

RESPONDING TO FOODBORNE ILLNESS OUTBREAKS

**Federal Bureau of Prisons
Technical Guidance**

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TABLE OF CONTENTS

1. Purpose.....	1
2. Health Services: Identification of Gastrointestinal (GI) Illness Outbreak and Collection of Data	1
3. Communication Regarding Possible Foodborne Illness Outbreak	2
4. Health Services: Initial Response	2
5. Food Service: Initial Response	3
6. Executive Staff: Initial Response	4
7. Environmental & Safety Compliance: Initial Response	4
8. Role of the Food Asset Support Team (FAST)	4
9. Multi Agency Cooperation.....	5
10. Training.....	5
Terminology.....	6
References.....	7
Attachments.....	8

1. PURPOSE

The Federal Bureau of Prisons (BOP) *Technical Guidance for Responding to Foodborne Illness Outbreaks* provides recommendations for the identification and management of foodborne illness outbreaks.

→ *The outbreak response measures outlined below will often be occurring simultaneously.*

2. HEALTH SERVICES: IDENTIFICATION OF GASTROINTESTINAL (GI) ILLNESS OUTBREAK AND COLLECTION OF DATA

When an unusual number of inmates present with vomiting and/or diarrhea, the institution's Health Services staff should immediately report this to the Clinical Director, Health Services Administrator (HSA), and Infection Prevention and Control (IP&C) Coordinator.

The HSA should report the issue to the local Executive Staff and local Food Service Administrator (FSA).

Health Services staff should be advised to collect and record data on every inmate who presents with GI illness:

- Data should be recorded on a *GI Illness Linelist* in EXCEL that can be accessed on Sallyport at: http://sallyport.bop.gov/co/hsd/infectious_disease/index.jsp. The *GI Illness Linelist* should be utilized to systematically collect data on inmate housing assignment, work, date and time of illness onset, signs and symptoms, etc.
- Each ill inmate should be coded in BEMR with problem code AO9 (*Gastroenteritis and colitis, unspecified*), along with the symptoms and the date and time of illness onset.

Local Health Services staff should consult with Regional and Central Office IP&C staff to review the collected data to determine if a foodborne illness outbreak investigation is needed:

- All gastroenteritis illness outbreaks should be considered a potential foodborne outbreak until otherwise determined.
- The data should be analyzed—to determine the proportion of inmates with each sign/symptom, the range of onset dates and times, and duration of illness—and compared to the Centers for Disease Control and Prevention (CDC) *Guide to Confirming an Etiology in Foodborne Disease Outbreak* at: http://www.cdc.gov/foodsafety/outbreaks/investigating-outbreaks/confirming_diagnosis.html
- A hypothesis should be developed regarding possible organisms that may be causing the illness. This hypothesis will help identify the timeframe in which inmates may have been infected and the possible cause of the illness.

3. COMMUNICATION REGARDING POSSIBLE FOODBORNE ILLNESS OUTBREAK

- If a foodborne illness is suspected, based on analysis of the collected data, the Central Office and Regional IP&C staff should notify the National and Regional FSAs. Likewise, the institution's HSA should notify the local Executive Staff of a possible foodborne illness outbreak (even if it has not been confirmed that it is tied to food).
- **A local OUTBREAK INVESTIGATION TEAM should be formed as soon as possible to coordinate the outbreak investigation.** The team should consist of representation from Executive Staff, Health Services, Food Services, and Environmental and Safety Compliance staff. A team leader should be identified. The team should determine what information needs to be gathered, the infection prevention and control measures that need to be implemented, and whether kitchen mitigation strategies are necessary, taking into consideration the type of outbreak. The identified team leader should continue to communicate with the Central Office and Regional IP&C and Food Service staff.
- The local IP&C Coordinator should complete and distribute the *Infectious Disease/Outbreak Report* (available at: http://sallyport.bop.gov/co/ipp/policy/forms/BP_A0664.pdf). A copy should be forwarded to the following personnel: Local Executive Staff, local FSA, local HSA, Central Office IP&C Coordinator, Regional IP&C Coordinator, Regional FSA, and National FSA.
- The local Outbreak Investigation Team should develop a plan for communicating with inmates and staff regarding the outbreak. Staff and inmates should be encouraged to report to Health Services if they develop GI illness. Their symptoms and date and time of onset of symptoms should be recorded on the *GI Illness Linelist*. Staff may want to consider contacting their personal primary care provider.
- The Central Office IP&C Coordinator and National FSA should coordinate conference calls with the team leader of the local Outbreak Investigation Team to begin information gathering and coordination of an appropriate response.
- In accordance with state/local regulations, Health Services staff should report the GI illness outbreak to the local public health department. When contact is made with the local public health department, it should be determined if public health laboratory services can be utilized to process lab specimens.

