

# Environmental Health Toolkit for Foodborne Outbreaks

November 2020

**Infectious Diseases Branch  
California Department of Public Health**

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# Introduction

## What is this Document?

This is a toolkit for environmental health (EH) specialists in California to use when investigating food establishments that may be involved in an outbreak. Per the Council to Improve Foodborne Outbreak Response (CIFOR), “an environmental health assessment is a systematic, detailed, science-based evaluation of environmental factors that contributed to transmission of a particular disease in an outbreak. It differs from a general inspection of operating procedures or sanitary conditions used for the licensing or routine inspection of a restaurant, food processor, or food-production facility. An environmental health assessment focuses on the problem at hand and considers how the causative agent, host factors, and environmental conditions interacted to result in the problem.” This toolkit provides resources and form templates that EH specialists working at local EH services (EHS) can use to conduct a thorough and standardized EH assessment.

The objectives of this toolkit are to:

- 1 Provide step-by-step guidance on how to conduct an EH assessment
- 2 Standardize the collection of EH evidence during outbreak investigations
- 3 Instruct EH specialists how to gather enough evidence to identify contributing factors and root causes; and
- 4 Encourage collaboration between public health staff from EH, epidemiology/communicable diseases, and laboratory disciplines.

## What is a Foodborne Outbreak?

The California Department of Public Health defines a foodborne outbreak as two or more cases of acute gastrointestinal illness occurring in persons from separate households and following the ingestion of a common food, drink, or other contaminated material. Foodborne outbreaks associated with food service establishments (restaurants, caterers, delis, etc.) most commonly occur when pathogens are transmitted to people either by food contaminated at a farm, production facility, or distribution facility; food contaminated by an ill food worker; or food contaminated via contaminated surfaces at establishments.

## Foodborne Outbreak Investigations

Foodborne outbreak investigations are conducted through collaboration between public health staff from epidemiology/communicable diseases, public health laboratory, and EH disciplines.

Epidemiology/communicable disease staff identify common exposures among ill individuals associated with the outbreak, while EH specialists investigate the suspected sources of illness, identify associated contributing factors, and determine possible root causes of the outbreak. Laboratorians test specimens to identify the etiology of the outbreak and to link human, food, and environmental samples.

Foodborne outbreaks are usually due to a **point source** or a **dispersed common source**. **Point source** outbreaks are typically outbreaks in a single geographical location in a short period of time, involving a

group of people who became ill after eating food at the same establishment or event. Examples include people becoming infected with *Salmonella* after attending a catered event (e.g., a wedding reception) or eating at the same restaurant. Investigations of point source outbreaks generally include reviewing food preparation, interviewing employees, and providing feedback to the establishment on ways to improve food safety, as well as collecting human, food, and environmental samples. **Dispersed common source** outbreaks are often multi-jurisdictional, involving multiple counties or states and typically happen when contamination occurs before the point of food service, such as during food harvesting, processing, or distribution. For example, Shiga-toxigenic *E. coli* contamination of lettuce at a farm may lead to illnesses nationwide due to widespread distribution of the contaminated lettuce. Investigation of establishments for dispersed common source outbreaks may include the same activities as a point source outbreak investigation and also require collection of product invoices for traceback purposes.

The primary goal of an EH assessment at a food establishment is to identify the source of illness and prevent further illness. Specific objectives include:

1. Identifying and removing contaminated products from distribution/sale;
2. Identifying and correcting improper food handling, food production, food storage, and employee health practices; and
3. Developing and improving food safety procedures and policies.

## Activities in an EH Assessment

Although the relevant activities in an EH Assessment may vary by scenario, these investigations typically involve the following:

- Describing the suspected food agent
- Observing food handling procedures that may have contributed to contamination of the suspected food agent
- Interviewing food workers and managers
- Taking temperatures of food storage devices and other relevant measurements
- Creating a food flow chart for the suspected food agent, including details about storage, preparation, cooking, cooling, reheating and service to identify opportunities for contamination, survival, and proliferation of pathogens
- Collecting specimens from food, the food handling environment, or people in contact with the suspected food agent
- Collecting and reviewing invoices or other documents describing the source of the suspected food agent

These activities provide local EHS with information needed to understand the context in which the suspected food agent was delivered, stored, prepared, and served. This allows EHS to determine contributing factors and provide appropriate preventive controls and education as necessary.

## How to Use This Toolkit

- This toolkit is meant to be used as a guide during an EH assessment.
- The forms in the toolkit can assist in completing a thorough foodborne outbreak environmental assessment; the investigator should print the applicable forms before leaving for the investigation. Use the flow chart on page 7 to determine which forms are necessary for each situation.
  - For an EH assessment of a **point source** foodborne outbreak, print and complete forms on pages 9-37, including the relevant appendices (Additional Resources for Restaurant Managers [pages A1-A7] and the Sampling Kit Log [page B3])
  - For an EH assessment of a **dispersed common source** foodborne outbreak, print and complete forms on pages 9-41, including the relevant appendices (Sampling Kit Log, page B3)
- The appendices are additional resources including education materials, protocols, contact lists, and supplemental forms for use in unique situations (e.g., recall situations, suspected intentional contamination).

## Roles and Responsibilities of Agencies Involved in Foodborne Disease Outbreak Investigations

Local environmental health services (EHS) and communicable diseases (CD) or epidemiology departments are usually the first to be notified of a foodborne disease outbreak. Depending on the nature and magnitude of the outbreak, state and federal agencies may also be notified and become involved. Detailed in the table below are different types of foodborne outbreaks with involved organizations indicated, and their respective roles.

### SUMMARY OF AGENCY ROLES AND RESPONSIBILITIES DURING A FOODBORNE OUTBREAK

Type of Outbreak	Local EHS/CD	Local Law Enforcement	Local Agriculture Department	CDPH IDB/FDB	CDFA	CDPR	State/Federal Law Enforcement	FDA	USDA
<b>Point Source</b>	X								
<b>Dispersed/Multi-agency</b>									
Commercially processed foods	X			X				X	X
Produce (pesticide related illness)	X		X	X	X	X		X	
Produce (non-pesticide related)	X			X				X	
Dairy products produced outside of California	X			X				X	
Dairy products produced in California	X			X	X			X	
Meat, poultry, and liquid eggs	X			X	X				X
Shell eggs	X			X	X			X	
Seafood and shellfish	X			X				X	
<b>Intentional Contamination</b>	X	X		X			X	X	

CDFA: California Department of Food and Agriculture

CDPH IDB/FDB: California Department of Public Health Infectious Diseases Branch/ Food and Drug Branch

CDPR: California Department of Pesticide Regulation

EHS/CD: Environmental Health Services/Communicable Diseases

FDA: US Food and Drug Administration

USDA: US Department of Agriculture

## **LOCAL HEALTH DEPARTMENTS**

### **1) Environmental Health Services**

- a. Investigates foodborne illness complaints and reports
- b. Performs environmental investigations to identify contributing factors and environmental antecedents, including evaluating food preparation practices, observing food flow procedures, and collecting documents on sources of food for traceback
- c. Assists in identification and interview of ill food handlers
- d. Collects food and environmental samples, when requested
- e. Provides education to food establishment management and staff on topics including safe food handling and storage, proper cleaning and disinfection, monitoring ill employees and sick leave, and proper documentation of establishment procedures
- f. Coordinates with local laboratory and public health partners, as well as state and federal EH agencies

### **2) Communicable Diseases / Epidemiology**

- a. Performs epidemiological investigations to identify the etiologic agent, persons at risk, size and scope, mode of transmission, and source of the outbreak
- b. Conducts disease surveillance
- c. Restricts ill food handlers
- d. Collects human specimens, as needed
- e. Informs the public, media, and healthcare providers, as needed
- f. Coordinates with local EH and laboratory partners, as well as state and federal public health agencies

### **3) Public Health Laboratory**

- a. Provides guidance on collection, storage, and shipment of patient specimens and food/environmental samples
- b. Performs laboratory analyses of patient specimens and food/environmental samples.
- c. Helps interpret test results
- d. Coordinates with local environmental and public health partners, as well as state and federal laboratories

## **STATE AGENCIES INVOLVED IN FOODBORNE OUTBREAK INVESTIGATIONS**

### **1) California Department of Public Health (CDPH)**

- a. Food and Drug Branch
  - Regulates commercial food manufacturing including food processors and distributors in California
  - Investigates consumer product complaints and tampering incidents
  - Initiates corrective actions including removal of unsafe product from sale
  - Collects suspect products from patients' homes for testing
- b. Food and Drug Laboratory Branch
  - Provides laboratory analytical and consultative support for food and environmental samples
- c. Infectious Diseases Branch
  - Conducts surveillance and investigation for enteric diseases in California

- Coordinates with local, state, and federal agencies to conduct surveillance, investigate, and control multijurisdictional foodborne outbreaks
- d. Infectious Diseases Laboratory Branch
  - Conducts laboratory testing of clinical specimens for enteric pathogens
  - Includes the Microbial Diseases Laboratory and the Viral and Rickettsial Disease Laboratory

**2) California Department of Food and Agriculture (CDFA)**

- a. Milk and Dairy Food Safety Branch
  - Regulates the production, processing and sale of milk, dairy products and milk-like substitutes
  - Initiates recalls of unsafe milk and dairy products
  - Investigates suspect illnesses that implicate milk, dairy products, and milk-like substitutes in California
- b. Meat, Poultry, and Egg Safety Branch
  - Regulates meat and poultry producing establishments that are exempt from USDA inspection (e.g., establishments producing poultry, game birds, rabbits, sausages and cured/smoked meats, shell eggs)
- c. Produce Safety Program
  - Regulates produce grown in California that is covered under the FDA’s Food Safety Modernization Act (FSMA) Produce Safety Rule

**FEDERAL AGENCIES INVOLVED IN FOODBORNE OUTBREAK INVESTIGATIONS**

**1) US Food and Drug Administration (FDA)**

- a. Shares jurisdiction with CDPH FDB over food (including shell eggs), drugs, medical devices, and cosmetics sold in California
- b. Initiates/coordinates recall of unsafe food, drug, or medical device products

