



Toolkit for Responding to Foodborne and Waterborne Outbreaks

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Introduction

This document outlines how to respond to food and waterborne disease outbreak and delineates the roles of Food Safety and Communicable Disease staff by:

- Identifying the activities necessary to recognize and investigate food and waterborne outbreaks.
- Assigning specific outbreak response roles and responsibilities.
- Articulating mechanisms for communicating and sharing responsibilities.

Outbreak Investigation Objectives

The primary goals in an outbreak investigation are to confirm the outbreak, identify the source of disease, and implement controls to stop further spread.

- Identify causative agent.
- Establish methods to control transmission.
- Prevent similar outbreaks in the future by understanding the process that led to contamination and transmission.
- Learn more about known diseases and health conditions.

Food or Waterborne Illness Notifications

Sources of Illness Notification:

CCPH identifies food and waterborne illness through:

- a. Calls from individuals reporting illness directly to the Communicable Disease unit (ext. 8182).
- b. Routine surveillance of laboratory isolates of reportable pathogens.
- c. Reports from schools, daycares and healthcare facilities.
- d. Reports by food service facilities.
- e. Illness complaints from patrons through calls to Customer Service or via the web-based EPH complaint form ([Link](#)).
- f. Contact to EPH staff directly.
- g. Calls to the Duty Officer phone line.

Illness Notification Triage:

- 1) Illness complaints received through **Customer Service** (i.e. front desk, EPH email, EPH notification phone line, etc.) will be triaged per [PRO 401](#).

- a. Enter notification into Envision and forward to CD unit (DL, Cnty Health CD Investigators).

2) **Communicable Disease Unit** will directly respond to illness notifications received through:

- a. Lab reports of reportable pathogens.
- b. Schools and daycares.
- c. Healthcare facilities and providers.
- d. Calls directly to the Communicable Disease unit (ext. 8182).

In most situations, illness notifications related to food and water received directly by the Communicable Disease Unit should be logged into Envision and fully investigated. This applies to nearly all notifications, including those received after an outbreak investigation and public health actions are underway.

Confirm a Suspect Outbreak

The sooner an outbreak is detected the quicker a response can be implemented to prevent further transmission. Use the below steps to help detect if an outbreak is developing:

- Determine existence of an outbreak by using all or some of the following methods:**
 - Compare the case rate with case rates from previous weeks or months, or from a comparable period during previous years.
 - Assure the rise in numbers is not due to changes in reporting procedures, case definition, diagnostic procedures, or increased awareness at the local or national level.
 - Consider transient populations (e.g. resorts, conferences, college students, or migrant farm workers) as a source for increased case numbers.
 - Consider point source based on the epidemiology.
 - Consult with the DOH CD Epidemiology and Food Safety teams to determine if surrounding jurisdictions are experiencing similar increases.
- Confirm diagnosis and assess risk or threat to the public's health.**
 - Review clinical findings and symptom profile for cases.
 - Verify lab results if available.
- Declare an Outbreak.**
 - Notify the CD and Food Safety Program Managers that a suspected outbreak has been confirmed due to an increase in related illnesses, and to determine next steps.
 - Once an outbreak is confirmed, proceed to conducting an outbreak investigation.

Outbreak Investigation

Conducting a thorough and timely investigation is essential for effective outbreak control. Investigations involve multiple steps not always occurring sequentially, they may happen simultaneously or not at all. The below checklist is meant to serve as a guide, and actions required as part of the investigation may expand or contract depending on the size and complexity of the outbreak.

☐ Identify investigation team and resources.

- Size and expertise of the team varies according to the outbreak and nature of the condition, and may change as the outbreak progresses.
- Review team members expected roles and responsibilities (see [Appendix C](#))
- The below table is an example of the composition of an outbreak team and the resources available at the state level.

Ex. CCPH Team	State Resources
<ul style="list-style-type: none">• Team Leader• Epidemiologist• Environmental Health Specialist• Public Health Nurse• Public Information Officer (PIO) (if applicable)• PHEPR (if applicable)	<ul style="list-style-type: none">• Public Health Lab• Epidemiologist• Food Safety

☐ Prepare initial epidemiology meeting report including:

- Name and address of the Food Service Establishment or site of outbreak.
- Number of known ill persons.
- Suspected or confirmed etiology.
- How the outbreak was identified.
- Other relevant background information.
- Dates and timelines.
- Consult with DOH CD Epidemiology if similar illnesses seen elsewhere.

☐ Prepare initial EPH investigator meeting report including:

- Past food safety or recreational water inspection reports when applicable.
- Food process risk factors that could contribute to the outbreak.
- Reports of ill food worker(s).
- Consult with DOH program staff to notify of situation and solicit relevant information including other possible reports impacting the investigation.

☐ Coordinate outbreak response team planning meeting via in-person, phone or email depending on size and complexity of outbreak.

- Brief the outbreak response team.

