of Custody Form for GCHD will be finalized, used on a routine basis as part of the standard operating procedure when collecting specimens, and copies will be maintained with specimen collection kits.
- Training for staff administering questionnaires needs to be a standard procedure before every investigation.
- If possible distribute questionnaires to population a head of time to facilitate quicker and better responses during the interview. Allows patients to review questions and think of answers a head of time.
- Contact state representatives earlier to discuss outbreak response, sampling procedures, etc. Include state representatives on an initial conference call when C-DIRT first convenes.
- Clarify role of Regional Epidemiologist
- Distribute current flow sheet for lab testing to C-DIRT and appropriate staff
- Install Epi-Info on clerical staff computers to assist with data entry
- Train data entry staff each time before data entry begins
- Utilize ICS during all investigations to help streamline communications and designate jobs

The National Outbreak Reporting System [NORS] CDC 52.13 form is inclusive of Foodborne Disease Transmission, Waterborne Disease Transmission, Person-to-Person Disease Transmission, and Animal Contact Disease Transmission.

This 6 page form replaces previous copies of CDC 52.12 and 52.13.
It can be found on the CDC's website at:

http://www.cdc.gov/outbreaknet/pdf/NORS_CDC5213.pdf

ICS Incident Types

Incidents may be typed in order to make decisions about resource requirements. Incident types are based on the following five levels of complexity. (Source: U.S. Fire Administration)

Type 5

- The incident can be handled with one or two single resources with up to six personnel.
- Command and General Staff positions (other than the Incident Commander) are not activated.
- No written Incident Action Plan (IAP) is required.
- The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene.
- Examples include a vehicle fire, an injured person, or a police traffic stop.

Type 4

- Command staff and general staff functions are activated only if needed.
- Several resources are required to mitigate the incident.
- The incident is usually limited to one operational period in the control phase.
- The agency administrator may have briefings, and ensure the complexity analysis and delegation of authority are updated.
- No written Incident Action Plan (IAP) is required but a documented operational briefing will be completed for all incoming resources.
- The role of the agency administrator includes operational plans including objectives and priorities.

Type 3

- When capabilities exceed initial attack, the appropriate ICS positions should be added to match the complexity of the incident.
- Some or all of the Command and General Staff positions may be activated, as well as Division/Group Supervisor and/or Unit Leader level positions.
- A Type 3 Incident Management Team (IMT) or incident command organization manages initial action incidents with a significant number of resources, an extended attack incident until containment/control is achieved, or an expanding incident until transition to a Type 1 or 2 team.
- The incident may extend into multiple operational periods.
- A written IAP may be required for each operational period.

Type 2

- This type of incident extends beyond the capabilities for local control and is expected to go into multiple operational periods. A Type 2 incident may require the response of resources out of area, including regional and/or national resources, to effectively manage the operations, command, and general staffing.
- Most or all of the Command and General Staff positions are filled.
- A written IAP is required for each operational period.
- Many of the functional units are needed and staffed.
- Operations personnel normally do not exceed 200 per operational period and total incident personnel do not exceed 500 (guidelines only).
- The agency administrator is responsible for the incident complexity analysis, agency administrator briefings, and the written delegation of authority.

Type 1

- This type of incident is the most complex, requiring national resources to safely and effectively manage and operate.
- All Command and General Staff positions are activated.
- Operations personnel often exceed 500 per operational period and total personnel will usually exceed 1,000.
- Branches need to be established.
- The agency administrator will have briefings, and ensure that the complexity analysis and delegation of authority are updated.
- Use of resource advisors at the incident base is recommended.
- There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.