WV Retail Food Program
New Sanitarian Training

Complaint Tracking and Response and Conducting a HACCP Based Environmental Risk Analysis for Foodborne Outbreak Investigations

Jennifer Hutson, Food Program Manager
September 9, 2019, Charleston, WV
• Foodborne Outbreak Detection

• The 7 HACCP Principles

• Applying HACCP Risk Analysis to Investigations

• Joint Class Activity

• Table Top Exercises

• Part I Epidemiology

• Part II Planning

• Part III Environmental Assessment & Reporting
Foodborne Illness Outbreak Detection

Infectious Disease Reporting

Vs

Complaint Reports
Three Types of Hazards

- **Physical**
- **Chemical**
  - Cleaners, sanitizers, pesticides
  - Some plants, animals, microbes can cause intoxications
- **Biological**
  - Viruses
  - Parasites
  - Bacteria
    - Infections
    - Intoxications
    - Toxin mediated infections
Outbreak Detection

Pathogen-Specific Surveillance

- Reporting Required by law from:
  - Health Care Providers
  - Laboratories
- For:
  - Outbreaks
  - Disease referenced in WV 16-3-1; 64CSR7

Complaints

- How do you collect complaints?

Useful Tools:

- Foodborne Disease Investigation Manual 2018
- C4. Food Complaint Form
- Complaint log for all food complaints (written or not)
- Cary-Blair Kit
- Specimen Collection Instructions

Complaints and Surveillance Efforts benefit from having a log of incoming data.
About Foodborne Illness Complaints

• Pick the method that works best for you.
  • EHERS
  • C4. Food Complaint Form
• Approach with respect and dignity.
• Collect all the information possible.
• Be as accurate as possible.
• Person collecting the information should be a member of the outbreak team.
  • Nurse
  • Sanitarian
  • Epidemiologist
  • Health Officer/Administrator/Threat Preparedness Coordinator
**C4 Foodborne Illness Complaint Form**

**Food Complaint Information**

<table>
<thead>
<tr>
<th>Date/Time Received:</th>
<th>AM/PM</th>
<th>Call Received By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone 1:</td>
<td>H/W/C</td>
<td>Phone 2:</td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
<td>State:</td>
</tr>
<tr>
<td>ZIP Code:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation(s):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food premises or event involved:</td>
<td>Location:</td>
<td></td>
</tr>
<tr>
<td>Complaint:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Complaint Involves**

- Foodborne Illness: ☐ ☐ ☐ (if no, do not continue on this form) Multiple ill persons: ☐ ☐ ☐ ☐

**Complaint Investigation**

<table>
<thead>
<tr>
<th>Investigated By:</th>
<th>Investigation Start Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected Meal Data:</td>
<td>Date/Time of meal:</td>
</tr>
<tr>
<td>Suspected Items:</td>
<td>AM/PM</td>
</tr>
<tr>
<td>List anything unusual about the meal (temperature, taste, odor, color etc.):</td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Information**

- Clinical information about: ☐ Complainant ☐ Someone else | Name: | Relationship: |
- Illness Onset Date/Time: | AM/PM | Illness End Date/Time: | AM/PM |

**Signs and Symptoms (mark all that apply):**

- Diarrhea (frequency in 24 hours: ___) ☐ watery ☐ bloody
- Nausea
- Jaundice
- Vomiting
- Rash
- Chills ☐ Fever (temp. __°F)
- Abdominal pain
- Other:

- Doctor or healthcare provider/ emergency visit: ☐ ☐ Date: |
- Physician/provider/facility: | Number: |

- Hospitalized due to illness: ☐ ☐ Admission date: |
- Hospital:

- Clinical specimens taken: ☐ Blood ☐ Stool ☐ None (Patient willing to provide a stool/blood sample?: ☐ ☐)

**Diagnosis:**

**Other Ill Persons Associated with Meal/Location**

<table>
<thead>
<tr>
<th>Number of people in party:</th>
<th>Number of people ill:</th>
<th>Number of people not ill:</th>
</tr>
</thead>
</table>