- Review team roles and responsibilities.
 - Establish goals and objectives for the investigation including identifying the cause of the outbreak, determine the spread of disease, and identify appropriate control measures.
 - Identify other relevant partners and primary contacts for involved organizations.
 - Select, prioritize, and assign investigation activities using the [Investigation Notes template](#) to outbreak response team members based on hypotheses about the potential source.
 - Determine need to inform PHEPR and Duty Officer of the situation.
- ❑ **Develop a communication plan that defines who in the organization will lead communication efforts so stakeholders are provided with consistent information, rumors are minimized, and good working relationships are maintained beyond the outbreak. Work with the Public Information Officer to review and update the communication plan (see [Communication section](#)).**
- ❑ **Determine the scope of the investigation, taking into consideration:**
- Severity and number of illnesses.
 - Communicability or ability of the disease to spread in the population.
 - Potential for an ongoing health threat.
 - Level of concern present in the community.
 - Resources available to conduct the investigation.
 - Political considerations.
- ❑ **Conduct epidemiological investigation (see [Checklist](#)).**
- Create a line list and identify additional cases through active case finding.
 - Conduct descriptive epidemiology (*who, what, where, when and how*).
 - Develop and test hypotheses (*e.g., cause of disease, risk and exposure factors, and transmission*).
- ❑ **Establish the case definition.**
- For purposes of reporting cases to DOH CD Epidemiology and Food Safety teams, verify the case definition in the Washington Department of Health Communicable Disease Epidemiology [Guidelines](#). For Public Health investigations, classifications vary by disease.
 - For outbreak purposes, case definitions should be tailored to the situation, and evolve with outbreak.
- ❑ **Conduct laboratory investigation (see [Specimen Collection section](#)).**
- The role of the Washington State Public Health Lab is to identify the specific agent and subtype. Some of the services they can support include:
- Test environmental samples and clinical specimens.
 - Conduct confirmatory diagnostic testing and forensic analysis of specimens.
 - Provide molecular “fingerprinting” (molecular epidemiology) – these methods help determine which persons with a common infection can be linked to a common source.

- ❑ **Conduct environmental investigation (see [Checklist](#)).**
Provide information about exposure to and/or contamination with a disease-causing agent during such activities as food preparation, manufacturing, or during recreational activities. These investigations may include:
 - Review of previous inspection results and possible linkage to outbreak.
 - Facility site investigation.
 - Observation of operations and production processes.
 - Sampling of food products, water sources, environmental surfaces and material and animals that can be tested in the laboratory for disease-causing agents.
 - Request and assess ill food worker records including details of the facility's process for ill food worker notification, tracking, and criteria determining when an ill food worker are able to return to work.
 - Conduct ill food worker interviews if deemed viable.

- ❑ **[Implement control measures](#).**

- ❑ **Hold daily outbreak team coordination meetings as appropriate for the outbreak.**
 - Brief team on any epi updates or new developments.
 - Update on progress made related to the previous day's task list, and assign team with new assignments for the day (see [Investigation Notes template](#)).
 - Update talking points for use by the response team.
 - Review and determine any additional communication needs (internal and external).
 - Reassess strategies as appropriate.

- ❑ **CD Unit to consult with the Food Safety and Communicable Disease Program Managers to determine need for external assistance.**
 - Additional investigation support may be available through the Outbreak Response and Collaborative Action (**ORCA**) team (DOH CD Epi Contact: (206) 418-5500) or the Student Epidemic Action Leaders (**SEAL**) (DOH CD Epi Contact: (206) 418-5515).

- ❑ **Communicate investigation findings internally and externally (see page 11).**
 - Develop communication plan in coordination with PIO. All communications regarding the outbreak will take into account epidemiologic and laboratory information discovered during the investigation and vetted by the PIO.
 - ➔ Food Safety team will serve as main point of contact with the Food Service Establishment.
 - ➔ CD Team will serve as main point of contact with cases.

- ❑ **If intentional contamination is suspected, notify law enforcement officials immediately if the threat is deemed credible.**

Specimen Collection

Based on the epidemiologic and/or environmental health investigation data determine need for sampling and testing of specimens in order to aid in confirming cases and identify implicated food or water sources.

All testing results should be communicated to the outbreak response team through the daily update meetings or via email if daily meetings are not being held.

Role and responsibilities of the Washington State Public Health Lab (WAPHL):

- 1) Provide recommendations for:
 - Proper collection of specimens.
 - Appropriate specimens transport conditions.
 - Testing strategies when the etiologic agent is unknown.
- 2) Assist in the interpretation of lab results.
- 3) Disseminate lab results to the specimen submitters.

Biological Specimens:

- If determined based on epidemiological data that stool specimens are needed as part of the investigation, the CD team will first get permission from DOH CD Epi to test each sample prior to submitting specimen(s).**
- Stool specimen collection (see standing order [SO 302](#)).**
 - a. In situations where a case is unable to see a healthcare provider, the CD unit can deliver and collect stool kits to and from cases to establish an etiology through laboratory testing.
 - b. Contact clinical laboratories that might have performed primary cultures on cases and ensure positive isolates are forwarded to the WAPHL for further analysis.
 - c. The CD PHN will communicate all results for tests done through CCPH to the individual.
 - A stool specimen collection kit should include a collection hat, information sheet instructing client how to collect sample, and stool collection and transport tube (confirm tube type needed for suspect pathogen). Materials located [here](#).
- Consult with the Washington State Public Health Lab on pathogen specific collection, storage and shipping instructions ([link](#)).**

Food, Water or Environmental Samples:

- Food Safety team will consult DOH Food Safety to determine number of samples approved for testing, and refine sampling criteria.**
- At first site visit (or as soon as possible in the investigation) obtain samples of suspect food (or water) items and ingredients.**
 - a. Collect enough sample to aid identification of suspect agent.

WA PHL does not test food samples for Norovirus, with the exception of oysters.

- b. Store samples in a manner appropriate for the agent under suspicion. Refrigerate perishable food samples but keep foods that are frozen when collected frozen until examined.
- c. Collect foods prepared in the same way as the suspect food, if none of the suspect food is available.
- d. Collect samples from lots served during the potential exposure period if still available.
- e. Test foods (rather than clinical specimens) for outbreaks thought to involve preformed toxins, because detection of toxin or toxin-producing organisms in clinical specimens can be problematic.
- f. Label samples and establish chain of custody (see [Appendix D](#)).
- g. After consulting with the Food Safety Program Manager, communicate food and/or environmental sample test results to the Food Service Establishment.