**2) US Department of Agriculture (USDA)**

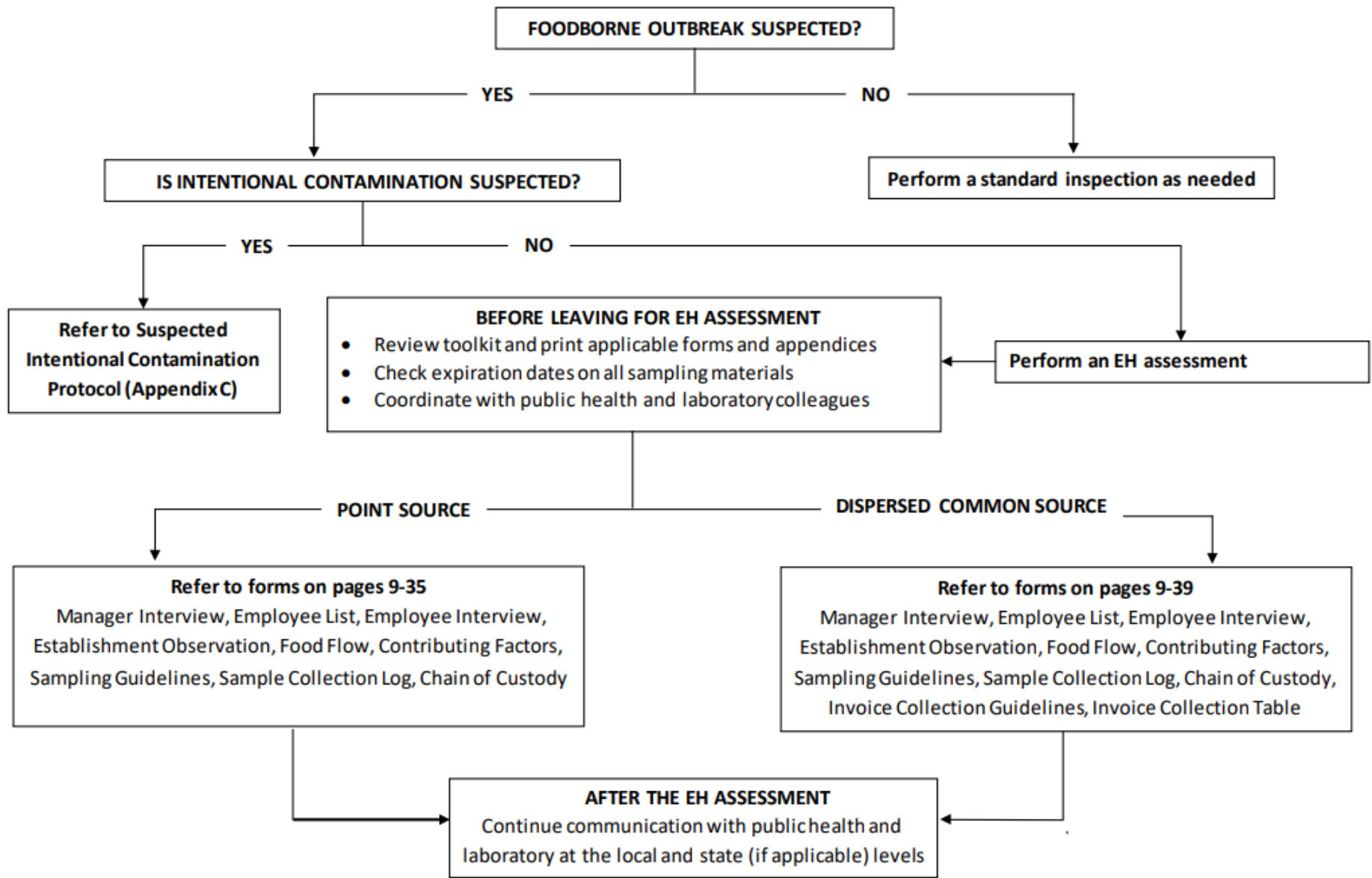
- a. Regulates the slaughter and processing of red meats and poultry products (including dried, frozen, or liquid eggs)
- b. Initiates recalls of unsafe meat and poultry products

**3) US Centers for Disease Control and Prevention (CDC)**

- a. Division of Foodborne, Waterborne, and Environmental Diseases (DFWED) Outbreak Response and Prevention Branch
  - Coordinates with local, state, and federal agencies to conduct surveillance, investigate, and control multistate foodborne outbreaks
- b. DFWED Enteric Diseases Laboratory Branch
  - Oversees PulseNet, the national molecular subtyping laboratory network used to detect possible foodborne outbreaks
  - Provides laboratory support as necessary



# Investigation Flow Diagram



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# Manager Interview Form

## Section 1: ESTABLISHMENT INFORMATION

<b>Outbreak #:</b>	<b>Establishment Name:</b>	
<b>Establishment address:</b>		
<b>EHS Personnel:</b>	<b>EHS Agency:</b>	<b>EHS Phone:</b>
<b>Earliest exposure date:</b>	<b>Time period of interest*:</b>	to

\*time period of interest = two weeks before the earliest exposure date TO the interview date

## Section 2: MANAGER INFORMATION

<b>Name:</b>	<b>Phone:</b>
<b>Do you do any non-managerial tasks at this establishment?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Refused	
<b>If yes:</b> <input type="checkbox"/> Food prep <input type="checkbox"/> Cook <input type="checkbox"/> Server <input type="checkbox"/> Busser <input type="checkbox"/> Dishwasher <input type="checkbox"/> Cashier <input type="checkbox"/> Other: _____	
<b>Interview language:</b>	<b>Interview date:</b>

## Section 3: GENERAL

**1) Is this an independent establishment or a chain establishment?**

Independent    Chain\*    Unknown    Refused

\*If chain, fill out the following table:

<b>Corporate Office:</b>	
<b>Main Contact:</b> (name/number)	
<b>List of Other Locations:</b>	

**2) What are the establishment's operating days and hours?** \_\_\_\_\_

a. **What meals are served at this establishment?**

Breakfast? Days/Hours: \_\_\_\_\_    Lunch? Days/Hours: \_\_\_\_\_  
 Dinner? Days/Hours: \_\_\_\_\_    Other (e.g., Happy Hour)? Days/Hours: \_\_\_\_\_  
 Specify: \_\_\_\_\_

**3) Approximately how many meals are served here daily?** \_\_\_\_\_  Refused

**4) Are any foods prepared or partially prepared outside of the restaurant at a commissary or other location?** (this includes outside vendors or commissaries owned by the restaurant)

Yes  No  Unknown  Refused

If yes, food item(s): \_\_\_\_\_

Location name/address: \_\_\_\_\_

**5) Where does the establishment purchase or acquire its food?**

Food Categories	List all Suppliers:
Produce	
Meat	
Seafood	
Dairy	
Dry goods	
Other	
Occasional or "irregular" suppliers (i.e., local grocery stores when supply is low)	

**6) Does this establishment keep invoices or delivery records for food and drink products?**

Yes  No  Unknown  Refused

**7) What is the source of water at this establishment?**

Municipal Tap  Filtered Tap  Private Well  Untreated surface  Bottled  Unknown

**8) Is there a menu of food items served during time period of interest?**

Yes  No  Unknown  Refused

If yes, collect menu (including all meals, daily specials, happy hours, or other special menus)

**9) Is there a reservation list during time period of interest?**

Yes  No  Unknown  Refused

If yes, consult with epidemiology/CD colleagues as to whether to collect this list

**10) Does the establishment do any of the following? (check all that apply)**

Takeout  Delivery  Catering  Other: \_\_\_\_\_

If any checked, consult with epidemiology/CD colleagues as to whether to collect details

**11) What kinds of payment are accepted at this establishment? (check all that apply)**

Cash  Credit  Debit  Other: \_\_\_\_\_

If any checked, consult with epidemiology/CD colleagues as to whether to collect details

**12) How does this establishment track information regarding sales records or meal tickets?**

Paper tickets    Electronic system    Other: \_\_\_\_\_

If yes to any, consult with epidemiology/CD colleagues as to whether to collect records or tickets

**13) Does this establishment keep temperature logs for food items?**

Yes    No    Unknown    Refused

If yes, review temperature logs

#### Section 4: COMPLAINTS

**14) Has this establishment received any illness complaints from customers in the past two weeks?**

Yes    No    Unknown    Refused

If yes, number of complaints: \_\_\_\_\_

If yes, list reported symptoms: \_\_\_\_\_

**15) Has there been plumbing, equipment, or power issues in the last two weeks at this establishment?**

Yes    No    Unknown    Refused

If yes, specify: \_\_\_\_\_

#### Section 5: KITCHEN MANAGER

**16) Approximately how long have you been employed as a manager in this establishment?**

\_\_\_\_\_  months    years

**17) How many managers, including you, are currently employed in this establishment?**

# of managers: \_\_\_\_\_  Unknown    Refused

**18) Do any kitchen managers receive food safety training?**

Yes, # of managers: \_\_\_\_\_    No    Unknown    Refused

**19) Are any kitchen managers, Certified Food Protection Managers?**

Yes, # of managers: \_\_\_\_\_    No    Unknown    Refused

a. If yes, is the certification up-to-date?

Yes    No    Unknown    Refused

#### Section 6: EMPLOYEES

**20) How many employees do you have? Of these, how many are food handlers?**

# of employees: \_\_\_\_\_   # of food handlers: \_\_\_\_\_    Unknown    Refused

**21) Do food handlers at your establishment receive food safety training? This training can be a course or a class, or it can be on-the-job training.**

Yes, # of workers \_\_\_\_\_    No    Unknown    Refused

a. If yes, are all the certifications up-to-date?

Yes    No    Unknown    Refused

**Section 7: POLICY**

**24) Does this establishment have a handwashing policy?**

- Yes  No  Unknown  Refused
- a. If yes, is this a written policy?  
 Yes  No  Unknown  Refused

**25) Does this establishment have a policy concerning disposable glove use?**

- Yes  No  Unknown  Refused
- a. If yes, is this a written policy?  
 Yes  No  Unknown  Refused

**26) Does this establishment have a policy that requires food handlers to tell a manager when they are ill?**

- Yes  No  Unknown  Refused
- If yes:**
- a. Is this a written policy?  
 Yes  No  Unknown  Refused
- b. Does this policy apply to kitchen managers as well as food handlers?  
 Yes  No  Unknown  Refused
- c. How do you monitor sick employees? \_\_\_\_\_
- d. Does this policy include identifying gastrointestinal illness?  
 Yes  No  Unknown  Refused

**27) Does this establishment have a policy that restricts or excludes ill workers from working?**

- Yes  No  Unknown  Refused
- If yes:**
- a. Is this a written policy?  
 Yes  No  Unknown  Refused
- b. Does this policy apply to kitchen managers as well as food handlers?  
 Yes  No  Unknown  Refused

**28) Do kitchen managers and food workers get paid sick leave when they miss work due to illness?**

- Yes  No  Unknown  Refused

## Employee List

**INSTRUCTIONS:** Use the following table to record information for ALL employees, including both past and present employees, who worked *during the time period of interest*.