4. HEALTH SERVICES: INITIAL RESPONSE

- **CLINICAL INTERVENTION:** An assessment should be made to determine if there are any immediate steps that should be implemented to assure ill inmates are adequately hydrated and seriously ill inmates are promptly assessed, treated, and considered for isolation.
- **STAFFING:** If large numbers of acutely ill inmates require evaluation and treatment, health services staffing adjustments may be needed to assure adequate health care coverage is provided during the outbreak.
- **SPECIMEN COLLECTION:** The public health department should be consulted on appropriate specimens to collect. It is strongly recommended that specimens be sent to the public health lab, if possible.
- **DATA COLLECTION AND ANALYSIS:** Health Services staff should continue to systematically update the *GI Illness Linelist* as more inmates with GI illness are identified.
- **FOOD HISTORY:** If a foodborne outbreak is suspected, ill inmates should be systematically interviewed for their recent food history (see *Attachment 1, Inmate Interview – Food History*).

5. FOOD SERVICE: INITIAL RESPONSE

During the outbreak, the following control measures should be implemented immediately:

- All Food Service staff and inmate workers should be systematically interviewed before each shift for GI symptoms, and excluded from Food Service work if they have symptoms.
- Hand hygiene before and during work hours must be strongly emphasized.
- Inmate workers should be directly observed performing hand hygiene prior to work.

The FSA should assist the local Outbreak Investigation Team to begin gathering information related to the outbreak, including environmental assessment and internal system variables. Time frames noted on documentation can be extended as necessary for the type of foodborne illness identified.

Documentation should contain, but not be limited to, the following:

- Inmate Interview – Food History (see *Attachment 1*)
- Staff Interview – Food Preparation History (see *Attachment 2*)
- Food Flow Chart and Process Guide (see *Attachment 3*)
- Food Safety Checklist Form (see *Attachment 4*)
- As Served Menu for the last 72 hours
- Recipes for all meals identified on the As Served Menu for the last 72 hours
- Inmate Schedule/Work Assignments/Work History for the last 72 hours
- Emails of all notifications
- Temperature Logs for the last 72 hours
- Sentry Roster of Food Service Workers including MDS assignment
- Latest Form of Sanitation Inspection
- Store Room Requisition from FNS for the last 72 hours
- Staff Schedule for the last 72 hours

If a foodborne illness is indicated and a food product is identified, the FSA should perform the following:

- **SEGREGATING PRODUCT:** Set the remainder of the suspected food product aside (if any remains). Label it as “**DO NOT USE – DO NOT DISCARD.**”
- **RECALLED PRODUCT:** If the suspected food product is identified on a USDA or FDA Food Recall, refer to the *BOP Guidance for Food Recalls*.

6. EXECUTIVE STAFF: INITIAL RESPONSE

- A plan should be developed to assure inmate housing units have a sufficient supply of cleaning supplies and that inmate orderlies increase the frequency of cleaning bathroom fixtures and high-touch surfaces in bathrooms and housing units.
- Ongoing updates should be provided to staff and inmates via town halls or memoranda. The Public Information Officer should be involved in preparation and approval of any information provided to staff and inmates, and should be prepared to respond to the local community and the media.