- Consult with the Washington State Public Health Lab on pathogen specific collection, storage and shipping instructions ([link](#)).**

Implement Control Measures

Implementing control measures should be done as soon as possible. Multiple approaches may be implemented simultaneously. Measures should be aimed at eliminating factors that could lead to further transmission and follow investigation guidelines for the specific disease agent. When results of the investigations are available, they can be used to implement additional or modified disease control and prevention measures.

- Put in place hold orders of suspected contaminated foods for future sampling and/or destruction. Food may be released if not implicated with the outbreak. If the food cannot be determined to be safe, it should be destroyed.**
 - a. Epidemiologist will provide advice if data is available on suspect food items.
- Disinfect contaminated water.**
- Make recommendations about hand hygiene practices for preventing the spread of disease.**
- Exclude or restrict ill food workers.**
 - a. The CD Unit will manage all work exclusions and follow DOH recommendations for when an ill food worker can return to work.
- Closing and reopening a Food Service Establishment involved in an outbreak.**
 - a. Food Safety Program Manager, in consultation with the Health Officer, will determine need to close a Food Service

Food Safety EHS or Program Manager should notify DOH Food Safety Program staff as soon as possible.

Establishment during an outbreak investigation.

- b. Standard procedures for closing a facility shall be adhered to by the Food Safety team, including posting signs and additional enforcement action as needed.
- c. The Food Safety Program Manager and Health Officer shall include the PIO and Clark County Prosecuting Attorney as needed to facilitate enforcement action.
- d. The decision to reopen a Food Service Establishment that was closed because of an outbreak must be determined by the Health Officer in coordination with the Communicable Disease and Food Safety Program Managers.

Food Product Recall

- a. Food Safety Program Manager will forward all recalls to CD (DL, Cnty Health CD Investigators) and Food Safety team members within 24 hours of receipt.
- b. EPH will assist in recalls issued by WA DOH as requested.
- c. CD Epi is responsible for coordinating trace backs with WA DOH, FDA, USDA, and CDC, as appropriate. Environmental Health will assist by obtaining pertinent information from the Food Service Establishment.
- d. CD and Food Safety Program Managers may consult with the Health Officer if considering additional actions beyond recommendations from involved agencies.

Outbreak Investigation Wrap-Up

Reporting to DOH:

- a. The EHS will complete the [DOH Field Investigation Worksheet – Part 2](#) and submit to DOH Food within **30 days**.
- b. The CD Epi (or back-up) will complete the CDC [National Outbreak Reporting System Report Form](#) in coordination with EHS and submit to DOH Epi within **2 weeks** of the conclusion of the investigation.

Completing the outbreak summary report:

- a. EHS will email the CD Epi a written report summarizing the environmental health findings related to the cause of the outbreak within **2 weeks** of the conclusion of the environmental health investigation.
- b. CD epidemiologist will draft an outbreak investigation report consistent with the size and complexity of the investigation within **30 days** of the conclusion of an outbreak investigation. Report should include:
 - Epidemiologic findings.
 - Laboratory test results if applicable.
 - Environmental health findings.
 - Conclusions based on available data related to the cause or extent of the outbreak.

- c. CD Epidemiologist will forward the draft report to the EHS, CD and Food Safety Program Managers for comment.
- d. CD epidemiologist will send the final report to CD and Food Safety Program Mangers and the Outbreak Response Team.
 - The EHS is responsible for sending a copy of the final outbreak report to the Food Service Establishment if requested.
 - CD is responsible for communicating outbreak findings to any inquiring complainants.

☐ **Conduct a post investigation hot-wash meeting:**

- a. At the conclusion of an outbreak investigation, the Outbreak Response Team will conduct a hot-wash to review:
 - Effectiveness of communication and investigation process.
 - Identify any lessons learned and action items for follow-up.
 - Identify factors that compromised the investigation and clarify needed changes to procedures, resources and training to optimize future investigations.
 - Include other agencies involved in the outbreak response such as: DOH, FDA, WUSDA, other counties or stakeholders if applicable.
- b. Based on the hot-wash discussions, summarize findings and recommendations in a final report. This report should be used for internal purposes only.

☐ **File outbreak documentation:**

- a. All outbreak related documentation and records will be filed in the specific outbreak folder ([File path](#)), named with an outbreak number and a brief description (e.g. 2006-128: Norovirus Elks Club) within **2 weeks** of the investigation.
- b. CD Epidemiologist (or back-up) will coordinate all CD related records.
 - Ex. investigation reports, completed interview forms, treatment records, demographic and diagnostic data, internal databases used for maintaining outbreak information.
- c. EHS will coordinate all EPH related records.
 - Ex. Site inspection reports, interviews with ill food workers, sample collection records and testing results, closure notices.

Records Retention:
Records pertaining to an outbreak investigation will be retained for a period of 6 years. After this period, records will be transferred to Washington State Archives for appraisal and selective retention (HE55-01D-05, Rev. 1).

- d. Original copies of DOH required outbreak reporting forms will be faxed to the appropriate number (listed on the form). A scanned copy of the completed form will be filed in the outbreak folder.

Communications

Response to media inquiries:

- a. Inquiries from the media regarding an outbreak will be referred to the Public Information Officer (PIO). The PIO, in collaboration with the CD and Food Safety Program Managers will develop tailored media messages relating to the outbreak.
- b. When a multi-jurisdictional investigation, the information provided will align with the lead agency messaging.
- c. Follow standards in the CCPH Media Relations procedure ([PRO 002](#)).