**Predominant symptoms:**

- Name: | Phone: | H/W/C |
- Name: | Phone: | H/W/C |
- Name: | Phone: | H/W/C |

☐ Additional contact info. attached ☐ High risk occupation(s) involved (food worker, daycare staff, healthcare worker, etc.)
# C4 Foodborne Illness Complaint Form

**Other Possible Non-Food Exposures in the Past 2 Weeks**

- [ ] Travel outside the US
  - Dates: / / to / /
  - Location(s):

**Drinking Water Sources (mark all that apply):**

- [ ] Well
  - Location(s):
    - [ ] Surface/spring
    - [ ] Tap (city/municipal)
    - [ ] Bottled
    - [ ] Other:

**Recreational Water Exposure (mark all that apply):**

- [ ] Swimming pool
- [ ] River/lake
- [ ] Splash pad/spray park
- [ ] Other:

  - Location:
  - Location:
  - Location:

**Additional Exposures (mark all that apply):**

- [ ] Ill persons in or outside home
- [ ] Daycare facility
- [ ] Nursing home
- [ ] Diapered kids or adults
- [ ] Mass gatherings
- [ ] Domestic animals/livestock
- [ ] Petting zoo
- [ ] Birds/reptiles
- [ ] Ill animals
- [ ] Other:

**Location(s) of exposures:**

**72-hour Food History** (collect information about what was consumed within the 72-hours prior to illness)

- Dates of 72-hour Food History: / / to / /
  - [ ] First day of illness + 3 days prior

<table>
<thead>
<tr>
<th>Day of Illness Onset (include all food and drinks consumed)</th>
<th>Date: / /</th>
<th>Location</th>
<th>Time: AM/PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinner:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Food/Drinks:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 Day Prior (include all food and drinks consumed)</th>
<th>Date: / /</th>
<th>Location</th>
<th>Time: AM/PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinner:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Food/Drinks:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2 Days Prior (include all food and drinks consumed)</th>
<th>Date: / /</th>
<th>Location</th>
<th>Time: AM/PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinner:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Food/Drinks:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 Days Prior (include all food and drinks consumed)</th>
<th>Date: / /</th>
<th>Location</th>
<th>Time: AM/PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinner:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Food/Drinks:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Public Health Actions and Additional Information** (to be completed after investigation is finished)

- [ ] Food complaint NOT an outbreak (state reason): __________
- [ ] Food complaint part of an outbreak Date/time reported to DiDE: / / : AM/PM
- [ ] Outbreak #________
  - [ ] Fax form to DiDE when outbreak is reported
  - [ ] Line list available
  - [ ] Outbreak specific questionnaires used
  - [ ] Outbreak specific food inspection performed
  - [ ] Site visit/routine inspection performed
  - [ ] Food samples taken
  - [ ] Food worker interview form(s) completed
  - [ ] Calls made to others who were ill/exposed
  - [ ] LHDS sent clinical specimens to lab
  - [ ] Other:
Is it a Foodborne Illness outbreak?

Definition: Two or more person experiencing a similar illness after ingestion of a common food or different food prepared or served in a common place.

Exceptions: Botulism or chemical poisoning requires only one case to classify it as an outbreak.

WHAT’S NEXT?

Notify WV DIDE
(http://dhhr.wv.gov/oeps/disease/Pages/default.aspx)

Epi On-Call
(304) 558-5358, extension 1
(800) 423-1271, extension 1 (toll-free in West Virginia)
(304) 925-9946 (answering service)
The Principles of HACCP

Performing a Hazard Analysis based on Restaurant’s Menu
The 7 principles of a HACCP plan

1. Hazzard Analysis
2. Identify Critical Control Points in the Process
3. Establish Critical Limits for Critical Control Points
4. Establish Critical Control Point Monitoring Criteria
5. Establish Corrective Action
6. Plan of Verification
7. Set Record Keeping Standards
Procedural Steps of A HACCP plan

1. Establish prerequisite programs
2. Group menu items into 1 of 3 categories based on food preparation process
3. Hazard analysis
4. Set critical limits
5. Develop monitoring standards
6. Determine corrective actions
7. Verification of the HACCP
8. Record keeping
9. Validation
Procedure 1: Prerequisite Programs

• As Part of a HACCP
  • Necessary
  • Fundamental
• Ensure Compliance
• “Standard Operating Procedures”
• Should Consider...
  • Customer base
  • Amount of food served
  • Type of food served
  • Number of food employees
Examples of Prerequisite Programs

Examples Include:

– Employee Training Programs
– Vendor Certification/buyer specifications
– Pest Control Programs
– Product Rotation
– Allergen Management
### Procedure 2: Categorize Menu
Based on number of trips through the danger zone.