7. ENVIRONMENTAL & SAFETY COMPLIANCE: INITIAL RESPONSE

- Environmental & Safety Compliance staff should be made available to assist with conducting inspections in the Food Service Department, as determined by the local Outbreak Investigation Team.
- Environmental & Safety Compliance staff should be made available for consultation in regards to the proper type of disinfectant(s) to use for the identified outbreak.
 - ➔ *If norovirus is suspected, a disinfectant effective against norovirus will be required to manage the outbreak. Consult Regional/Central Office infection control staff.*
- The local Environmental & Safety Compliance staff should consult with the Regional and Central Office Environmental & Safety Compliance staff as needed.

8. ROLE OF THE FOOD ASSET SUPPORT TEAM (FAST)

The FAST is a trained team of Food Service and IP&C personnel that can be deployed by the Health Services Division (HSD), Assistant Director to assist with a foodborne outbreak investigation.

- The FAST members serve in this role as a collateral duty, appointed by the Assistant Director, HSD in consultation with respective applicant's CEO. (See *FAST* definition under [Terminology](#).)
- The FAST can assist with data gathering; conducting the outbreak investigation environmental assessment; making recommendations to institution staff for controlling the outbreak; assist with determining if kitchen mitigation strategies are indicated; and helping to coordinate with local, state, and federal public health officials if further investigation is needed.
- The FAST can identify factors that contributed to the outbreak and provide immediate recommendations. These recommendations and a summary can be provided by the FAST Lead after the assistance is provided.
- The Assistant Director, HSD will determine the need to deploy FAST in consultation with the respective Regional Director and Warden.

9. MULTI AGENCY COOPERATION

The U.S. Department of Agriculture (USDA)/ Food Safety and Inspection Service (FSIS), the CDC, and the state or local public health department may request information regarding the foodborne illness outbreak during an investigation. Full cooperation and documentation should be provided as requested, and in accordance with BOP Health Information Policy. It may be necessary for one or all of these agencies to visit the institution. A Central Office IP&C Coordinator, National or Regional FSA, and/or FAST member should assist with the coordination of these visits with institution Executive Staff.

10. TRAINING

All local and Regional FSAs are encouraged to complete the e-Learning course entitled *Environmental Assessment of Foodborne Illness Outbreaks* provided by the CDC at: http://www.cdc.gov/nceh/ehs/eLearn/EA_FIO/

TERMINOLOGY

OUTBREAK: Two or more cases of a similar illness shown by an investigation to result from a common exposure, such as ingestion of a common food. An outbreak is a cluster with a clear association between cases, with or without a recognized common source or known disease agent. However, even single cases of certain rare and serious conditions—such as gastrointestinal anthrax, botulism, or cholera—are considered public health emergencies and should elicit an outbreak-like response.

INTERNAL AUTHORITY: The entity responsible for matters of public health and/or regulatory jurisdiction over the food establishment. The **FAST** (see below) will be the internal authority for any food illness outbreak in the Federal Bureau of Prisons.

FAST: The BOP Food Asset Support Team (FAST) includes a minimum of one Central Office Food Service Staff Member, one Regional FSA, and one local FSA (who is selected as FAST Collateral Duty Staff Member), and one IP&C staff person. The FAST is available to provide assistance via phone/email or immediate response to the institution in the event of a food-related illness outbreak. Deployment of FAST is determined by the Assistant Director, HSD, in consultation with the respective Regional Director and Warden.

FEDERAL AGENCIES:

- The **USDA** (U.S. Department of Agriculture) is a regulatory agency that monitors meat, poultry, or egg products through the **FSIS** (Food Safety and Inspection Service).
- The **FDA** (Food and Drug Administration) is a regulatory agency that monitors other food items (approximately 80 percent of the food consumed in the United States).
- The **CDC** (Centers for Disease Control and Prevention), through its Food Safety Office, tracks cases of foodborne illness and investigates outbreaks.

REFERENCES

Council to Improve Foodborne Outbreak Response (CIFOR). Webpage located at:
<http://www.cifor.us/>

CIFOR Industry Guidelines: Foodborne Illness Response Guidelines. Developed by the Council to Improve Foodborne Outbreak Response (CIFOR). Atlanta: Council of State and Territorial Epidemiologists, 2009.