Food service establishment:

- a. The Environmental Health Specialist will have primary responsibility for communicating with the Food Service Establishment management regarding any anticipated contact with the media about the outbreak. The Epidemiologist may assist the Environmental Health Specialist in providing such notification. Information provided to the Food Service Establishment will be vetted by the PIO and include:
 - Current status of the outbreak.
 - A consistent message that can be used by CCPH and the Food Service Establishment in responding to the media.

Proactive notification of the public or media regarding an outbreak:

- a. The decision to proactively notify the public about an outbreak will be made by the Health Officer in coordination with the, PIO, Food Safety and CD Program Managers. The need for public disclosure will take into consideration the following:
 - Does risk for exposure still exist?
 - Severe outcomes (i.e. type of pathogen, vulnerable population affected)?
 - Can the public take action to protect their health?
 - Is public reporting necessary to aid investigation?
 - Need to address misinformation circulating through other channels?
 - Is there public or media interest?
- b. The PIO will coordinate news conferences, development and distribution of news releases, and other vehicles for notifying the public about an outbreak if they are deemed appropriate.

Response to legal inquiries:

- a. Legal inquiries regarding an outbreak will be referred to the CD or Food Safety Program Managers.

Appendix A: Resources & References

CCPH

- Food Safety Team District Map ([link](#))

Other:

- [Barblog](#)
- CIFOR [Toolkit](#)
- [Iwaspoisoned.com](#)

Washington State Department of Health

- DOH notifiable conditions ([link](#))
- DOH Foodborne Disease Outbreak ([link](#))
- DOH Field Investigation Checklist ([link](#))
- DOH Public Health Lab Forms ([link](#))

Appendix B: Definition of Terms

- **Case definition:** a standard set of criteria for deciding whether a person is classified as having the condition under investigation and included in the investigation. Case definition criteria include person, place, time, and clinical and laboratory features of the disease and may change over the course of an outbreak. A case definition does not replace professional judgment in the clinical management of individual patients nor in the Health Officer's disease control management of suspected cases.
- **Cluster:** cases that are grouped in a given area over a particular time period but may not represent a real increase of numbers over what is expected in that time frame.
- **Descriptive epidemiology** is a systematic way to describe and characterize an outbreak according to person, place and, time. Use the results to generate a hypothesis about the cause of the outbreak and to communicate about the outbreak and the investigation.
- **Epidemic:** the occurrence of more cases of a disease than would be expected in a community or region during a given time period. The terms "outbreak" and "epidemic" are sometimes used interchangeably. The use of "epidemic" can also indicate situations involving large numbers of people over a wide geographic area.
- **Food Service Establishment¹:** A place, location, operation, site, or facility where food is manufactured, prepared, processed, packaged, dispensed, distributed, sold, served, or offered to the consumer regardless of whether or not compensation for food occurs.
- **Waterborne Illness Outbreak:** defined as an incident in which 1) two or more epidemiologically-linked persons experience a similar illness after exposure to the same water source and 2) epidemiologic evidence implicates the water as the likely source of illness (see [DOH # 420-044](#) for more details).
- **Foodborne Illness Outbreak:** defined as an incident in which 1) two or more persons experience a similar illness after exposure to the same food source and 2) epidemiologic

evidence implicates food as the likely source of the illness (see [DOH # 420-054](#) for more details). Public Health investigation and reporting may be limited to outbreaks that necessitated Public Health intervention; such as outbreaks with two or more persons from separate households with similar illness after exposure to the same food source.

Reference:

WAC 246-101-010: Notifiable Conditions - Definitions within the notifiable conditions regulations.

Appendix C: Outbreak Team Roles & Responsibilities

The Clark County Health Officer has authority for conduct, oversight, and outcome of all public health investigations. Day-to-day operational leadership will usually be delegated to either the Food Safety or Communicable Disease Program Manager(s). The list below is intended to serve as a guide, and may be adjusted depending on the size of the outbreak and to meet the needs and available resources of CCPH.

Team Leader (*often Food Safety, CD Program Manager, or Epidemiologist*)

1. Coordinate overall outbreak investigation efforts.
2. Prioritize and delegate investigation activities to team members.
3. Review the epidemiology of the disease and priority of investigation.
4. Assess resources available. Begin steps to pull additional resources as needed.
5. Request DOH or outside assistance as needed.
6. Facilitate communication with healthcare providers, hospitals, ERs.
7. Lead daily meetings with investigation team members and update on day's activities and prioritize next day's activities.
8. Maintain a timeline of events. Include activity dates, contact with different agencies, meeting/conference calls, and decisions pertaining to the outbreak.

Epidemiologist

1. Initial notification to DOH CD Epi and Serves as point-of-contact.
2. Regularly update DOH CD Epi on the status of the outbreak and interventions.
3. Formulate a case definition; classify cases into suspect, probable, confirmed or ruled-out.
4. Maintain a current case line list, an epidemic curve and number of suspect cases pending further investigation.
5. Provide daily epi status reports including the number of suspect, probable and confirmed cases reported, investigations completed and pending.
6. Ensure that cases are entered into PHIMS as they are received.
7. Discuss hypotheses for possible increases in the disease based on findings of inspections, case investigations, and laboratory results.

8. Lead active/enhanced surveillance activities for missed cases and train others as needed.
9. Train case investigators on how to properly investigation and interview tools developed.
10. Ensure after action report of the outbreak is completed and distributed to appropriate partners within 30 days of the end of the outbreak.