GENERAL INFORMATION						
<b>Outbreak #:</b>		<b>Establishment Name:</b>				
<b>EHS Personnel:</b>		<b>EHS Agency:</b>		<b>EHS Phone:</b>		<b>Date Completed:</b>
<b>Time period of interest:</b>						
Name	Job Position	Work Shifts (Days & Hours)	Unscheduled Absence	Contact Information	Gastrointestinal Illness*	Interviewed
1.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
2.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
3.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
4.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
5.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
6.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
7.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
8.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
9.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
10.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
11.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
12.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N

\*Gastrointestinal illness is defined as any diarrhea (loose stools) or vomiting during the time

Name	Job Position	Work Shifts (Days & Hours)	Unscheduled Absence	Contact Information	Gastrointestinal Illness*	Interviewed
13.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
14.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
15.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
16.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
17.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
18.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
19.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
20.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
21.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
22.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
23.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
24.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
25.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
26.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
27.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
28.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
29.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N
30.			<input type="checkbox"/> Y <input type="checkbox"/> N		<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk	<input type="checkbox"/> Y <input type="checkbox"/> N

\*Gastrointestinal illness is defined as any diarrhea (loose stools) or vomiting during the time



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# Employee Interview Form

## Section 1: GENERAL INFORMATION

Outbreak #:	Establishment Name:	
EHS Personnel:	EHS Agency:	EHS Phone:
Earliest exposure date:	Time period of interest*:	TO
*Time period of interest = two weeks before the earliest exposure date TO the interview date		

## Section 2: EMPLOYEE INFORMATION

Name:		Gender:	Age:
Address:		Phone:	
City:	County:	State:	Zip:
<b>Job at establishment:</b> <input type="checkbox"/> Food prep <input type="checkbox"/> Cook <input type="checkbox"/> Server <input type="checkbox"/> Busser <input type="checkbox"/> Dishwasher <input type="checkbox"/> Cashier <input type="checkbox"/> Other: _____			
<b>Do you have a food handler certification card?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Interview language:		Interview date:	

## Section 3: WORK HISTORY/ RESPONSIBILITIES

**1) Describe your job duties** (including contact with utensils, food items, beverages, and food containers): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**2) What were your work hours from \_\_\_\_\_ to \_\_\_\_\_ \*?** (Report dates and times)

Date (MM/DD/YY)	Times		Date (MM/DD/YY)	Times

**3) Did you handle or prepare any food items, drinks, or garnishes during the time period of interest\*?**

Yes  No  Unknown

a. **If yes**, list the foods on the **Food Preparation History Table** at the end of this form (optional)

1) Did you eat any foods prepared at this establishment during the time period of interest\*?  Yes  No  Unknown

a. If yes, list the foods eaten and dates:

\_\_\_\_\_

2) Do you ever have bare hand contact with ready-to-eat foods (foods that are not cooked before serving)?  Yes  No  Unknown

a. If yes, list: \_\_\_\_\_

\_\_\_\_\_

3) Describe your hand washing practices (e.g., how often, when, before putting on gloves, soap use, paper towel used to turn faucets off) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4) Do you have other jobs outside of this establishment?  Yes  No

a. If yes, do you handle or prepare food at any of these other jobs?  Yes  No

• If yes:

Name of Establishment	Location	Dates Worked During Timeframe of Interest

**Section 4: CLINICAL INFORMATION**

1) During the time period of interest\* did you have any of the following symptoms?

Diarrhea  Y  N  U → If yes, was it bloody?  Y  N  U  
 If yes, max # of stools in 24 hours: \_\_\_\_\_

Vomiting  Y  N  U

Nausea  Y  N  U

Abdominal pain  Y  N  U

Unusual fatigue  Y  N  U

Fever  Y  N  U If yes, highest temperature: \_\_\_\_\_

Chills  Y  N  U

Jaundice  Y  N  U

Muscle aches  Y  N  U

Loss of appetite  Y  N  U

Headaches  Y  N  U

Other: \_\_\_\_\_

**a. If yes to ANY symptom:**

- o When did the symptoms begin (date and time)? Date: \_\_\_\_\_ Time: \_\_\_\_\_
- o When did the symptoms end (date and time)? Date: \_\_\_\_\_ Time: \_\_\_\_\_

2) **If yes to ANY symptom in #1, did you see a doctor or go to the hospital?**  Yes  No  Unk

**If yes:**

a. Name of healthcare provider visited: \_\_\_\_\_

b. Name of the clinic/hospital: \_\_\_\_\_

c. Date of the visit: \_\_\_\_\_

d. Diagnosis: \_\_\_\_\_

e. Was a stool specimen taken or any other lab test done?  Yes  No  Unk

o **If yes**, what was the test result? \_\_\_\_\_

3) **If yes to ANY symptoms in #1, did you work while you were ill?**  Yes  No  Unk

**If yes:**

a. Which dates? \_\_\_\_\_

b. Did you vomit while at work?  Yes  No  Unk

c. Did you have diarrhea while at work?  Yes  No  Unk

d. Did you notify your employer of your illness?  Yes  No  Unk

o **If yes**, how did your employer modify your duties, if at all? \_\_\_\_\_

\_\_\_\_\_

**IF NO**, when did you return to work after being ill? \_\_\_\_\_

4) **Do you know of any coworkers sick with diarrhea or vomiting during the time period of interest\*?**  Yes  No  Unk

a. **If yes**, who (name) and which dates? \_\_\_\_\_

5) **Have you noticed any problems with staffing, plumbing, power outages, equipment failures, or anything else unusual in the past month?**  Yes  No  Unk

a. **If yes**, specify: \_\_\_\_\_

6) **Have you had any customers call to report becoming ill with vomiting or diarrhea after eating at your place of business in the past month?**  Yes  No  Unk

a. **If yes**, specify: \_\_\_\_\_

7) **Has anyone in your household been ill in the past month?**  Yes  No  Unk

a. **If yes**, who was ill? (names, ages, relationships, occupations) \_\_\_\_\_

\_\_\_\_\_

b. **If yes**, what symptoms did they experience? \_\_\_\_\_

c. **If yes**, when did their symptoms begin AND end? \_\_\_\_\_

d. **If yes**, did they visit a doctor or hospital?  Yes  No  Unk

o **If yes**, what was their diagnosis? \_\_\_\_\_

o **If yes**, was a stool sample taken?  Yes  No  Unk

• **If yes**, what was the result? \_\_\_\_\_

**\*\*\*\*TO BE COMPLETED BY PUBLIC HEALTH\*\*\*\***

**1) Will specimens be collected from this food handler?**  Yes  No  Unknown

If yes:

a. Was he/she provided with a stool collection kit<sup>1</sup>?  Yes  No  Unknown

b. Date given: \_\_\_\_\_

**2) Is this food handler recommended for exclusion or restriction<sup>2</sup>?**  Yes  No  Unknown

a. If yes, explain: \_\_\_\_\_

**3) Is clearance required or recommended for this food handler<sup>2</sup>?**  Yes  No  Unknown

<sup>1</sup>If given a kit, be sure to provide them with instructions and your business card. Instruct them that the stool must be submitted within 48 hours or the worker may be excluded from work.

<sup>2</sup>For criteria related to exclusion or restriction, consult communicable disease counterparts.

## Food Preparation History Table (Optional)

Employee's Name: \_\_\_\_\_

Use the employee's work schedule and a calendar to help with recall.

Food/Beverage/Garnish Item	Date(s) Prepared	Role in preparation/tasks related to the food item

\*Refer to the dates identified in Section 1 of the Employee Interview Form for the time period of interest

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# Establishment Observation Form

(The numbering on this form corresponds with the NEARS manual)

## Section 1: GENERAL INFORMATION

<b>Outbreak #:</b>	<b>Establishment Name:</b>	
<b>EHS Personnel:</b>	<b>EHS Agency:</b>	<b>EHS Phone:</b>

## Section 2: OBSERVATIONS

**1) Date of Interview/Observation:** \_\_\_\_\_

**2) Are hand sinks available in employee restroom(s)?** \_\_\_\_\_  
 Yes (Y)    No (N)    Could not observe (CNO)

**If yes:**

a. How many hand sinks in the employee restrooms? \_\_\_\_\_

b. How many hand sinks do not have warm water? \_\_\_\_\_

c. How many hand sinks do not have soap? \_\_\_\_\_

d. How many hand sinks do not have sanitary drying towels available? \_\_\_\_\_

**3) Are hand sinks available in the work area(s)?** \_\_\_\_\_  Yes    No

**If yes:**

a. How many hand sinks are located in the work area(s)? \_\_\_\_\_

b. How many hand sinks do not have warm water? \_\_\_\_\_

c. How many hand sinks do not have soap? \_\_\_\_\_

d. How many hand sinks do not have sanitary drying towels? \_\_\_\_\_

**4) Are there cold storage units?** \_\_\_\_\_  Yes    No

**If yes:**

a. How many cold storage units? \_\_\_\_\_

b. Which types of units did you observe? (check all that apply)  
 Reach-in    Walk-in    Self-serve/salad bar    Open-top units    Display case

c.\* Are there temperature logs for the cold storage units? \_\_\_\_\_  Yes    No

**If yes to c:**

d.\* Are temperature measurements being collected as intended? \_\_\_\_\_  Yes    No

e.\* Are there any deviations or issues with the temperature logs? \_\_\_\_\_  Yes    No

**5) Are all cold storage units maintained at a temperature of 41°F or below?** \_\_\_\_\_  Yes    No

**If no:**

a. How many cold storage units are above 41°F? \_\_\_\_\_

b. Which types of units did you observe through measurement to be above \_\_\_\_\_  
 41°F? (check all that apply)  
 Reach-in    Walk-in    Self-serve/salad bar    Open-top units    Display case