<table>
<thead>
<tr>
<th>Process 1</th>
<th>Process 2: Same Day</th>
<th>Process 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food with no cook step:</strong></td>
<td><strong>Food made and served the same day:</strong></td>
<td><strong>Food Preparation is complex and makes more than one trip through the danger zone.</strong></td>
</tr>
<tr>
<td>– Sandwiches</td>
<td>– Hamburgers</td>
<td>– Received</td>
</tr>
<tr>
<td>– Chicken/tuna salad from canned chicken/tuna</td>
<td>– Hoagies</td>
<td>– Stored</td>
</tr>
<tr>
<td>– Salads without cooked components</td>
<td>– Made to order Eggs</td>
<td>– Prepared</td>
</tr>
<tr>
<td><strong>Food is:</strong></td>
<td><strong>Food is:</strong></td>
<td><strong>Food is:</strong></td>
</tr>
<tr>
<td>– Received</td>
<td>– Received</td>
<td>– Cooked</td>
</tr>
<tr>
<td>– Stored</td>
<td>– Stored</td>
<td>– Cooled</td>
</tr>
<tr>
<td>– Prepared</td>
<td>– Prepared</td>
<td>– Reheated</td>
</tr>
<tr>
<td>– Held</td>
<td>– Held</td>
<td>– Hot held</td>
</tr>
<tr>
<td>– Served</td>
<td>– Served</td>
<td>– Served</td>
</tr>
</tbody>
</table>
Based on Menus provided Categorize the food for your Establishment

- No Cook Process 1 (41°F)
- Same Day Process 2 (Cook & Serve)
- Complex Food Process 3 (Cook & Cool, Reheat)

Temperature Ranges:
- 41°F - 135°F
Sample Menus

What category do you think each menu is?
What are some of the Prerequisite programs you might see for each?
Procedure 3: Hazard Analysis Finding the Critical Control Points

Two Steps

1. Hazard Identification
2. Hazard Evaluation

Narrows down hazards to CCP’s based on:
- Severity
- Likelihood of occurrence
- No other control available
Flow of Food

- Receiving
- Storing
- Preparing
- Cooking
- Hot Holding
- Serving
- Cooling
- Reheating
Design a flow of food diagram for each process type of food in your establishment.
Conduct a Hazard Analysis of the Food Establishment

Using the flow of food and the question diagram...
Identify & evaluate the hazards.

<table>
<thead>
<tr>
<th>CCP of Concern</th>
<th>Critical Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking</td>
<td>155°F for 15 seconds</td>
</tr>
<tr>
<td>Cooling</td>
<td>41°F or less within 6 hours</td>
</tr>
<tr>
<td>Storage</td>
<td>41°F</td>
</tr>
<tr>
<td>Storage</td>
<td>Above raw meat and poultry</td>
</tr>
<tr>
<td>Reheating</td>
<td>165°F for 15 seconds for hot hold**</td>
</tr>
<tr>
<td>Serving</td>
<td>Prevent bare hand-contact</td>
</tr>
</tbody>
</table>
Critical Control Point (CCP): A point in food preparation that can be controlled to prevent, eliminate, or reduce hazards.

Critical Limits: A measurable minimum standard that can be applied to reduce, prevent, or eliminate hazards. Must be based on regulation at a minimum.
Determine Critical Control Points & Establish Critical Limits

Will this hazard be controlled through a prerequisite program or is there a specific process that must be monitored?

A critical limit is a parameter(s) set to maintain control of the hazard at a critical control point.