Public Health Nurse

1. Identify cases and exposed contacts.
2. Conduct patient interviews and complete investigation forms daily.
3. Provide daily status report of outstanding and completed investigations.
4. Identify cases in sensitive occupations and implement exclusions as appropriate.
5. Follow up with patients to ensure treatment as needed.
6. Collect and send clinical samples as needed.
7. Provide education to local providers about the disease under investigation.
8. Facilitate communication and ensure necessary education with schools, childcare centers, and other involved institutions.
9. Notify schools, childcare centers, and other involved institutions of outbreak control recommendations.

Environmental Health Specialist

1. Notify DOH Food Safety Team.
2. Perform investigation of facility to determine possible source(s) of exposure.
3. Collect food or water samples for testing.
4. Contact DOH Food Safety to coordinate sampling of food or environmental samples.
5. Fill out submission forms for food or water testing.
6. Implement control measures affecting the facility.
7. Work with DOH Food Safety to perform trace backs of implicated food items or ingredients.
8. Provide daily updates to team members on inspection/investigation findings and status of control measures.

Public Information Officer

1. Prepare/review press releases, fact sheets, talking points, frequently asked questions, and phone scripts as needed.
2. Assist in training staff to handle public calls and respond to questions.
3. Respond to and/or direct media and public inquires.
4. Develop/provide educational materials for the public and media.
5. Ensure proper dissemination of public information.

Appendix D: Chain of Custody

TEMPLATE - County Use

OBX ID # (CDDDB):	
Name of county official picking up samples(s):	
Name of county official delivering samples(s):	

Sample Information & Chain of Custody Log	Date	Time	Initials
Public Health Official collects product samples <u>Description of product sample(s):</u> Fresh/Frozen (circle one) Opened/Unopened package (circle one) Description of Packaging: Color: Branding/Wording on label: Invoice(s) available? Yes / No If yes, were invoices picked up? Yes / No / Previously submitted			
Public Health Official places sample(s) into sterile specimen bags			
Public Health Official places bagged sample(s) into a cooler filled with ice packs			
Public Health Official leaves facility and delivers to refrigerated storage at health department			
Public Health Official receives samples from ___PARTY 1___ and ___PARTY 2___ and examines for integrity and proper refrigeration. ___PARTY 1___ and PARTY 2 Chain of Custody end here.			
Public Health Official removes ___PARTY 1___ samples from refrigerator and places them in a cooler filled with ice packs			
Public Health Official departs ___PARTY 1___ with samples from ___PARTY 1___, ___PARTY 2___.			
Public Health Official arrives at ___LAB OR OTHER___			
Public Health Official drops samples(s) off with: _____LAB OR OTHER_____. ___PARTY 1___ Chain of Custody ends here.			
___LAB OR OTHER___ receives samples and ensures package integrity and proper refrigeration			

FDA use only	
Case-patient PulseNet ID#	
Food product Specimen ID #	
Date/time/initials for samples(s) received at _____	
Photographs taken?	Yes / No
Status of product	Frozen / Cold / Other (describe):
Product description (include brand, type, establishment # from packaging, lot #, use by / sell by / freeze by date)	

Appendix E: Public Records Request Process:

1. Lydia reviews request received through GovQA:
 - a) If categories of documents being requested is clear, insert the “Due Date” and forward the request to Monica.
 - b) If categories for documents being requested is NOT clear, send the requester a follow up email and ask for clarification (refer to Document Type Matrix).

Note: GovQA automatically gives a five day window for us to respond to the requestor however we may update and extend the timeline depending on the records and staff availability. Confirm with Program Manager turnaround time needed to complete the request.

2. Once records have been compiled, send records to PA for redactions.
3. Once all reviews are completed, send documents to customer.

Outbreak Document Type by Category:

Medical Record	Emails	Investigation Records
<ul style="list-style-type: none"> • Lab results (CCPH or state ordered labs) • Client interview forms (non-medical – i.e. control interviews) • Medical Chart or Chart Notes (if applicable) 	<ul style="list-style-type: none"> • Internal (when only CCPH staff are in copy) • External (includes any non-CCPH person in copy) 	<ul style="list-style-type: none"> • Client interview forms (non-medical – i.e. control interviews) • Line lists • Epi data reports • CD Staff Call logs (staff record purpose of each call, advice given, action, etc.) • Individual illness complaints (Envision) • Letters <ul style="list-style-type: none"> ○ Exposure notifications letters ○ Exclusion letters ○ To facilities
Internal Reports:	Media & Communications:	
<ul style="list-style-type: none"> • Investigation Notes & Task List • EFS Inspection reports • Outbreak hot wash reports 	<ul style="list-style-type: none"> • Internal talking points • Press releases • Provider Advisories 	
External Reports		
<ul style="list-style-type: none"> • Final outbreak summary 		

Checklist 1: Illness Complaint Interview

- Check Envision** for similar complaints within previous 2 weeks.
 - a. If complainant ate at more than 1 FSE within possible incubation period, consider all FSE as potential source.