**6) Are any food handlers using disposable gloves while handling food?** \_\_\_\_\_  Yes    No

**7) Is there a supply of disposable gloves available in the establishment?** \_\_\_\_\_  Yes    No

**8) Are any food handlers handling ready-to-eat food with bare hands?** \_\_\_\_\_  Yes    No

**9) \* Are food handlers following proper hand-washing procedures?** \_\_\_\_\_  Yes    No



**Section 2: OBSERVATIONS**

- 10) \* Do employees have their own restroom?  Yes (Y)  No (N)  Could not observe (CNO)  
a. If yes, do they ever use the public restroom instead?  Yes  No  CNO
- 11) Are there records to indicate that the temperatures of incoming ingredients are being taken and recorded (for ingredients requiring heating or cooling)?  Yes  No  CNO  
If yes:  
a. \* Are temperature measurements being collected as intended?  Yes  No  
b. \* Are there any deviations or issues with the temperature logs?  Yes  No  
(Please note any deviations/issues in Box 3 below)
- 12) Are there records to indicate that the temperatures of foods, excluding incoming ingredients, are being taken and recorded (for foods requiring heating or cooling)?  Yes  No  CNO  
If yes:  
a. \* Are temperature measurements being collected as intended?  Yes  No  
b. \* Are there any deviations or issues with the temperature logs?  Yes  No  
(Please note any deviations/issues in Box 3 below)
- 13) Is there any evidence of direct cross contamination of raw animal products with ready-to-eat foods?  Yes  No  No raw animal products used  
a. If yes, please describe the evidence of cross contamination observed: \_\_\_\_\_  
\_\_\_\_\_
- 14) Is there cooling of hot foods in this establishment?  Yes  No  CNO  
a. If yes, what cooling method(s) are used? (check all that apply)  
 Portioning into smaller pans and cooled in regular cooler  
 Portioning into smaller pans and cooled in blast chiller  
 Using ice as an ingredient  
 Using ice bath for food container before cooling in regular cooler  
 Using ice bath for food container before cooling in blast chiller  
 Using ice wands before cooling in regular cooler  
 Using ice wands before cooling in blast chiller  
 Combining methods (ice, ice wand, portioning, etc.) with cooling in regular cooler  
 Combining methods (ice, ice wand, portioning, etc.) with cooling in blast chiller  
 Other (specify): \_\_\_\_\_  
b. \* Was there improper cooling of hot foods in this establishment?  Yes  No  CNO
- 15) \* Is there defrosting of frozen foods in this establishment?  Yes  No  CNO  
a. If yes, what defrosting method(s) are used? (check all that apply)  
 Portioning into smaller amounts  
 Placing frozen item in cold water  
 Running water over frozen item  
 Placing in sink  
 Leaving out on counter  
 Placing in refrigerator  
 Combining methods (specify): \_\_\_\_\_  
 Other(specify): \_\_\_\_\_  
b. \*Was there improper defrosting of frozen foods in this establishment?  Yes  No  CNO

## Section 2: OBSERVATIONS

- 16) Were any foods observed in hot holding?**  Yes  No  CNO  
**If yes:**  
 a. Were the temperatures of any foods in hot holding measured?  Yes  No  
 b. Were all temperatures 135°F or above?  Yes  No
- 17) Were any foods observed in cold holding?**  Yes  No  CNO  
 a. **If yes,** were the temperatures of any foods in cold holding measured?  Yes  No  
 b. **If yes to a,** were all the temperatures at 41°F or below?  Yes  No
- 18) Were any foods observed during cooking?**  Yes  No  CNO  
**If yes:**  
 a. Were the temperatures of any foods being cooked measured?  Yes  No  
 b. Were the temperatures of all foods measured during cooking at the recommended temperatures?  Yes  No
- 19) \* Does this facility handle, store, or serve raw oysters?**  Yes  No  CNO
- 20) Are wiping cloths used in the establishment?**  Yes  No  CNO  
 a. **If yes,** are wiping cloths stored in a sanitizer solution?  Yes  No  CNO
- 21) Are there mechanical washing machines for dishes, utensils, or other equipment?**  Yes  No  
**If yes:**  
 a. Does the wash cycle reach the temperatures recommended?  Yes  No  
 b. Does the sanitizing cycle reach the temperatures recommended?  Yes  No  CNO  
 c. Is chemical sanitizing used?  Yes  No  
 d. **If yes to c,** does the chemical sanitizing cycle have recommended levels for the machine?  Yes  No  CNO
- 22) Are there any hand washed dishes, utensils, or other equipment?**  Yes  No  CNO  
 a. **If yes,** are hand washed equipment washed, rinsed, and sanitized (with heat or chemical)?  Yes  No  CNO  
 b. **If yes to a,** is the sanitizing method (heat or chemical) properly implemented?  Yes  No  CNO
- 23) Did you observe signs and instructions posted in the establishment?**  Yes  No  
**If yes:**  
 c. Did any signs or posted instructions use pictures or symbols to communicate a message?  Yes  No  
 d. What language(s) did you observe on signs or instructions posted for food handlers? (check all that apply)  
 English  Japanese  Chinese (any dialect)  
 Spanish  French  No written words  
 Other(specify): \_\_\_\_\_



# Food Flow Form

**Instructions:** Use this form if there is a *suspected food vehicle*. Be as detailed as possible and include **ALL ingredients**. Use this form to look for critical control points, i.e., steps that must be performed correctly every time to ensure food is served safely.

Section 1: GENERAL INFORMATION		
<b>Outbreak #:</b>	<b>Establishment Name:</b>	
<b>EHS Personnel:</b>	<b>EHS Agency:</b>	<b>EHS Phone:</b>
<b>Date:</b>	<b>Time:</b>	
Section 2: FOOD ITEM INFORMATION		
<b>Suspected Item:</b>	<b>Date of Exposure:</b>	
<b>Ingredients:</b>	<b>Approx. # of servings sold on date of exposure:</b>	
<b>Leftovers available for testing?</b> <input type="checkbox"/> Yes, refer to Food Collection Guidelines <input type="checkbox"/> No		
Section 3: PREPARATION STEPS AND CONDITIONS		
RECEIVING (include ALL ingredients)		
Observations ( <i>proof of purchase, mark of inspection, tags; delivery temperature/condition; delivery records</i> ): _____ _____ _____ _____		
STORAGE (include ALL ingredients)		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>location, equipment used, first in/first out rotation, etc.</i> ): _____ _____ _____ _____		

<b>PREPARATION (include ALL ingredients)</b>		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>procedures, equipment used, thermometer last calibration</i> ):		
_____		
_____		
_____		
_____		
_____		
<b>COOLING</b>		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>procedures, equipment used, temperature control, containers dimensions</i> ):		
_____		
_____		
_____		
_____		
_____		
<b>REHEATING</b>		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>procedures, equipment used, temperature control, thermometer last calibration</i> ):		
_____		
_____		
_____		
_____		
_____		

HOT HOLDING		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>procedures, equipment used, length of holding, protection, thermometer last calibration</i> ): _____ _____ _____		
COLD HOLDING		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>procedures, equipment used, length of holding, protection, thermometer last calibration</i> ): _____ _____ _____		
SERVING		
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Ingredient:	Temperature:	Food Handlers Involved:
Observations/comments ( <i>procedures, equipment used, length of holding, protection, thermometer last calibration</i> ): _____ _____ _____		
COMMENTS		
_____ _____ _____ _____ _____ _____		

## Contributing Factors Summary

### Box 1: SITE VISIT INFORMATION

<b>Outbreak #:</b>	<b>Establishment Name:</b>		
<b>EHS Personnel:</b>	<b>EHS Agency:</b>	<b>EHS Phone:</b>	
<b>Type of establishment:</b> <input type="checkbox"/> Restaurant (fast-food) <input type="checkbox"/> Restaurant (sit-down) <input type="checkbox"/> Restaurant (other)			
<input type="checkbox"/> Assisted living	<input type="checkbox"/> Nursing home	<input type="checkbox"/> Hospital	<input type="checkbox"/> Private home
<input type="checkbox"/> Child day care center	<input type="checkbox"/> School	<input type="checkbox"/> Prison, jail	<input type="checkbox"/> Grocery store
<input type="checkbox"/> Banquet facility (food prepared and served on-site)			<input type="checkbox"/> Camp
<input type="checkbox"/> Caterer(food prepared off-site from where served)			<input type="checkbox"/> Picnic
<input type="checkbox"/> Fair, festival, other temporary or mobile services		<input type="checkbox"/> Church, temple, religious location	
<input type="checkbox"/> Workplace, not cafeteria		<input type="checkbox"/> Workplace cafeteria	
<input type="checkbox"/> Other: _____			

**Box 2: CONTAMINATION FACTORS (check all that apply)**

- C1:** Toxic substance part of tissue
- C2:** Poisonous substance intentionally/deliberately added
- C3:** Poisonous substance accidentally/inadvertently added
- C4:** Addition of excessive quantities of ingredients that are toxic in large amounts
- C5:** Toxic container
- C6:** Contaminated raw product – food was intended to be consumed after a kill step
- C7:** Contaminated raw product – food was intended to be consumed raw or undercooked/under-processed
- C8:** Foods originating from sources shown to be contaminated or polluted (i.e., a growing field or harvest area)
- C9:** Cross-contamination of ingredients (does not include ill food workers)
- C10:** Bare-hand contact by a food handler/worker/preparer who is suspected to be infectious
- C11:** Glove-hand contact by a food handler/worker/preparer who is suspected to be infectious
- C12:** Other mode of contamination (excluding cross-contamination) by a food handler/worker/preparer who is suspected to be infectious
- C13:** Foods contaminated by **non**-food handler/worker/preparer who is suspected to be infectious
- C14:** Storage in contaminated environment
- C15:** Other sources of contamination (specify): \_\_\_\_\_
- C-N/A:** Contamination factors not applicable
- C-UNK:** Contamination factors unknown



**Box 3: PROLIFERATION/AMPLIFICATION FACTORS (Bacterial Outbreaks Only, check all that apply)**

- P1:** Food preparation practices that support proliferation of pathogens (during food preparation)
- P2:** No attempt was made to control the temperature of implicated food or the length of time food was out of temperature control (during food service or display of food)
- P3:** Improper adherence of approved plan to use time as a public health control
- P4:** Improper cold holding due to malfunctioning refrigeration equipment
- P5:** Improper cold holding due to improper procedure or protocol
- P6:** Improper hot holding due to malfunctioning equipment
- P7:** Improper hot holding due to improper procedure or protocol
- P8:** Improper/slow cooling
- P9:** Prolonged cold storage
- P10:** Inadequate modified atmosphere packaging
- P11:** Inadequate processing (acidification, water activity, fermentation)
- P12:** Other situations that promoted or allowed microbial growth or toxic production (specify):  
\_\_\_\_\_
- P-N/A:** Proliferation/amplification factors not applicable

**Box 4: SURVIVAL FACTORS (check all that apply)**

- S1:** Insufficient time and/or temperature control during initial cooking/heat processing
- S2:** Insufficient time and/or temperature during reheating
- S3:** Insufficient time and/or temperature control during freezing
- S4:** Insufficient or improper use of chemical processes designed for pathogen destruction
- S5:** Other process failures that permit pathogen survival (specify): \_\_\_\_\_  
\_\_\_\_\_
- S-N/A:** Survival factors not applicable

**Box 5: PRIMARY CONTRIBUTING FACTOR IDENTIFICATION**

Select the contributing factor from above that seems **the most likely** to be the first event that started the evolution of the outbreak. Multiple factors may be contributing factors, but try to identify one primary contributing factor to report.