Measurable/quantifiable

Based minimally on food code

**Examples**

**Hamburger Patty:**
- CCP: Cooking
- Critical Limit: 155°F for 15 seconds

**Salad for Immediate Service:**
- CCP: Preparation
- Critical Limit: No Bare-hand Contact

**Raw Oysters:**
- CCP: Receiving
- Critical Limit: Approved Source & Shell Stock Tags
Using Information on Assigned food Establishment

Set Critical Limits
Procedure 5: Develop monitoring standards

Monitoring: Taking measurements to determine if critical limits are maintained

Consider...
What you will monitor
How
When during flow
How often
Who
Procedure 6: Determine Corrective Actions

Purpose:
Correct cause of deviation from Critical Limit
Determine disposition/safety of food

Consider:
Who is doing this
Ease of implementation
What corrective action requires
Documentation and communication

• Determine corrective actions for the establishment.
Procedure 7: Verification

Address:
Activities being done
Frequency
Responsibility of employees

• What would this entail for this HACCP?
Procedure 8: Record Keeping

5 Types of Records
1. Prerequisite program records
2. Monitoring records
3. Corrective action records
4. Verification/validation records
5. Calibration records

• What kind of records will your food establishment keep?
Procedure 9: Validation

Address:

New processes or menu items fit with plan
Changes in suppliers, customers, equipment, or facilities
Changes needed in prerequisite programs
Suitability of record keeping
Accuracy of CCP’s to Critical Limits

• Name some examples of validation...
Foodborne Outbreak Investigations

Applying HACCP Risk Analysis to Environmental Assessments
1. **Report of Illness**
   - Laboratory findings
   - Complaints
   - Emergency room

2. **Notify the WV Division of Infectious Disease Epidemiology**
   - They will assist in structuring an investigation.
   - Notify immediately.
   - Throughout they will help set case definition.

3. **Begin Outbreak Investigation**
   - Contact Patients
   - Food Histories
   - Begin to form a hypothesis

4. **Conduct environmental assessment of the suspected establishment/food.**
   - Based on hypothesis developed from patient interviews create an assessment plan using HACCP Risk Analysis
HACCP plan vs Food Outbreak HACCP based risk analysis

• HACCP is designed to be a preventive tool for food establishments.
• HACCP risk analysis principles can be applied to an outbreak investigation to plan the environmental assessment of implicated foods and or establishments.
• The goal is to plan an investigation, not create a HACCP plan for the establishment.
  • Identifies the most likely CCP’s that were out of control
  • Allows the environmental assessment to focus on those specific risks
Before you go: Plan Assessment Goals

Base it around the outbreak disease or symptoms.
What is the most likely CCP/s causing the problems?
What kind of foods are on the menu?
Will samples of suspected food need collected?
  ▪ Contact DIDE and OLS to coordinate sampling.
  ▪ Gather equipment to collect samples.
What questions do you need to ask of management?
  ▪ Documentation
  ▪ SOPs
  ▪ Do you need to interview staff or do you need information about a specific date or time regarding staff?
Collect all forms and equipment and prepare it to go.
Start With the knowns (Hazard Analysis)

**What is the illness?**
- Pathogen
- Symptoms
- Onset

**What was consumed?**
Using recipe, ingredients, source, and process create a flow diagram.

**When was the food consumed?**

**What is the inspection history of the establishment?**
Assessment Based On Set Goals

This is not a routine inspection

Keep the lines of communication open with management and food workers.

- Introduce yourself and explain the purpose of your visit.
- Conduct interviews with management and specific employees.
- Keep an open mind and a helpful/positive attitude.

Focus on the issue at hand.

- Look for CCP’s relating to the illness, disease, or suspect food item.
  - Does the identified CCP meet the established critical limit.
- SOP’s that are not followed
- Gather as much information as possible
- Take pictures

Perform a quick walk through.

If there is known suspected product present...

Collect Samples

- Collect twice the required amount.
- Use aseptic techniques
- Protect yourself from the potential harmful product

Remove it from the flow of food.

- Embargo
- Discard
- Label it
Contact Department of Infectious Disease Epidemiology

OLS

What needs sampled?
How much is needed?
How should it be held and shipped?
What forms are required?