Centers for Disease Control and Prevention, Foodborne Illness. Webpage located at:
<http://www.cdc.gov/foodsafety/foodborne-germs.html>

ATTACHMENTS

The following Attachments can be printed out and filled in as needed:

- ***Attachment 1: Inmate Interview – Food History (one page)***
- ***Attachment 2: Staff Interview – Food Preparation History (one page)***
- ***Attachment 3: Food Flow Chart and Process Guide (two pages)***
- ***Attachment 4: Food Safety Checklist Form (one page)***

Guidelines for Foodborne Illness Outbreaks Inmate Interview - Food History

Institution: Date:
 Inmate Name: Reg. No.:
 Housing Unit Assignment: Work Assignment:

List all food consumed in the past 72 hours at each meal and/or consumed in the housing unit.

Day of illness: Date:
 Breakfast:
 Lunch:
 Dinner:
 Did you eat anything in the housing unit? Yes No If yes, list all items, times consumed, and date purchased below.
 Food Item: Time Consumed: Date Purchased from Commissary:

Day Before illness: Date:
 Breakfast:
 Lunch:
 Dinner:
 Did you eat anything in the housing unit? Yes No If yes, list all items, times consumed, and date purchased below.
 Food Item: Time Consumed: Date Purchased from Commissary:

2 Days Before illness: Date:
 Breakfast:
 Lunch:
 Dinner:
 Did you eat anything in the housing unit? Yes No If yes, list all items, times consumed, and date purchased below.
 Food Item: Time Consumed: Date Purchased from Commissary:

Any visits in the past 72 hours? Yes No Visitor Names:
 Date of last sick call request to medical for any reason:
 Type of illness/symptoms?
 (Request copy of BEMR report from Health Services Staff for date of sick call visit for verification).
 Completed by (Name/Title):

Guidelines for Foodborne Illness Outbreaks Staff Interview - Food Preparation History

Institution: Date:
 AM Cook Supervisor: PM Cook Supervisor:

List all foods prepared and served on each of the meals indicated. Include items on the menu, any leftovers prepared, and if you served extra items on the trays provided to lockdown units. Cooking temperatures of each item and if you noticed anything different with any item should be noted.

Day of Illness: Date:

Breakfast:

Prepared by (Inmate Names):

Lunch:

Prepared by (Inmate Names):

Dinner:

Prepared by (Inmate Names):

Day Before Illness: Date:

Breakfast:

Prepared by (Inmate Names):

Lunch:

Prepared by (Inmate Names):

Dinner:

Prepared by (Inmate Names):

2 Days Before Illness: Date:

Breakfast:

Prepared by (Inmate Names):

Lunch:

Prepared by (Inmate Names):

Dinner:

Prepared by (Inmate Names):

What time was the health/hygiene check conducted on inmates?

Did any of your inmate workers appear sick or go to sick call?

Completed by (Name/Title):

Guidelines for Foodborne Illness Outbreaks FOOD FLOW CHART AND PROCESS GUIDE

Institution: Date:
 Cook Supervisor: Suspected Food:

List all steps in the preparation process for the food product listed above. Refer to the process guide on the next page to complete the form. List all ingredients used in each step.

STEP NUMBER	STEP COMPLETED	NOTES	INMATE NAME	REG. NO.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				

Completed by (Name/Title):

**Guidelines for Foodborne Illness Outbreaks
FOOD FLOW CHART AND PROCESS GUIDE**

Attachment 3, page 2

Institution:

Date:

Cook Supervisor:

Suspected Food:

STEP NAME	QUESTIONS
RECEIVING/REMOVAL FROM FREEZER	DATE & TIME PRODUCT WAS REMOVED FROM FREEZER?
STORAGE	LOCATION? TEMPERATURE? FIFO?
PREP/DEFROST/THAW	HOW WAS FOOD THAWED? WAS TEMPERATURE MONITORED? WAS THERE DISCOLORATION OR ODOR?
PREP/BREAKDOWN	WERE INGREDIENTS PROCESSED ON THE SAME WORK SURFACE? WERE MULTIPLE LOTS OF SOURCES MIXED?
PREP/MIX	HOW WAS FOOD MIXED? WAS THERE HAND CONTACT?
PREP/SERVING SIZE	HOW WAS FOOD PORTIONED (BY UTENSIL OR HAND)? WAS THE FOOD MEASURED (BY UTENSIL OR HAND)?
COOL PROCESS/CLOSE	HOW WAS FOOD COOLED? WAS TEMPERATURE MONITORED? COOLING TIME? TEMPERATURE? COOLING AT END OF SHIFT?
COOK-KILL	EQUIPMENT AND THERMOMETERS CALIBRATED? TEMPERATURE?
RE-HEAT	HOW WAS FOOD REHEATED? WAS TEMPERATURE MONITORED? TEMPERATURE? TIME?
HOT-HOLD	TEMPERATURE? HOW WAS IT HELD? (PASS THRU/MOBILE HOT BOX?) EQUIPMENT FUNCTIONING?
COLD-HOLD	TEMPERATURE? HOW WAS IT HELD? (PASS THRU/MOBILE COOLER/LARGE COOLER?) EQUIPMENT FUNCTIONING?
SERVICE	CONTAMINATION? HOLDING FOOD WITHOUT TEMPERATURE CONTROL? CONTROLLING THE HOT/COLD BAR?
OTHER	

Guidelines for Foodborne Illness Outbreaks Food Safety Checklist Form

Attachment 4

Institution:

Date:

INSIDE FROZEN STORAGE

1. Walk-In Freezer Temp:
2. Walk-In Freezer Temp:

INSIDE COLD STORAGE

1. Walk-In Cooler Temp:
2. Walk-In Cooler Temp:
3. Walk-In Cooler Temp:

Are leftovers covered, labeled, and dated? Yes No

INSIDE STORAGE (Freezer, Cooler, Dry, etc.)

- Any expired products. Rotation evident? Yes No
- All food labeled, dated and covered? Yes No
- Any food/ingredients been recalled? Yes No
- Any damaged, dented, or swollen packages? Yes No

THAWING

- Items thawed using approved methods? Yes No
- How long have items been pulled/thawing? Days:

EQUIPMENT

- Are staff using thermometers? Calibrated? Yes No
- Are thermometers on equipment accurate? Yes No
- Is any equipment not functioning properly? Yes No
- Is the dish machine functioning properly? Yes No
- Wash: Final Rinse: Flow Pressure:

CLEANING & CHEMICALS

- Are chemical control procedures in place? Yes No
- Cleaning towels properly stored in sanitizer? Yes No
- Are pot and pan procedures being followed? Yes No
- Trays, cups, utensils, and equipment clean? Yes No
- Any issues with plumbing or sewage waste? Yes No

COOKING TEMPERATURES

1. Food Item Temp:
2. Food Item Temp:
3. Food Item Temp:
4. Food Item Temp:
5. Food Item Temp:

HOLDING TEMPERATURES

1. Food Item Temp:
2. Food Item Temp:
3. Food Item Temp:
4. Food Item Temp:
5. Food Item Temp:

PEST CONTROL

- Any evidence of pest infestation? Yes No
- Is a pest control plan in place? Yes No

HEALTH & HYGIENE

- Gloves used/worn properly? Yes No
- Any staff or inmate workers sick? Yes No
- Any eating/drinking in unapproved areas? Yes No
- Staff & inmates in clean proper uniforms? Yes No
- Hand wash stations fully operational? Yes No

FOOD SAFETY PRACTICES

- Any possible hazards present? Yes No
- Any possible contamination issues present? Yes No
- Are Food Prep areas cleaned and sanitized? Yes No
- Any cross contamination during preparation? Yes No
- Produce and other foods properly washed? Yes No

Specify any policy deviations, discrepancies, or concerns that are noted above.

Comments:

Comments:

Completed by (Name/Title):