If Customer Service sends a notification already entered into Envision:	If notification is NOT yet entered into Envision, start a new complaint:
<p>Make sure the main screen of the complaint is fully completed:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Name, phone number and address of the notified. <input type="checkbox"/> Name and location of the food establishment. <input type="checkbox"/> Name of food inspector assigned to food establishment. <input type="checkbox"/> Date and time of next action. <input type="checkbox"/> Summary of the incident including any other food establishments eaten at by name. <input type="checkbox"/> Sync the location and the owner of the food establishment. 	<ol style="list-style-type: none"> 1. Sign into Envision and click on complaint processing. 2. Click on add a complaint. 3. Search for facility in Envision. 4. Click on the appropriate facility. <p>Add:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Name, phone number and address of the notified. <input type="checkbox"/> Name and location of the food establishment. <input type="checkbox"/> Name of food inspector assigned to food establishment. <input type="checkbox"/> Date and time of next action. <input type="checkbox"/> Summary of the incident including any other food establishments eaten at by name. <input type="checkbox"/> Sync the location and the owner of the food establishment.

- Initiate contact for interview.**
 - a. If report is one person only, initiate contact within same business day when patient recall and cooperating with investigators is the greatest.
 - b. If an outbreak is suspected or confirmed, call within two hours of the initial call.
- Investigate reports of illness among groups who ate together more aggressively than illness related to isolated individual complaints.**
- Use the [DOH Case Investigation Worksheet](#)** to collect as much information as possible during the initial report including detailed exposure histories consistent with the incubation period of the pathogen identified/suspected, including:
 - a. Onset, duration, and nature of illness.
 - b. Ask client about group exposures, food item brands and place of purchase.
 - c. If complainant identifies other ill persons - collect their contact information.

- d. Document all food establishment(s) / event(s) (e.g. BBQ, wedding reception, potlucks) attended 5 days prior to the onset of symptoms.
- e. If an outbreak is related to an event or establishment, obtain a list of persons attending the event or a list of persons patronizing the establishment during the potential outbreak period.

Document foods eaten at the food establishment(s)/event(s):

- a. **Single case:** complete 5 day food history for all food establishments or events attended.
- b. **In an outbreak:** consult with Epi on appropriate interview tool to use looking at specific common exposures.

Interview all available ill/potentially exposed persons identified.

Assess if client attends daycare, lives or works in a residential facility, or works in a sensitive occupation (healthcare or childcare worker, food handler).

- a. If yes, exclude from attending or working at these facilities according to the disease specific DOH Guidelines.
- b. For norovirus infections, exclude for 48 hours after last symptom.

If in an outbreak, specific talking points will be developed for ensuring consistent communication is being provided to complainants related to the outbreak investigation.

Provide client with health education.

- a. Importance of good hygiene and ways to minimize dehydration when ill, etc.

Refer ill person to their healthcare provider as needed.

- a. Recommend that any client with bloody diarrhea call their healthcare provider for follow up care and request a stool specimen.

See WA DOH notifiable condition [guidelines](#) for further disease specific guidance.

Determine if incubation period and symptoms are consistent with illness from suspected exposure.

a. **Symptoms consistent with exposure:**

Inform case CCPH is not aware of other reports of illness identified from that food establishment or event, but CCPH will check with the food establishment and keep this report should additional people report illness. If the event did not have professional food handling, consult with CD/EPH managers to determine follow up steps (e.g. church potluck).

b. **Symptoms NOT consistent with exposure:**

Inform case that onset and duration are not consistent with exposure; however we will take note of the illness.

Update Envision interview notes.

- a. Access the Envision report by clicking on *complaint dispatch center*.
- b. Type in the restaurant name in the search bar.
- c. Pull down the arrow on the right side of the complaint and click *add a comment button*. Once it leads you to the comment section click *add a comment* on the bottom of the screen. Add your comments as outlined below:
 - Onset and duration of illness
 - Symptoms
 - Foods eaten
 - Suspect pathogen.
 - Whether illness is consistent with exposure.
 - If it is advisable that EPH go out for an inspection.
- d. Assign illness notification to appropriate EPH Staff.

☐ Determine appropriate response to Single Notification.

- a. Recommend a site visit from EHS if situation needs timely response:
 - Severe violation is observed (i.e., raw beef served).
 - Multiple calls on one facility.
 - Ill food handler identified.

Speak directly to EHS area staff on the same day as initial interviews.
- b. Send email with Envision #:
 - **To:** DL, Cnty Health CD Investigators and responsible EPH food staff.
 - **Cc:** Food Safety Program Manager, DL, Cnty Health – Food
- c. Based on knowledge of the facility, risk of foodborne contamination, and the notification information, EHS will make a further assessment if a site visit would be a prudent to protect public health.

Checklist 2: Illness Related to Store-Bought Food Items

- Interview case.**
 - a. Same process as food establishments/events, obtain 5-day food history as needed.
 - b. Note: only interviewing those who became ill, clients with only a food complaint get referred to assigned food safety inspector.
 - c. If illness appears to be related to a known recalled product, provide instructions to complainant from recall notice. If recall instructions cannot be located immediately, take the complainants phone # and agree to call them back with info when found.

- Research previous complaints for food item in Envision and recall notification emails regarding recent food recalls.**

- If no other exposures identified, refer client to Food Safety Program Manager.**
(May refer to staff or other agency such as DOH, FDA, USDA, WSDA).

- If multiple similar complaints identified, contact Food Safety Program Manager.**

- Enter new complaint in Envision:**
 - a. Complaint is associated with suspect food item, not facility.
 - b. Add a complaint, Continue Without a Facility.
 - c. Specific food/brand info put in Description field for future search-ability.
 - d. Specify store/location in Description field for reference.

- If a potential outbreak is suspected, alert the CD and Food Safety Program Managers.**

Checklist 3: Epidemiological Investigation

Select tools for on-site investigation.

- a. Food worker interview forms.
- b. Illness interview forms.
- c. Fact sheets about suspected agents.
- d. Information about hand washing and food worker illness.
- e. Specimen containers (stool kits) – EPH lead
- f. Appropriate media (transport or enrichment) – EPH lead
<http://www.cdc.gov/foodborneoutbreaks>

Identify additional cases.