**Primary contributing factor:** \_\_\_\_\_

# Sampling Guidelines

## ENVIRONMENTAL SAMPLING GUIDELINES

Contact your laboratory and communicable disease counterparts before the investigation to determine what environmental sampling is necessary and where pathogen(s) of interest may be found, particularly unexpected places to swab. Consider consulting with other environmental health programs such as the California Food and Drug Branch for guidance on sampling selection. Consult with your laboratory regarding availability and capacity to test samples, restrictions on the number of samples, proper storage of samples, and delivery/drop-off locations.

### Before Leaving for the Investigation:

1. Go over the objectives of the assignment
2. Determine potential types of samples to be collected
3. Plan to collect controls like gloves or bags, in order to ensure equipment is not contaminated
4. Arrange for the submission of samples with laboratories
5. Check expiration dates on all sampling materials to make sure they are not expired
6. Print out adequate Chain of Custody and laboratory submission forms

### Selecting Environmental Samples:

1. Discuss with communicable disease colleagues about possible locations for environmental sampling based on the suspected pathogen(s)
2. Common sites for environmental sampling include both **food contact surfaces** such as cutting boards, utensils used with suspected food, any other surface that may have been in contact with the suspected food, and **non-food contact surfaces** such as high use surfaces (i.e., door knobs, refrigerator handles), floor drains, floor mats, brooms and mops

### Collection:

1. Wash hands thoroughly and dry with paper towel
2. Use properly fitting sterile gloves and be mindful not to cross-contaminate samples
3. Use environmental swab packet from the sampling kit and follow the directions to prevent sample contamination
4. Remember to set aside controls (e.g., gloves, bags, etc. from the sampling kit)
5. Assign and label each sample with an identifying number
6. Seal sample with tamper evident tape
7. Fill out Chain of Custody and lab submission forms for each sample
8. Document location where sample was taken on a sampling log. Include pictures and/or drawings of floorplan. Note on the floor plan the location where each sample was collected.
9. Place in an ice chest containing ice packs

10. Do **NOT** forget to collect and send controls to the laboratory

**Transportation:**

1. Transport samples to the laboratory as quickly as possible
  - If immediate delivery to the laboratory is not possible, store specimens in a secured area, where there is no possibility for contamination or tampering
  - Check if types of samples collected have a time/temperature restriction upon collection and delivery to laboratory
2. Send controls along with samples to laboratory
3. Make copies of all forms (Chain of Custody and laboratory submission forms) for your records.

**NOTE:** Store food and environmental samples separately from stool samples

## FOOD SAMPLING GUIDELINES

Contact your laboratory and communicable disease counterparts before the investigation to determine what food sampling is necessary. Consider consulting with other environmental health programs such as the California Food and Drug Branch for guidance on sampling selection. Consult with your laboratory regarding availability and capacity to test samples, restrictions on the number of samples to be collected, proper storage of samples and delivery/drop-off location.

### Before Leaving for the Investigation:

1. Go over the objectives of the assignment
2. Determine potential types of samples to be collected
3. Plan to collect controls
4. Arrange for the submission of samples with laboratories
5. Check expiration dates on all sampling materials to make sure they are not expired
6. Print out adequate Chain of Custody and laboratory submission forms

### Selecting Food Samples:

1. Collect leftover food items or ingredients with the same lot number as the food items or ingredients used during the exposure period, if available.
  - If ingredient with the same lot number is available unopened, collect the closed container
  - In some circumstances, consider sampling comparable food items or ingredients if the original item is unavailable
2. Consult with laboratory on quantity of sample to be collected and collection procedures/protocols.
  - General rule of thumb:
    - Collect at least 2 cups of each food item, with the exception of loosely packed or airy food (such as leafy greens). Collect more for these food items
    - Randomly sample from the same container of interest; do NOT scoop entire food sample from one area of the container
    - If less than 2 cups is available, collect all that is possible

**NOTE:** It is better to collect too much than too little. The laboratory can discard any food not used for testing later.

### Collection:

1. Wash hands thoroughly and dry with paper towel
2. Use properly fitting gloves and do not touch any portion of the food. Be mindful not to cross-contaminate samples
3. Use the sterile collection tools to retrieve the sample
4. Collect sample in sterile containers or bags from the kit. Remember to send controls (e.g., gloves, bags, etc. from the kit) to lab for testing

- If product is still in its retail packaging:
    - Leave product in its original container
    - Collect an intact, unopened container of the same batch/lot for comparison, if possible
  - For foods with high moisture content or liquids:
    - Use containers that can be sealed securely
    - Store separately from other samples in case of leakage
  - For large food items (i.e., tray of lasagna, beef roast):
    - Collect the entire food item (laboratory will determine from where to sample)
    - Leave product in the container they are found in, and wrap product in foil and plastic to prevent spills and cross-contamination
5. Assign and label each sample with an identifying number
  6. Seal sample with tamper evident tape
  7. Place sample in proper storage container using the following guidelines:
    - For foods that do **NOT** need refrigeration, use insulated coolers or clean containers/bags
    - For foods that need refrigeration, use insulated coolers with ice packs
    - For foods that are frozen, keep frozen. Use insulated coolers with frozen ice packs, then place in freezer as soon as possible

**NOTE:** If food item is not frozen, do **NOT** freeze the specimen
  8. Fill out Chain of Custody and lab submission forms for each sample
  9. Leave an itemized list of what was collected with the establishment

**Transportation:**

1. Transport samples to the laboratory as quickly as possible.
  - If immediate delivery to the laboratory is not possible, store specimens in a secured area, where there is no possibility for contamination or tampering.
  - Check if types of samples collected have a time/temperature restriction upon collection and delivery to laboratory.
2. Send controls to laboratory along with samples
3. Make copies of all forms (Chain of Custody and laboratory submission forms) for your records.

**NOTE:** Store food and environmental samples separately from stool sample

## CLINICAL SPECIMEN SAMPLING GUIDELINES

Collaborate with your communicable disease counterparts regarding collection of clinical samples from establishment employees and restriction/exclusion clearance criteria of employees. Consult with laboratory counterparts regarding availability and capacity to test specimens, restrictions on number of specimens to be collected, proper storage, and delivery/drop-off location.

### Before Leaving for the Investigation:

1. Go over the objectives of the assignment
2. Determine potential types of specimens to be collected
3. Arrange for the submission of specimens with laboratories
4. Check expiration dates on all sampling materials to make sure they are not expired
5. Print out consent and laboratory submission forms for food handlers to complete, if applicable

### Collection:

1. Label the specimen container with the food handler's name using permanent ink and fill in as much of the submission form as possible
2. Provide food handlers with adequate information and instructions for stool sampling. This includes how to properly label the specimen and the fact that the specimen must be returned by the food handler within 48 hours
3. Local health department staff should collect consent forms and disburse laboratory submission forms to food handlers

### Transportation:

1. Transport samples to the laboratory as quickly as possible.
  - If immediate delivery to the laboratory is not possible, store specimens in a secured area, where there is no possibility for contamination or tampering.
  - Check if types of samples collected have a time/temperature restriction upon collection and delivery to laboratory
2. Make copies of all forms for your records

**NOTE:** Laboratory samples should be turned in as soon as possible. Do **NOT** wait for all specimens to be turned in before handing them off to the laboratory

## Sample Collection Log (Example)

Template provided by CDPH FDB

Below is an example of a sample collection log to be used when taking food or environmental samples as part of an environmental assessment.

**NOTES:** (1) For the Glove, Whirlpak, and Swab boxes, fill out the lot # and expiration date (if applicable) information. If items from multiple packages are used, be sure to note them separately and indicate in the table for each sample which package was used. An example would be if gloves from box 1G were used for all food samples, then all food samples should have "1G" in the column for "Equipment Lots Used".

(2) The Sample ID # should follow your agency's system for assigning sample identification numbers.