Supplies:

Gloves
Sealable containers
Sterile utensils
Freezer packs
Shipping cooler
Labels
# Food Laboratory Specimen Submission Form

## Patient Information
- **Last Name**
- **First Name**
- **M#**
- **Date of Birth**
- **County of Residence**
- **Sex**
- **City**
- **State**
- **Zip**

## Date of Collection
- **Test Requested**
  - **Routine Food Testing**
  - **Other**
  - **Specify**

## Routine Food Sample Information
- **Name of Investigator**
- **Phone # of Investigator**
- **Specimen Description**
- **Manufacturer**
- **Lot Number**
- **Date & Time Sampled**
- **Date & Time of First Symptoms**
- **Number of persons consuming food**
- **Number of Ill persons**
- **Suspected Organism**

## Remarks
- **Comments**

---

Failure to complete this form in its entirety may result in delayed test results.
Food Specimen Tracking Form

DO NOT SEND THIS FORM TO OLS; use the FOOD LABORATORY SPECIMEN SUBMISSION FORM. This form is to be filled out when samples are taken and updated with lab results once OLS has completed specimen processing. For additional instructions, see the back of the form. A copy of the completed form is to be sent to DIDE. It is important to complete all information on this form as it contains additional information not collected on the OLS specimen form.

Suspected Agent: ________________________  Collected By: ________________________

Name of restaurant, company, event, etc. where samples were taken: ________________________

<table>
<thead>
<tr>
<th>Description of Sample</th>
<th>Lab Testing</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food Item</strong></td>
<td><strong>Location collected from</strong></td>
<td><strong>Date prepared</strong></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Before submitting specimens to the Office of Laboratory Services (OLS): Specimens must be labeled and submission form must be complete. OLS will not be able to process specimens if forms are not complete. Inform the lab that specimens will be coming in and the approximate number of submissions. For additional instructions or questions regarding specimen submission, contact OLS at (304) 558-3530. Consult with DIDE before submitting any food specimens for testing.

Division of Infectious Disease Epidemiology
350 Capitol St., Room 125, Charleston, WV, 25301
Phone: (304) 558-3536 ext. 3, Fax: (304) 558-8736, Answering Service (304) 923-9948
What needs fixed or remediated to mitigate the outbreak?
Could be immediate or long term.

Does the establishment need to be closed?

Is the outbreak ongoing?

Is the establishment cooperating to correct the concerns?
Prevention

Share lessons with the establishment.

Review findings upon exit

- Establish critical limits and monitoring procedures to correct the issues

Return to share complete report with the establishment

Follow up to ensure correction and compliance

Recognize when there may be a shortcoming that repeats throughout the community
**Sample Collection Kits**
- Sample Containers
- Gloves
- Sterile Collection Utensils
- Ice Packs & Shipment Cooler
- Labels & Pen
- Food Specimen Tracking Form
- Food Laboratory Submission Form

**Interview Questionnaires**
- Management Specific
- Employee Specific

**Official Forms and Documents**
- Environmental Assessment Form (for reference)
- Blank Food Complaint Copies
- Master List of Establishment Employees
- Last Inspection
- Food Flow Diagram if Possible
- List of Goals to Accomplish Before Leaving

**Everyday Inspection Gear**
- Thermometers
- Alcohol Swabs
- Flashlight
- Temperature Tapes
- Test Strips
- Pen & Paper
- Camera
C5. Environmental Investigation Assessment Form

**NOTE:** This form is to be used by Local Health Departments that do not have access to the Environmental Health Electronic Reporting System. Local Health Departments with access to the electronic reporting system may use this form for guidance, but information is to be entered electronically.

