

ICMR FoodNet Practical Guidelines for the investigation of Foodborne outbreak

(These guidelines are intended to serve as general procedures for investigation of foodborne disease outbreaks)

Case Definition: Foodborne outbreak occurrences affecting two or more people who express the similar illness due to consumption of same contaminated food or drink.

	Steps	Methods	Approach to	
1	Source of information of an outbreak	<p>Alert: Before, during and after a major festival, marriage ceremony, any other mass gathering (These events increase the chance of infection through host environment interconnection and contamination of food)</p> <p>-Small scale outbreak</p> <p>-Large outbreak</p>	<p>Media :Electronic Media, local Newspaper</p> <p>Local Health Authorities: Anganwadi/ASHA workers, MO (PHC), BMOH</p> <p>Local administration: Gram Pradhan, BDO, DM</p> <p>Integrated Diseases Surveillance Program (IDSP) officers</p> <p>Consumer or from any local person</p>	
2.	Declaration of an outbreak (Confirmation of news of outbreak)	Information of an outbreak should be confirmed by: <ol style="list-style-type: none"> 1. Local administrative and health authority 2. Information from patients and contacts 3. Lab test/ microbiological investigations: (confirmation of pathogens from patients samples/ from leftover food samples) 		
3.	Outbreak investigation			
3.1	Identify and interview the stake holders	To identify the place, person and time of outbreak	<p>Administrative Officials</p>	<p><u>Village level:</u> Gram Panchayat/ Gram Pradhan</p> <p><u>District level:</u> Block Development Officer, DM</p>
			<p>Health officials</p>	<p>Primary Health Centre (PHC)</p> <p>Block Medical Officer of Health (BMOH)</p> <p>Chief Medical Officer of Health (CMOH)</p>
3.2	Select sites for investigation, based on the primary information	<p>1. Health centers and Hospitals: PHC, BPHC, Rural Hospital, District hospital (for patients/ cases)</p>		

	(where large number of people affected and increased number of cases admitted/treated)	<p>2. Community/ school/household:</p> <ul style="list-style-type: none"> -Contact of patients, family members, who may have consumed the same food item/Asymptomatic cases in the community - Cook , food handlers
3.3	Conduct site investigation at identified premises	<p>1. Conduct in-depth pre-determined questionnaire based interview (annexure I) of the patients and associated asymptomatic cases:</p> <ul style="list-style-type: none"> -Socio demographic profile of Patient (Name/address/Contact details) -illness history/Food Consumption History -Location of the food taken from Date and time of the onset of illness/Suspected time of consumption - Drinking water source, purification procedure, type of pot (mud/metal; wide mouth/narrow mouth; closed/open), number of days stored etc. -Common food handling practice -Hand hygiene -Treatment seeking behavior -use of ORS and antibiotics - Treatment provided by centers or by others -Diagnosis/Clinical Report -Suspected Microbial Infection <p>2. Conducting an environmental investigation of implicated food type.</p> <p>3. Assess procedures (cooked/Raw/Processed) undergone by suspected food item.</p>
3.4	Sample Collection	<p>Collect appropriate food and clinical samples:</p> <ol style="list-style-type: none"> 1. Leftover food samples: Suspected contaminated foods, water, surface swabs etc. 2. Patient samples: Vomitus, Stool, rectal swabs etc. 3. Samples from nail bed of food handlers (if required)
3.5	Sample transport	Collected samples should transport to the nearest labs/ study center as per SOP guidelines (page no-)
3.6	Lab testing for pathogen identification& Antibiotic sensitivity testing	At the lab, samples should be processed as quickly as possible
4.	Preparation of	Should prepare outbreak/over the time endemic curve /spot map etc. as well as last three years secondary data (on

	outbreak curve and secondary data curve	foodborne infections and outbreak) curve to compare outbreak situation
5.	Dissemination of the results to the stakeholders with suggestion in current treatment policies	<p>-To contain outbreak, policy makers could be approached if there is any need of change the current treatment policy or other things come out from lab investigations</p> <p>-Specific feasible recommendations for the control and prevention of recurrences of similar outbreaks can be made.</p>