SAMPLING COLLECTION LOG								
<b>Date:</b>		<b>Establishment name:</b>						
<b>Outbreak #:</b>		<b>EHS Personnel:</b>						
<b>Glove Lot(s):</b>	1G) Size 7.5 = Lot _____					Expiration:		
	2G) Size 8 = Lot _____					Expiration:		
	3G) = Lot _____					Expiration:		
<b>Whirlpak Lot(s):</b>	1W) 24oz = Lot _____					Expiration:		
	2W) 55oz = Lot _____					Expiration:		
	3W) = Lot _____					Expiration:		
<b>Swab Lot(s):</b>	1S) Lot _____					Expiration:		
	2S) Lot _____					Expiration:		
	3S) Lot _____					Expiration:		
Sample ID #	Time	Location	Sample Type	Description	Quantity	Equipment Lots Used	Collector	Pics (Image#)
EXAMPLE: 512061218-E001	15:00	Deli area	Food	Cooked carrots from open bin, prepared 6/11/18 18:00	200 g	1G, 1W	Mary Smith	1-2

<b>Sample ID #</b>	<b>Time</b>	<b>Location</b>	<b>Sample Type</b>	<b>Description</b>	<b>Quantity</b>	<b>Equipment Lots Used</b>	<b>Collector</b>	<b>Pics (Image#)</b>



# Chain of Custody Form

Template provided by CDPH FDB

**INSTRUCTIONS:** If samples are sent to different laboratories, use one form per final laboratory destination.

Box 1: ESTABLISHMENT INFORMATION		Box 2: ENVIRONMENTAL HEALTH SPECIALIST (EHS) INFORMATION				
Establishment Name:		EHS Name:		EHS Agency:		
Establishment Address:		EHS Title:		EHS Agency Address:		
Box 3: SAMPLE INFORMATION						
Sample #:	Sample Temperature:	Sample Description:	Reason for Collection	Date/time:	Sample Type:	
<b>Sample Type</b> 01 DRINKING WATER   03 SURFACE WATER   05 FOOD   07 SOIL   09 OTHER (specify) <b>Codes:</b> 02 WASTE WATER   04 POOL/SPA WATER   06 SHELLFISH TANK WATER   08 CLINICAL SPECIMEN (specify)						
Box 4: SIGNATURES						
License holder (or Consumer)						
Name (print):		Signature:		Date:		
EHS (Collector)						
Name (print):		Signature:		Date:		
Box 5: DELIVERY INFORMATION						
Method of Shipping:		Delivery condition: <input type="checkbox"/> FROZEN <input type="checkbox"/> ON ICE <input type="checkbox"/> RM TEMP <input type="checkbox"/> OTHER:				
Sample #(s):	Relinquished by (print):	Relinquished by (signature):	Received by (print):	Received by (signature):	Date:	Time:
Box 6: COMMENTS						

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# Invoice Collection Guidelines

## INSTRUCTIONS:

1. Consult with communicable disease (CD) counterparts to identify the earliest exposure date and the suspected food item(s). Identify the invoice date range to collect. This does **NOT** necessarily mean that the product delivery date was during the exposure period, but the *ingredient was used during the exposure period*.
  - Use the table below as a general rule of thumb
  - **Always count back from the earliest exposure date** and collect up until the current date
  - Take into account the turnover rate of the suspected food item
    - i. High turnover products are products with frequent shipments. New shipments at least once per week is considered high turnover.
    - ii. Low turnover products are products with less frequent shipments. New shipments less frequent than once per week is considered low turnover.
  - If pathogen is unknown or pathogen has a long incubation period, use the low turnover timeframe
2. Collect invoices.
  - **Be sure to include alternative suppliers** (i.e., if establishment purchases from local grocery store in between shipments or when shipment arrives late).
3. Clarify with manager if there is ambiguous content, such as illegible writing, vague description of food item, or foreign language on invoice.
4. Highlight or circle suspected food item of interest on invoice.

Suspected Food Item	Time Frame for Invoice Collection (High Turnover Product)	Time Frame for Invoice Collection (Low Turnover Product or Other**)
Fresh Produce	1 month* – present	3 months* – present
Fresh Meat, Poultry, and Processed Egg Products	3 months* – present	6 months* – present
Frozen Products and Shelf-stable Products	3 months* – present	1 year* – present

\* **prior to earliest exposure date**

\*\* pathogen with long incubation period (i.e. *Listeria monocytogenes*, Hepatitis A), or unknown pathogen

## Invoice Collection Table

GENERAL INFORMATION		
<b>Outbreak #:</b>	<b>Establishment Name:</b>	
<b>EHS Personnel:</b>	<b>EHS Agency:</b>	<b>EHS Phone:</b>
<b>Earliest Exposure Date:</b>	<b>Date Range of Interest/Range Requested:</b>	
Suppliers and alternative suppliers (Name & Address)	Invoice date range requested	List suspect ingredient(s) in this set of invoices and description as listed on invoice
ABC Distributor 1 Street St. City, CA 12345	5/6/17- 6/30/17	Cilantro 20 ct., Chopped romaine 1 lb., Romaine head 4/6

# APPENDIX A

## Additional Resources for Restaurant Managers

### GENERAL PROCEDURES RESOURCES FOR RESTAURANT MANAGERS

- 1) [California Emerging Infections Program \(CEIP\): Employee Health Toolkit](#)  
(<http://ceip.us/wordpress/wp-content/uploads/2013/12/CEIP-Toolkit-Final-10-31-13.pdf>)
  - Pages 5-6 (English); pages 7-8 (Spanish): Brochure with information on keeping sick employees away from food
  - Page 11, 13, 23 (English); page 12, 14, 24 (Spanish): Flyers encouraging sick employees to stay home
  - Page 17, 19, 28 (English); page 18, 20, 28 (Spanish): Flyers encouraging the use of gloves and hand washing
  - Page 27: Hand wash observation form to be completed by managers
- 2) [Council to Improve Foodborne Outbreak Response \(CIFOR\): Foodborne Illness Response Guidelines](#) (<http://cifor.us/downloads/clearinghouse/CIFOR-Industry-Guidelines.pdf>)
  - Page 58: Exclusion/restriction criteria for sick employees
  - Pages 59-63: Flyers encouraging sick employees to stay home, and encouraging proper glove use and hand washing practices
  - Page 78: Sample re-opening self-inspection checklist form
- 3) [US Food and Drug Administration \(FDA\): Employee Health and Personal Hygiene Handbook](#) (<https://www.fda.gov/food/retail-food-industryregulatory-assistance-training/retail-food-protection-employee-health-and-personal-hygiene-handbook>)
  - Handbook meant for use by establishment managers and employees. Entire handbook is a great resource for information and forms for managers
- 4) [California Food and Drug Branch \(FDB\) Retail Food Program](#)  
(<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/RetailFoodProgram.aspx>)
  - California FDB guidelines and resources for retail food establishments

### NOROVIRUS RESOURCES FOR RESTAURANT MANAGERS

- 1) [California Department of Public Health \(CDPH\) Norovirus Webpage](#)  
(<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Norovirus.aspx>)
  - Flyers with key facts regarding norovirus
  - General information and guidance regarding norovirus
- 2) [US Centers for Disease Control and Prevention \(CDC\): Norovirus Facts for Food Workers](#) (<https://www.cdc.gov/norovirus/downloads/foodhandlers.pdf>)

<https://www.cdc.gov/norovirus/downloads/foodhandlers-sp.pdf> ([Spanish](#))

- Flyer for prevention of spread of norovirus specific to food workers

**3) [Water Quality and Health Council](#) (<https://waterandhealth.org/resources/posters/>)**

- Flyers for proper cleaning and disinfection to prevent the spread of norovirus (English, Spanish, French)

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## EMPLOYEE ILLNESS LOG FOR MANAGER USE

This form is intended to be used by establishment managers to regularly log when employees call out sick.

Report Date	Employee Name	Symptoms Reported to Manger						Date returned to work	IF DIAGNOSED	
		Vomiting	Diarrhea	Jaundice	Fever	Respiratory	Comments		E. coli O157:H7, Salmonella, Shigella, or Hepatitis A (Y or N)?	Called local health agency (Y or N)?
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										



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## ILLNESS REPORTING REQUIREMENTS FOR FOOD SERVICE WORKERS AND PERSONS-IN-CHARGE



To reduce the opportunity for the transmission of a foodborne illness by an ill Food worker with symptoms associated with acute gastrointestinal illness\* or other communicable disease, Chapter 3, Article 3 of the California Retail Food Code (CRFC) requires notification responsibilities for both the Food worker to report to the Person-In-Charge, and the food establishment's Manager or Person-In-Charge to report to the local environmental health agency.

### FOODWORKER RESPONSIBILITIES:

You must report the illness to the Person-In-Charge at your facility if you have been told you have one of the following illnesses:

- *E.coli 0157:H7* or *Shiga toxin producing E.coli*
- *Salmonella typhi*
- *Salmonella spp.*
- *Shigella spp.*
- Hepatitis A virus
- Norovirus
- *Entamoeba histolytica*
- Or any other illness that may be transmittable through food.

You must report to the Person-In-Charge if you have an open, infected wound so precautions can be taken to prevent food contamination.

If you have a gastrointestinal illness\*, diarrhea, or vomiting, you should report it to the Person-In-Charge. The Person-In-Charge may exclude or restrict you to work assignments temporarily that do not put customers at risk of getting sick or from working.

*\*Acute Gastrointestinal Illness is defined in CRFC as a short duration illness most often characterized by diarrhea and/or vomiting; alone or in conjunction with other gastrointestinal symptoms, such as fever or abdominal cramps.*

### PERSON-IN-CHARGE RESPONSIBILITIES:

All food employees shall be instructed on the relationship between personal hygiene and food safety, including the association of hand contact, personal habits and behaviors, and food employee health to foodborne illness.

#### Ill Employee Policy

Restrict employees from the food establishment from working with exposed food, clean equipment, utensils, and linens; unwrapped single service or use articles if they have diarrhea and/or vomiting.

Exclusions and restrictions may apply if an employee has been diagnosed with:

- *E.coli 0157:H7* or *Shiga toxin producing E.coli*
- *Salmonella typhi*
- *Salmonella spp.*
- *Shigella spp.*
- Hepatitis A virus
- Norovirus
- *Entamoeba histolytica*
- Or any other illness that may be transmittable through food.

#### Reporting Policy

You must notify your local environmental health agency of any employee diagnosed with any of the illnesses listed above.