**Completed By:**
- **Title:**
- **Agency:**

**A. Establishment Information**
- **Establishment:**
  - Type of Operation(s):
  - Food Service
  - Retail
  - Mobile
  - Temporary
  - Other:
- **Address:**
- **Date Complaint Received:**
- **Date(s) Environmental Investigation Completed:**
- **Implicated Food(s):**
- **Food Samples Collected:**
  - Y
  - N
- **From:**
  - Consumer
  - Food Establishment
  - Food Manufacturer/Distributor
- **Food Worker Questionnaire(s) Completed:**
  - Y
  - N
  - Number of Questionnaires Completed:

**B. Recent Compliance History**
- **Most recent inspection report prior to the complaint attached:**
- **Date of prior inspection:**

**C. Risk Assessment of Suspect Food**
- **Risk Assessment (Required):**
  - HACCP Based risk assessment of the suspect food(s) or process(es) attached: include food source, volume prepared, preparation steps (where, how, when, where, when, monitoring procedures used, identification of critical control points, and any corrective actions that were taken if necessary to correct inadequate monitoring processes).
  - **If you need assistance with your risk assessment, please call Food Program Staff at 304-558-2561.**

**D. Level of Compliance Noted During On-site Investigation(s)**
- **IN** (In Compliance) | **OUT** (Out of Compliance) | **NA** (Not Applicable) | **ND** (Not Observed)

<table>
<thead>
<tr>
<th>Observation</th>
<th>Compliance Observation</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Person in charge, present, demonstrates knowledge, and performs duties.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>2. Management awareness, policy present.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>3. Proper use of reporting, restriction and exclusion.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>4. Proper seating, tasting, drinking, or tobacco use.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>5. No discharge from eyes, nose, and mouth.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>6. Hands clean &amp; properly washed.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>7. No bare hand contact with ready to eat (RTE) foods or approved alternate method properly followed.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>8. Adequate hand washing facilities supplied and accessible.</td>
<td>IN</td>
<td>OUT</td>
</tr>
<tr>
<td>9. Food obtained from approved source.</td>
<td>IN</td>
<td>OUT</td>
</tr>
</tbody>
</table>

**E. Corrective and Enforcement Actions**

Check corrective or enforcement actions that were taken in response to the complaint.

- **None**
- **Order for Correction issued to correct violations relating to:**
  - **Risk factors and major interventions:**
    - Good retail practices
  - **Food Employee/Food Handling Procedures & Policies Modified**
  - **Voluntary Disposal**
  - **Emergency Suspension or Closure**
  - **Food Employee/Food Handling Procedures & Policies Modified**
  - **Food Employee Restriction/Exclusion**
  - **Food Employee/Food Training**
  - **Press Release/News Alert**
  - **Equipment/Physical & Sanitary Facilities Modified/Upgraded**
  - **Other:**
    - [describe]

**REMINDERS:** Submit the following documents along with this form to the Food Program Public Health Sanitation Division:
1. Copy of most recent inspection report issued prior to complaint
2. HACCP Risk Assessment and Related Environmental Data
3. Related Enforcement Documents
4. Mail or Fax To: Office of Environmental Health, Public Health Sanitation Division
   350 Capital St., Room 338, Charleston, WV 25302
   Phone: (304) 558-3156 ext. 3, Fax: (304) 558-4914, Answering Service: (304) 348-0940

---

West Virginia Department of Health and Human Resources, Bureau for Public Health, Division of Food Safety and Epidemiology
350 Capital St., Room 338, Charleston, WV 25302
Phone: (304) 558-3156 ext. 3, Fax: (304) 558-4914, Answering Service: (304) 348-0940
C7. FOOD WORKER INTERVIEW FORM
(All employees must be interviewed with this form)

Date(s) of suspect event (date of first onset) or date suspect meals eaten:

Name: ____________________________

Interview date: ____________________

Title: ____________________________

Interview conducted by: ______________

Address: __________________________

How long have you worked here? ______

City/State: _________________________

Are you a food worker anywhere else? Y N

Phone: ____________________________

If yes, where:

WORK HISTORY

Time period of risk: __/____ to __/____

To be determined prior to interview (typically 2-4 weeks). Consult DOH for assistance.

