

Action points for epidemiological investigation of suspected foodborne/ADD outbreak

1. After assembling the outbreak investigation team, the investigators need to **gather descriptive information** in order to describe the outbreak by time, place, and person characteristics.
 - The investigator (Medical Officer/Health Inspector) should complete the **food history form** for each suspected case ([Annexure E1: Food History Form](#)), which will help to gather necessary descriptive information about when, where, and who has been affected in this outbreak. The form is also used to gather information about food consumption in the days prior to illness onset, which may provide clues regarding potential common exposures among those affected.
2. The information gathered through the food history form should be used to **develop a case definition**. Components of a case definition should include illness, time, and place characteristics. (Example: Diarrhea (≥ 3 loose stools/day) in a person residing in Kantipur village with onset on or after June 1, 2016.) A case definition may also include pathogen details if this is known—discussion and coordination with the microbiology laboratory is essential. Types of case definition may include confirmed, probable, and suspected cases.
 - Once a case definition has been developed, the investigating team should make an effort to **identify additional cases**. This helps to determine the magnitude of the outbreak and may be useful in identifying clues regarding its source.
3. The investigator should enter the relevant information obtained from case interviews into an MS Excel based **line list** ([Annexure E2: Line List Template](#)). The line list provides standard information for key variables for each case-patient. The information gathered is used to describe the outbreak in the following ways:
 - When did the illnesses occur: Construct an **epidemic curve** (number of cases across time)
 - Where did illnesses occur: **Develop a map** of illnesses
 - Who was affected: **Describe those affected** by the following parameters--
 - Age (median, range), sex (male, female)
 - Symptoms
 - Number ill, hospitalized, died

Line list data may also be compiled to calculate:

 - Attack rate among a specific population (village, town, group of people)
 - Total number who ate a common meal/food
 - Total number of clinical specimens collected
4. The investigator should **coordinate with laboratory staff to ensure collection and testing of clinical specimens** for each case-patient, and collect relevant laboratory results from the district/referral laboratory. The laboratory information should be used to classify, if possible, the pathogen responsible for illness.
5. **Coordinate daily with the DSU and SSU regarding analysis** and investigation to determine the source of the outbreak. Based on consultation with epidemiologists, this may involve developing and testing a hypothesis using an analytic study.
6. **Communicate and share investigation findings** with the affected populations in order to prevent additional illness and prevent future outbreaks.

Foodborne Illness Complaint Form
(To be filled by the Medical Officer/ Health Inspector)

Outbreak No:.....
No:.....

Complainant

1. Origin of Complaint

Date of Reporting :..... Receiving office: Received
by:.....

2. Location of the Outbreak

Rural/Urban

District:.....
Block:.....PHC:.....Village:.....

3. Complainant Data

Name:..... Age:..... Sex: M/F

Address:..... Mobile No:.....
Occupation:.....

..... Previous illness: Y/N Existing Medications:
Y/N

4. Illness Data

Illness Onset: Date:.....Time:.....AM/PM. Illness Stopped: Date:.....Time:.....AM/PM. Illness
Ongoing: Y / N

Signs and Symptoms:

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> Diarrhea..... Watery/Bloody
(location)..... | <input type="checkbox"/> Headache | <input type="checkbox"/> Itching |
| <input type="checkbox"/> Vomiting
(location)..... | <input type="checkbox"/> Myalgia (muscle ache) | <input type="checkbox"/> Numbness |
| <input type="checkbox"/> Nausea
(location)..... | <input type="checkbox"/> Dizziness | <input type="checkbox"/> Tingling |
| <input type="checkbox"/> Abdominal Pain
(location)..... | <input type="checkbox"/> Double Vision | <input type="checkbox"/> Edema |
| <input type="checkbox"/> Fever.....°F | <input type="checkbox"/> Jaundice | <input type="checkbox"/> Rash |
| <input type="checkbox"/> Chills | <input type="checkbox"/> Weakness | <input type="checkbox"/> |
- Others:.....

Diarrhea Onset: Date:..... Time:.....AM/PM Diarrhea Stopped: Date:..... Time:.....AM/PM
Illness Ongoing: Y/N

Vomiting Onset: Date:..... Time:.....AM/PM Vomiting Stopped: Date:..... Time:.....AM/PM
Illness Ongoing: Y/N

5. Clinical Data

Doctor or other Healthcare provider consulted? Y/N Date visited: Time:.....AM/PM

Health care Facility: (PHC/GH/Medical College/Private) Admitted: Y/N Length of stay:.....(hrs)

6. Specimen collected

Whether clinical specimen taken? Y/N Type of specimen: Stool Rectal swab

Name of the Institution where samples sent:.....

Collected on:..... Sent on:..... Lab

Diagnosis:.....

If no specimen is taken, would you be willing to provide a stool sample? Y/N/NA – Samples no longer available

7. Suspect Meal Data

Date:..... Time:.....AM/PM Location:.....Suspect
Meal:.....
.....
.....

Number of people in party:.....Number of people reported ill:.....Group

Contact:.....

List anything unusual about the meal (temperature, taste, colour etc.,)

.....

8. Other Contacts

<u>Name</u> <u>and/or Location</u>	<u>Phone</u>	<u>Associated Meal</u>
.....	<input type="checkbox"/>	
	Ill <input type="checkbox"/> Well <input type="checkbox"/>
	<input type="checkbox"/>

1 DAY PRIOR TO ILLNESS

DATE:.....

	Breakfast	Lunch	Dinner	Other Foods/Water
Type of food (name the food)				
Location/Place				
Time (AM/PM)				
Suspect Meal? (Yes/No)				
If yes, other details of suspected meal				
Contacts				

2 DAYS PRIOR TO ILLNESS

DATE:.....

	Breakfast	Lunch	Dinner	Other Foods/Water
Type of food (name the food)				
Location/Place				
Time (AM/PM)				
Suspect Meal? (Yes/No)				
If yes, other details of suspected meal				
Contacts				

Signature