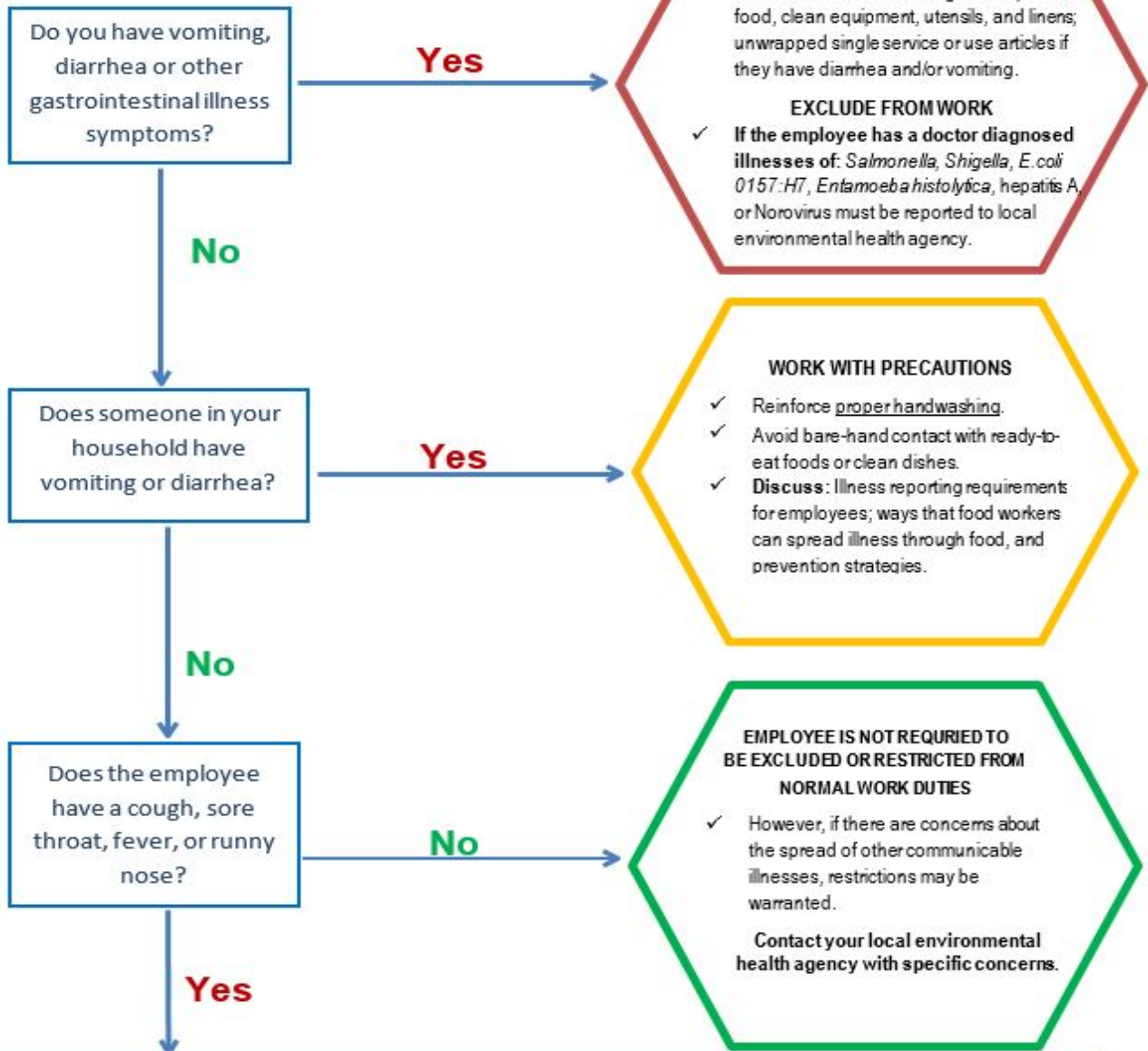
You must notify the local environmental health agency if you are aware of two or more of your employees are concurrently experiencing an acute gastrointestinal illness\*.

# EMPLOYEE ILLNESS DECISION GUIDE

For Use by Food Establishment Persons-In-Charge

CONTACT YOUR LOCAL ENVIRONMENTAL HEALTH AGENCY WITH ANY SPECIFIC QUESTIONS

Ask these three questions to decide if employees' duties should be modified due to illness.



If a food worker has influenza-like symptoms (cough, fever, sore throat, or runny nose), or has been diagnosed with any type of influenza and the symptoms cannot be controlled by medication; the food worker should not work with exposed food, clean equipment, linens, or utensils. CRFC Section 113974

# APPENDIX B

## Additional Resources for Environmental Health Specialists

### EDUCATIONAL RESOURCES FOR ENVIRONMENTAL HEALTH SPECIALISTS

#### 1) PRINTED MATERIALS

- [FDA: Foodborne Illness-Causing Organisms in the U.S.](https://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM187482.pdf)  
(<https://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM187482.pdf>)
  - Chart on organisms causing foodborne illness in the US with symptoms, onset time, duration, and common food sources
- [CIFOR: Guidelines for Foodborne Disease Outbreak Response: 3<sup>rd</sup> edition](https://cifor.us/products/guidelines)  
(<https://cifor.us/products/guidelines>)
  - Chapter 5 (p.87): Cluster and Outbreak Investigation
  - Chapter 6 (p.115): Control Measures and Prevention
  - Chapter 7 (p.137): Special Considerations for Multijurisdictional Outbreaks
- [CIFOR: Outbreaks of Undetermined Etiology \(OUE\) Guidelines](https://cifor.us/products/oue-guidelines)  
(<https://cifor.us/products/oue-guidelines>)
  - Interactive, application-based program to provide guidance on recommended outbreak specimen collection, shipping information, and rule-out testing
- [CIFOR: Outbreaks of Undetermined Etiology \(OUE\) Agent List](https://cifor.us/uploads/resources/CIFOR-OUE-Agent-List_FINAL.pdf)  
([https://cifor.us/uploads/resources/CIFOR-OUE-Agent-List\\_FINAL.pdf](https://cifor.us/uploads/resources/CIFOR-OUE-Agent-List_FINAL.pdf))
  - Chart of pathogens, incubation periods, signs and symptoms, and notable risk factors and considerations
- [CDC Centers of Excellence: Food Safety Tools](https://www.cdc.gov/foodsafety/centers/index.html)  
(<https://www.cdc.gov/foodsafety/centers/index.html>)
  - Website with resources produced by CDC Centers of Excellence relating to food safety
  - [Environmental Assessment Field Guides](http://foodsafety.uw.edu/resources/ea-field-guides) produced by the Washington (WA) Integrated Food Safety Center of Excellence (<http://foodsafety.uw.edu/resources/ea-field-guides>)
- [CDPH Food and Drug Branch Seafood and Shellfish Safety](http://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/SeafoodAndShellfishSafety.aspx)  
([www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/SeafoodAndShellfishSafety.aspx](http://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/SeafoodAndShellfishSafety.aspx))
  - Website with resources on regulations, shellfish shippers list, and inspection checklists

#### 2) TRAININGS

- [CDC: Environmental Assessment Training Series \(EATS\)](https://www.cdc.gov/nceh/ehs/elearn/eats/index.html)  
(<https://www.cdc.gov/nceh/ehs/elearn/eats/index.html>)
  - Free, online training to build the skills needed to investigate foodborne outbreaks
- [NY Integrated Food Safety Center of Excellence](https://nyfoodsafety.cals.cornell.edu/environmental-sampling)  
(<https://nyfoodsafety.cals.cornell.edu/environmental-sampling>)
  - Website includes guidance, webinars, and other resources for environmental sampling

- Recorded webinar on [Interviewing Food Workers in an Outbreak Investigation as part of an Environmental Assessment](https://www.youtube.com/watch?v=dXogi737jXM&feature=youtu.be)  
(<https://www.youtube.com/watch?v=dXogi737jXM&feature=youtu.be>)
  - **WA Integrated Food Safety Center of Excellence**
    - [The Role of Environmental Assessments in Outbreak Investigations](https://youtu.be/8lsXrHPGgYs)  
(<https://youtu.be/8lsXrHPGgYs>)
- 3) [CDC NEARS \(National Environmental Assessment Reporting System\)](#)**
- (<https://www.cdc.gov/nceh/ehs/nears/index.htm>)
    - Website with information on the NEARS program and instructions on registration
- 4) OUTBREAK REPORTING**
- [CDC NORS \(National Outbreak Reporting System\)](#)
    - (<https://www.cdc.gov/nors/index.html>)
    - Website with information on the NORS program
  - [CDPH Foodborne Disease Outbreak Report Form](#)
    - (<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8567.pdf>)

## STATE AND FEDERAL CONTACTS FOR ENVIRONMENTAL HEALTH SPECIALISTS

- 1) CA Department of Public Health (CDPH) Disease Investigations Section (DIS):** (510) 620-3434
- 2) CDPH Food and Drug Branch (FDB):** (800) 495-3232 \*ask for someone in the Emergency Response Unit (ERU)
- 3) NEARS:** call FDB at (800) 495-3232 and ask for someone responsible for NEARS

# SAMPLING KIT INVENTORY LOG (EXAMPLE)

Template provided by CDPH FDB

Below is an example sampling kit inventory log. This is the form used by the CDPH FDB team when they perform environmental assessments. Please note, **this as an example** that can be used to create your own customized form that meets the needs of your agency.

**NOTE:** (1) The kit expiration date is determined by the earliest expiration date of all items in the kit.  
 (2) A shaded-out box means that the item does not have an expiration date or lot number.

SAMPLING KIT INVENTORY					
<b>Kit #:</b>	<b>Date inspected:</b>	<b>Kit expiration:</b>			
<b>Location:</b>			<b>Signature:</b>		
Exp Date	Lot #	Item	Count	✓	Comments/notes
		24 oz. Whirl-Pak Bags	110		
		55 oz. Whirl-Pak Bags	110		
		Gloves-Sterile-8.0 or XL	100		
		Sponge Swabs	150		
		92 oz. Whirl-Pak Bags	10		
N/A	N/A	Trash Bags – Black 30 Gal	5		
N/A	N/A	Trash Bags – White 13 Gal	5		
N/A	N/A	Closed Controls in a Bag	1		
	N/A	AA Batteries	4		
N/A	N/A	Camera (Charged)	1		
N/A	N/A	Camera Battery	1		
N/A	N/A	Camera Charging Cable	1		
N/A	N/A	Camera Charging Wall Adapter	1		
N/A	N/A	Hanging Scale (Verify Batteries)	1		
N/A	N/A	Rubber Bands	25		
N/A	N/A	Gloves – Non-Sterile White (L)	20		
N/A	N/A	Hairnets	10		
N/A	N/A	Beard nets (optional)	10		
		Hand Sanitizer	2		
N/A	N/A	Packing Tape	1		
N/A	N/A	Sharpie Pens	5		
N/A	N/A	Ball-Point Ink Pens	2		
N/A	N/A	Evidence Tape	10		
N/A	N/A	Sample/Evidence Tags	10		
		Swab Sticks	10		
		Sponge Tubes	10		
		Boot Covers	10		
N/A		Clorox Disinfecting Wipes	1		
N/A		Alcohol Spray	1		
N/A	N/A	Paper Towels (Roll)	1		
N/A		Sterile Scoops	6		
N/A		Sterile Water Bottles – 120mL	3		

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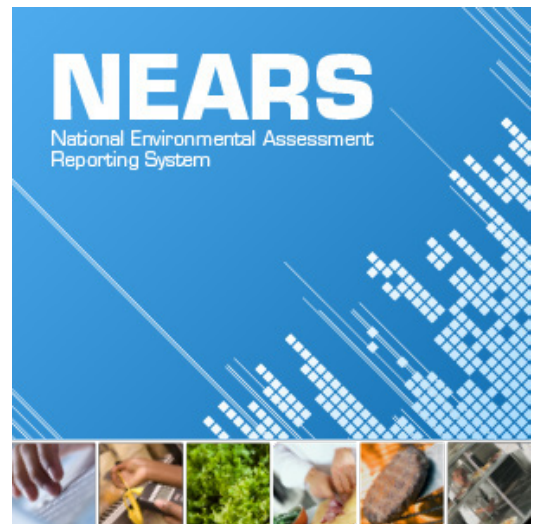
# National Environmental Assessment Reporting System

Use CDC's NEARS\* surveillance system to capture environmental assessment data from foodborne illness outbreak investigations and improve your food safety programs.