1. Use the calendar to determine the days worked during the time frame of risk:

   Sun Mon Tues Wed Thurs Fri Sat
   1 2 3 4 5 6 7
   8 9 10 11 12 13 14
   15 16 17 18 19 20 21
   22 23 24 25 26 27 28
   29 30 31

2. Did you work the day of the suspect event/illness? Y N
   If yes, what hours? ____________

3. Did you work the day before the suspect event/illness? Y N
   If yes, what hours? ____________

4. Did you work the day before the suspect event/illness? Y N
   If yes, what hours? ____________

5. Did you handle/prepare any of the foods served? (see provided food list) Y N

6. Were any of these prepared 6 hours or more in advance of the event/illness? Y N

7. Did you eat any foods served on the day of event or suspect meal? Y N
   If yes, what is the food item(s)?

BLOOD HISTORY

Have you or anyone in your household had any of the following symptoms during the time period of risk:

Food worker

Household members

Diarrhea/Loose Stool: Y N

Diarrhea/Loose Stool: Y N

Vomiting: Y N

Vomiting: Y N

Jaundice: Y N

Jaundice: Y N

Fever: Y N if yes, highest temp: ____________

Fever: Y N if yes, highest temp: ____________

Sore Throat: Y N

Sore Throat: Y N

Wounds or Sore: Y N

Wounds or Sore: Y N

If ill with any of the above symptoms, obtain the following:

Food worker

Household members

When did the symptoms first start? Date/time

When did symptoms first start?

When did the symptoms end?

When did the symptoms end?

What is the first day you worked after being ill? Occupation:

Did you go to the doctor or hospital? Y N if yes, indicate health care provider:

If household member is a food worker, place of employment:

Diagnosis/Treatment:

1. Are you required to tell your employer when you are sick with diarrhea or vomiting? Y N

2. What happens if you tell your employer when you are sick with diarrhea or vomiting? ____________

3. Do you receive sick leave pay? Y N

STOOL SPECIMEN

Was the food worker provided with a stool kit? Y N

Date kit(s) distributed: ________________

* Instruct workers that submission of stool must be within 48 hours or the work may be excused from work.

West Virginia Department of Health and Human Resources, Bureau for Public Health, Division of Infectious Disease Epidemiology, 330 Capitol St., Room 123, Charleston, WV, 25302. Phone: (304) 558-5358 ext. 1. Fax: (304) 558-8736, Answering Service (304) 925-9946
Establishment:  

Phone Number:  

### C6. Master List of Establishment Staff

Include:
- All waitstaff, dishwashers, food preparation workers, cooks, bartenders, bussers, supervisor, owner/manager, host/hostess, delivery/transport personnel, bakers, or any other staff.

Include all those who worked between: _______ and _______.
Number of employees on-site date of event/suspect meal: _______.
Manager in charge of the facility the date of the event/suspect meal: _______.
Person in charge of the kitchen the date of event/suspect meal: _______.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Foodborne Illness

Common CCP’s

Five Major Risk Factors Contributing to Foodborne Illness

• Improper holding Temperatures
• Inadequate cooking, such as undercooking raw shell eggs
• Contaminated equipment
• Food from unsafe sources
• Poor personal hygiene
Hepatitis A

Type of Pathogen: Virus

Symptoms:
- Fever
- Anorexia
- Nausea
- Vomiting
- Diarrhea
- Muscle aches
- Myalgia
- Jaundice

Incubation Period:
- 15 to 30 days

Commonly Associated With:
- Food from unsafe sources
- Poor personal hygiene
Norovirus

Type of Pathogen: Virus

Symptoms:
• Acute-onset vomiting (often explosive)
• Watery diarrhea with abdominal cramps
• Nausea
• Headache
• Low-grade fever
• Muscle aches

Incubation Period:
• Some reports of illness within 12 hours of exposure
• Usually between 24 and 48 hrs.

Commonly Associated With:
• Food from unsafe sources
• Poor personal hygiene
**Shigella spp.**

**Type of Pathogen:** Bacteria (Entero-toxin)

**Symptoms:**
- Abdominal pain
- Diarrhea
- Fever
- Vomiting
- Blood, pus, or mucus in stools
- Tenesmus

**Incubation Period:**
- 8 to 50 hours

**Commonly Associated With:**
- Poor personal hygiene
Shiga Toxin Producing E. Coli (STEC)

Type of Pathogen: Bacteria (Enterotoxin)

Symptoms:
• Hemorrhagic colitis
  • Nausea
  • Vomiting
  • Diarrhea from watery to grossly bloody
  • Low-grade to no fever
• Hemolytic Uremic Syndrome (extreme cases)

Incubation Period:
• 1 to 9 days

Commonly Associated With:
• Inadequate cooking (beef, raw milk)
• Food from unsafe source
• Poor Personal Hygiene

Other Considerations:
• Cross Contamination
Nontyphoidal Salmonella Spp.