- a. Implement enhanced or active surveillance techniques to locate additional cases using as many surveillance sources as needed to identify cases.
 - Take-out orders
 - Online orders
 - Catered events
 - Credit card records
 - Media release, and call for cases
- b. Compare exposure information from pathogen-specific surveillance reports with data obtained through the notification/complaint system to identify potential connections among cases and increase the likelihood of detecting outbreaks.
 - Compare Envision Food borne illness complaint data with information included in case investigations of enteric reportable conditions.
- c. Work with grocery stores where cases purchased food to obtain shopper card purchase records to identify/verify food purchases.
- d. If conducting detailed exposure history interviews with cases only after a cluster is identified, either a) use the results for hypothesis generation with subsequent testing of those hypotheses in a controlled study or b) use the detailed exposure history questionnaire on an appropriate set of controls at the same time, thereby combining hypothesis generation and testing.
- e. Review foodborne illness notifications/complaints to identify undiagnosed cases that could be linked to the outbreak.
- f. Interview appropriate non-ill persons to obtain exposure information for comparisons in case-control or cohort studies.
- g. Interview non-outbreak-associated ill persons (i.e., cases with microbial agents other than the agent under investigation from the same time) to obtain exposure information for controls for case-case analytic studies.

- h. Compare exposure frequencies among cases against known or estimated background exposure rates, such as those found in the [FoodNet Atlas](#) of Exposures to identify suspected food items.

❑ Conduct descriptive epidemiology

Develop templates for data collection and interview form(s). Questionnaire should include:

- a. Demographic information: case name, date of birth, race, address, occupation, contact information, and a unique identifier for analyses purposes.
- b. Clinical information – reporting source, illness data, lab results, healthcare provider contact information, etc.
- c. Risk factor/exposure information – such as travel, immunization history, dietary history, social activities, exposures to pets and other animals; use open-ended questions to help you better determine the risk factors for infection.

❑ Create a line list.

- a. Design a line list based on the interview questionnaire and data generated.

❑ Characterize outbreak by time: Epidemic (Epi) curve.

The time course of an epidemic is shown by drawing a graph of the number of cases by their date of onset. This displays the outbreak's magnitude and time trend.

- a. A point-source outbreak results in a sharp rise in the number of cases and a fairly steep decline.
- b. A continuing common source outbreak results in a relatively stable number of cases as long as the exposure is ongoing.
- c. Person-to-person transmission is characterized by an upsurge during the initial cases, a lull during the incubation period, and then another upswing during the time that the secondary cases become ill.

❑ Characterize by place: Mapping.

- a. Characterizing an outbreak by place provides information on the geographic extent of the problem and may also show clusters or patterns that help determine the outbreak cause and/or exposure locations.
- b. Mapping the work, residential, and recreational activities of cases can help define potential common exposures.

❑ Characterize by person: Identify the at-risk population.

- a. The population at risk may be defined by describing cases by their personal characteristics (e.g., age, race, sex, or marital status) and/or by exposures (e.g., occupation, leisure activities, use of medications, tobacco, drugs).
- b. These factors may reveal susceptibility to the disease and opportunities for exposure.

❑ **Identify persons at risk.**

- a. Identify additional cases by alerting health-care providers, reviewing laboratory reports and medical charts, asking cases if they know of others who are ill, reviewing employee or school absences, reviewing death certificates, surveying the affected population, or asking the public to contact the health department if they have the illness under investigation.

❑ **Generate hypotheses.**

- a. After conducting descriptive epidemiology formulate the outbreak hypotheses which should address the source of the agent, the mode of transmission, and the exposures/risk factors that caused the disease.
- b. If clinical, laboratory, environmental, and/or epidemiologic evidence obviously supports the hypothesis, further evaluation is not necessary.
- c. If the evidence is not straightforward (i.e. the agent cannot be identified, cases continue to occur, and there are a large number of unexplained illnesses) analytical epidemiology may be considered.
- d. Test the hypotheses (if indicated) – Analytical Epidemiology.
 - Cohort studies – track and compare rates of disease among well-defined groups of exposed and non-exposed persons. These studies are done when the outbreak involves a relatively small well-defined population such as foodborne disease outbreaks that affect attendees at a particular time or place, such as a wedding or picnic
 - Case control studies – Study groups are called cases, persons with disease, and controls, persons without disease. Comparisons are made between cases and controls, examining the difference in rates of suspected exposures or risk factors between the groups. Case-control studies are done when the entire or an undefined population is at risk, and all those exposed are not identified, such as a county fair, where there is no registration or attendance list.

❑ **Monitor the outbreak and reassess strategies.**

- a. If the hypothesis does not explain the circumstances of the outbreak, reevaluate to see if other explanations have been overlooked. Sequential case-control studies may narrow down exposures and definitively identify the risk factor responsible for disease (e.g. in a foodborne outbreak, the initial study might implicate customers who ate at a particular food establishment additional studies can identify particular foods, etc.).

Checklist 4: EPH Site Visit & Investigation

The recommendations given below are guidelines for the environmental health investigation of a potential foodborne outbreak based on the suspected etiology. The etiology can often be surmised by the symptoms and incubation periods of the initial complainants, even if an etiology hasn't been laboratory-confirmed. These are general guidelines and are by no means absolute. Each investigation should be conducted on a case-by-case basis with Environmental Health and Epidemiology working together to determine the focus of the investigation.