## Participating in NEARS Helps Your Program

Participating in NEARS can help prevent foodborne illness outbreaks associated with restaurants, banquet facilities, schools, and other institutions. Your program can access and use your NEARS data at any time to

- Identify environmental causes of outbreaks in your jurisdiction.
- Take follow-up action to reduce or prevent future foodborne illness outbreaks.
- Evaluate your food safety program and make improvements based on established guidelines.
- Develop or modify program policies or regulations.
- Focus limited program resources on actions with the highest impact.
- Help your program meet the Food and Drug Administration's Retail Food Program Standards (Standard 5).



## Participating in NEARS Helps the National Food Safety System

NEARS is designed for use by health departments throughout the United States. This surveillance system serves as a companion to CDC's National Outbreak Reporting System (NORS) for reporting of environmental assessments.

CDC and national food safety partners recommend that all food safety programs use NEARS to improve food safety in the United States. Environmental assessments help identify the underlying environmental causes of foodborne illness outbreaks. By participating in NEARS, your program is providing critical data from these assessments to prevent and reduce future outbreaks.

CDC and its national food safety partners will use NEARS to

- Analyze standardized data to understand how and why outbreaks occur.
- Share findings or recommend actions to better respond to outbreaks and prevent future ones.

*\*Note: NEARS was formerly known as National Voluntary Environmental Assessment Information System (NVEAIS).*



Regulatory agencies such as the U.S. Food and Drug Administration can use information from NEARS to develop food safety intervention strategies and recommend regulations such as the Food Code. Food safety programs use this information during outbreak investigations and on a daily basis for issuing permits and inspecting restaurants and other facilities.



## How To Participate in NEARS

NEARS is targeted to government, local, state, tribal, and territorial food safety programs.

To participate, go to the [NEARS Registration webpage](https://www.cdc.gov/nceh/ehs/nears/registration.htm) (<https://www.cdc.gov/nceh/ehs/nears/registration.htm>).

## Environmental Assessment Training Series (EATS): A Helpful Tool for NEARS Users

CDC highly recommends completing EATS before participating in NEARS; however, the free courses can be taken independently of NEARS. EATS helps users better understand terminology, agency roles and responsibilities, and the connection of the environment to foodborne illness. In turn, EATS graduates will be able to collect and report high quality data to NEARS.

EATS was formerly known as e-Learning on Environmental Assessment of Foodborne Illness Outbreaks.

### Quick Links

[National Environmental Assessment Reporting System:](https://www.cdc.gov/nceh/ehs/nears/)

<https://www.cdc.gov/nceh/ehs/nears/>

[Environmental Assessment Training Series:](https://www.cdc.gov/nceh/ehs/elearn/eats/index.html)

<https://www.cdc.gov/nceh/ehs/elearn/eats/index.html>

[Food Safety Resources for Environmental Health Practitioners:](https://www.cdc.gov/nceh/ehs/activities/food.html)

<https://www.cdc.gov/nceh/ehs/activities/food.html>



*Refrigerator contents seen in the training's simulated environmental assessment of a restaurant facility.*

Questions? Email [NEARS@cdc.gov](mailto:NEARS@cdc.gov)

# APPENDIX C

## Resources for Unique Situations

### RECALL EFFECTIVENESS CHECK

*This template provided by CDPH FDB*

If you conduct any recall effectiveness checks within your jurisdiction, the CDPH FDB would appreciate any feedback regarding the effectiveness of a recall. The completed form can be emailed to [fdberu@cdph.ca.gov](mailto:fdberu@cdph.ca.gov). Completed forms help continue the communication between FDB and the distributors regarding the effectiveness of their recall notices. Your local agency has primary responsibility of following up with individual retailers within your jurisdiction.

Below is a script to use either on the phone or in person with establishments to assess the effectiveness of a product recall.

SURVEY	
Recalled product:	Date AND time of interview:
<p>This is <u>(name and agency of interviewer)</u>. I am calling for/wish to speak to <u>(responsible person at establishment)</u> to check on the effectiveness of the <u>(recalling firm)</u> recall of <u>(product description including codes)</u>. On <u>(date)</u>, <u>(recalling firm)</u> informed all their customers who received this product via <u>(how: letter, telephone, visit, email, etc.)</u>, that all affected stock should be <u>(returned, destroyed, modified, relabeled, etc.)</u>. I have the following questions to ask you about this recall:</p> <ol style="list-style-type: none"><li>1) Did your firm/establishment receive notification that <u>(product name)</u> products manufactured by <u>(company name)</u> are being recalled? <input type="checkbox"/> Yes <input type="checkbox"/> No</li><li>2) Did your firm/establishment receive shipments of the product being recalled? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If NO</b> to question 2: Terminate questioning and go to the closing.</li><li>3) Do you have any of the recalled product on hand? (Please check inventories before answering). <input type="checkbox"/> Yes <input type="checkbox"/> No</li><li>4) <b>If YES</b> to question 3: do you intend to return the product to <u>(company name)</u> as requested? <input type="checkbox"/> Yes <input type="checkbox"/> No</li><li>5) <b>If NO</b> to question 4: please explain your intentions. _____ _____ _____</li><li>6) Have you received any reports of illness or injury related to this product? <input type="checkbox"/> Yes <input type="checkbox"/> No</li></ol>	

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# Resources for Unique Situations

## SUSPECTED INTENTIONAL CONTAMINATION PROTOCOL

### BACKGROUND

If there is suspected intentional contamination of a consumer product, it is important that a prompt investigation is performed by the appropriate governmental agency. Indicators of intentional contamination include the presence of unusual microorganisms in host food, an unusually high inoculum, and a disease found outside the normal transmission season. Therefore, this reference form is meant to provide information related to the proper steps to take if there is suspected intentional contamination.

### SITUATION AND GUIDELINES

\*Phone list on second page; **NOTE:** Does not include local department numbers

- 1) Product tampering or contamination, that appears could have been done purposefully, first reported in your jurisdiction, and resulted in (1) a life-threatening situation to complainant or public or (2) has potential to cause illness:**
  - a. If a local law enforcement officer receives the first report of the incident, he/she should follow the local law enforcement department's investigation policies and notify the local Environmental Health Services and ask for an environmental health specialist on duty.
  - b. If any other agency receives the first report, they shall notify:
    - Local law enforcement who should also notify emergency rooms at hospitals as the situation demands
    - Local Environmental Health Services who should notify:
      - Public Health Department, County Epidemiologist
      - **California Department of Public Health Food and Drug Branch (CDPH FDB) at (800) 495-3232** and ask to speak to someone from the Emergency Response Unit (ERU) (afterhours: **CDPH Duty Officer at (916) 328-3605**) who will contact the Federal Bureau of Investigation (FBI) and U.S. Food and Drug Administration (FDA) or the U.S. Department of Agriculture (USDA), as needed
      - Poison Control Center, as needed
    - Plan of investigation coordinated by local law enforcement or FBI, local health department, local environmental health services, local epidemiologists, public health laboratory, and CDPH FDB in collaboration with FDA or USDA
- 2) Product tampering first noted outside your jurisdiction and there is a possibility that product is distributed in your jurisdiction:**
  - a. The agency first receiving the report should notify the local Environmental Health Services who should then notify both the local public health department's epidemiologist and CDPH FDB, as well as local law enforcement

## PHONE LIST

### **California Department of Food and Agriculture, Milk and Dairy Food Safety**

Sacramento main line: (916) 900-5008

Regional office, depends on location

### **California Department of Public Health-Food and Drug Branch (CDPH FDB)**

General number: (800) 495-3232

CDPH Duty Officer (afterhours): (916) 328-3605

Consumer complaints (24 hours, automated): (800) 495-3232

### **Federal Bureau of Investigation**

Report suspicious activity: (855) TELL-FBI or (855) 835-5324

Los Angeles: (310) 477-6565

Sacramento: (916) 746-7000

San Francisco: (415) 553-7400

San Diego: (858) 320-1800

Local contact, depends on location

### **Poison Control Center**

General number: (800) 222-1222

### **U.S. Consumer Product Safety Commission**

Consumer hotline: (800) 638-2772

### **U.S. Department of Agriculture**

Emergency number: (202) 720-5711

Meat and poultry hotline: (888) MPHotline or (888) 674-6854

Non-meat or poultry: (888) SAFEFOOD or (888) 723-3366

Information hotline: (202) 720-2791

### **U.S. Food and Drug Administration**

Sacramento office: (916) 930-3674

Emergency number: (866) 300-4374

General number: (888) INFO-FDA or (888) 463-6332

## Acknowledgements

Alameda County Department of Public Health

Boulder County Public Health

California Emerging Infections Program

California Food and Drug Branch

Connecticut Department of Public Health

Contra Costa County Department of Public Health

County of San Luis Obispo Health Agency

Joyce Tuttle at National Environmental Assessment Reporting System (NEARS)

Los Angeles County Department of Public Health

Minnesota Department of Health

Orange County Health Care Agency

Oregon Public Health Division

San Diego County Department of Public Health

San Francisco Department of Public Health

Santa Clara County Public Health Department Shasta County Department of Public Health

Stanislaus County Department of Environmental Resources

Tri-County Health Department (Colorado)

Ventura County Department of Public Health

Washington Integrated Food Safety Center of Excellence

Yuba County Environmental Health Division