Type of Pathogen: Bacteria

Symptoms:
- Nausea
- Vomiting
- Abdominal cramps
- Diarrhea
- Fever
- Headache

Incubation Period:
- 6 to 72 hours

Commonly Associated With:
- Inadequate cooking (poultry & eggs)
- Food from unsafe sources
- Poor personal hygiene

Other Considerations
- Cross Contamination
Salmonella Typhi

Type of Pathogen: Bacteria

Symptoms:
• Fever 103 or 104°F
• Abdominal pains
• Diarrhea or constipation
• Headache
• Achiness
• Loss of appetite
• Rash

Incubation Period:
• 1 to 3 weeks but as much as 2 months

Commonly Associated With:
• Food from unsafe sources
• Poor personal hygiene
Clostridium perfringens

Type of Pathogen: Bacteria (Spore forming Enterotoxin)

Symptoms:
• Gastroenteritis
  • Watery diarrhea
  • Abdominal cramps
• Enteritis necroticans
  • Abdominal pain with distention
  • Diarrhea (sometimes bloody)
  • Vomiting
  • Patchy necrosis of the small intestine

Incubation Period:
• 16 hours

Commonly Associated With:
• Inadequate holding temperatures (cooked meats & poultry, casseroles, gravies, stews)

Other Considerations
• Washing fruits and vegetables
• Cooling and Reheating
Campylobacter jejuni

Type of Pathogen: Bacteria

Symptoms:
- Fever
- Diarrhea
- Abdominal cramps
- Vomiting

Incubation Period:
- 2 to 5 days

Commonly Associated With:
- Inadequate cooking temperatures (poultry products, unpasteurized milk and milk products)

Other Considerations:
- Cross contamination
Staphylococcus aureus

Type of Pathogen: Bacteria (Toxin forming)

Symptoms:
• Nausea
• Abdominal cramping
• Vomiting
• Diarrhea
• More severe symptoms can include changes in pulse and BP

Incubation Period:
• 1 to 7 hours

Commonly Associated With:
• Poor personal hygiene
• Contaminated equipment
Conclusion

• Complaints, lab reports, and contact from a health care provider are some of the ways potential outbreaks can be identified.

• Response to potential foodborne illness outbreaks requires preplanning and consideration of the most likely risks and critical control points within a food establishment.

• Conducting an Environmental Assessment of a food establishment is based on the risk identified during the HACCP based risk assessment. This is then applied to conducting an onsite evaluation of those risks and reporting back observations.

• Environmental Assessments are not routine inspections.

• Knowing the causative pathogen can help determine what critical control points need evaluated during the Environmental Assessment.
BPH Food Program Contacts

Jennifer Hutson, RS
Food Program Manager
350 Capitol Street, Room 313
Charleston, WV 25301-3731
Phone: 304-356-4339
Fax: 304-558-1071
Email: jennifer.eb.hutson@wv.gov

Wayne Powell, RS
Assistant Food Program Manager
350 Capitol Street, Room 313
Charleston, WV 25301-3731
Phone: 304-356-4283
Fax: 304-558-1071
Email: wayne.p.powel@wv.gov

James Casdorph, RS
Manufactured Food Program Coordinator
350 Capitol Street, Room 313
Charleston, WV 25301-3731
Phone: 304-356-5254
Fax: 304-558-1071
Email: james.e.casdorph@wv.gov

Emilee Melchior
Foodborne Illness RRT Coordinator
350 Capitol Street, Room 313
Charleston, WV 25301-3731
Phone: 304-356-4342
Fax: 304-558-1071
Email: emilee.j.melchior@wv.gov