The Outbreak Response Team will conduct an on-site assessment of the implicated facility or site as soon as possible after the start of an epidemiologic investigation and no later than 24 hours after being notified of the outbreak. The investigation of a suspect foodborne disease outbreak is different from a routine inspection. Such an investigation requires a systematic assessment of critical food handling procedures, focusing as much as possible on procedures suggested by preliminary epidemiological and/or laboratory information. The environmental investigation will be coordinated by an Environmental Health Specialist/Sanitarian with involvement of the Food Safety Program Manager, Department of Health staff, Clark County Communicable Disease staff and Washington Public Health Laboratory technicians.

The facility assessment will be conducted using the Field Investigation Worksheet and Field Investigation Checklist forms (available at [DOH investigation forms](#)) and will focus on:

- a. Identifying and correcting critical violations that may have contributed to the outbreak;
- b. Collecting information about key aspects of the establishment's operation;
- c. Obtaining a list of all food workers and their phone numbers;
- d. Interviewing food workers and evaluating job duties;
- e. Assessing management oversight;
- f. Obtaining menus;
- g. Collecting food samples or embargoing food, if necessary;
- h. Interviewing food workers for illness history and requesting stool samples, if necessary;
- i. Obtaining customer names, reservation lists, or credit card receipts for case/control finding.

Important Note

Under no circumstances should protected information, such as a complainant's name be shared with establishment personnel (consult the data practices guide or your supervisor for further information).

EHS personnel involved in the environmental investigation of the implicated FSE will be the main point of contact between the FSE and CPH.

IMPORTANT NOTE: following a site investigation, CCPH staff should wash hands and disinfect equipment used during inspection to prevent contamination leading to illness.

MANAGEMENT MEETING

- Upon arriving at the implicated establishment introduce yourself to the FSE owner/manager/person in charge (PIC) and explain the purpose of your visit.
- Provide an overview of the investigation and process;
- Answer questions and provide details regarding what is known about the outbreak up to that point (extent of information shared will be determined at the initial outbreak meeting);
- Request management's assistance in:
 - Obtain a menu from the event or establishment.
 - Arranging employee interviews
 - Providing records for review (food temperature logs, employee illness records, food purchasing records, etc.)
 - Providing workspace for field team where possible
 - Arranging for sample/specimen collection and submission to PHL, if needed
- Assess Management Control and Operation
 - Ask about the training and experience of the manager
 - Identify the Person in Charge (PIC) at key times suggested by the initial outbreak information
 - Obtain information about the operation such as: days and times of operation, number of staff, number of shifts, staffing needs, etc.
 - Ask about the duties performed by each staff member (including manager). In particular, ask about the food handling responsibilities of all staff.
 - Ask about the establishment's policy regarding ill workers and ask to view the employee illness logs

Provide information needed to design effective strategies to prevent future outbreaks.

INTERVIEWING FOOD WORKERS (WHEN APPROPRIATE)

Environmental health staff ensure that all food workers are interviewed using a standardized questionnaire. The epidemiologist leading the investigation is responsible for providing the interview form to environmental health specialists who will complete the interviews. Food workers should be interviewed by PH staff in a private location. (This will better ensure accurate reporting) Do not rely on the manager or PIC to provide personal health information.

Include questions addressing:

1. Work history or schedule during the identified critical time period
2. Job tasks and responsibilities
3. Illness history
4. Recent illness among household members
 - a. Other establishments where employees work
 - b. Conducting a review of food worker illness records

Checklist 5: Outbreak Investigation Supplies

The following is a list of items that may be of assistance when conducting a field investigation of a disease outbreak. It would be helpful to gather these items during the pre-event planning stages.

Standard Field Items

- | | |
|---|---|
| <input type="checkbox"/> Laptop Computer | <input type="checkbox"/> 2 Notepads |
| <input type="checkbox"/> USB Flash Drive | <input type="checkbox"/> Pens |
| <input type="checkbox"/> Digital Camera w/charger | <input type="checkbox"/> Highlighters |
| <input type="checkbox"/> Flashlight | <input type="checkbox"/> Sharpies |
| <input type="checkbox"/> Food Code | <input type="checkbox"/> Paperclips, Binder clips, Rubber bands |
| | <input type="checkbox"/> Scissors |
| <input type="checkbox"/> Notifiable Conditions Surveillance | <input type="checkbox"/> Stapler/staples |
| <input type="checkbox"/> Emergency Contact Information | <input type="checkbox"/> File folders |

Specimen Collection

Standard Supplies for All Specimen Types

- Disposable Examination Gloves
- Eye Protection, Masks
- Alcohol Wipes
- Specimen Labels
- Hand Sanitizer
- Re-Sealable Plastic Bags; Biohazard Bags
- Disinfectant or Towelettes with
- Lab Slips
- Cooler/Cold Packs

Stool Samples

- 3-5 Cary-Blair Specimen kits
- 3-5 Screw-top Urine Cups
- Mailing tubes and instructions

Check expiration dates frequently

Environmental Samples

- Sterile Saline (for wetting swabs & pads)
- Sterile Whirlpaks
- Matches
- Gloves (vinyl)
- Sterile Gauze Pads
- Thermometers and data loggers
- pH meter and test strips
- Water activity meter
- Enforcement guide
- Sterile implements for sample collection (e.g. sponge stick, scoops, spoons, tongs, tongue depressors, swabs)

Personal Items

- | | |
|---|---|
| <input type="checkbox"/> Business Cards | <input type="checkbox"/> Tissue |
| <input type="checkbox"/> Identification Badge | <input type="checkbox"/> Insect Repellant |
| <input type="checkbox"/> Bottled Water | |