WEER SRI LANKA 2025

WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health & Mass Media
231, de Saram Place, Colombo 01000, Sri Lanka
Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk
Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk
Web: http://www.epid.gov.lk

Vol. 52 No. 48 **22nd – 28th Nov 2025**

Structured Approach to Food Poisoning Outbreak Investigation and Documentation

This is the first article of two in a series on "Structured Approach to Food Poisoning Outbreak Investigation and Documentation"

Food poisoning remains one of the most common public health challenges worldwide. Surveillance case definition to notify food poisoning is when two or more people develop acute gastroenteritis symptoms after consuming the same contaminated food or drink. Such events not only affect the health of individuals but also disrupt communities, damage public trust in food safety, and sometimes lead to severe economic or legal consequences. To effectively manage these incidents, public health authorities follow a structured process: first, they investigate the outbreak to identify its cause, and then they document the findings in a detailed outbreak report. Together, these steps form the backbone of foodborne disease control and prevention.

This article summarises the key steps in outbreak investigation and provides a guideline for writing reports after such investigations, highlighting how they complement each other to safeguard public health.

Understanding Food Poisoning Outbreaks

A food poisoning outbreak is defined as an incident where at least two people experience illness that is epidemiologically linked to a common food or drink. These illnesses can range from mild gastrointestinal upset to life-threatening infections. The ultimate goals of an outbreak response are to:

- Confirm the outbreak.
- Identify and eliminate the source.
- Collect evidence that may be used in legal proceedings.
- Learn lessons to prevent future events.

The effectiveness of outbreak management depends heavily on the golden time, the period between the first case being reported and the arrival of the public health team at the site. A faster response gives investigators a better chance to find the cause before evidence is lost.

Steps in Outbreak Investigation

Public health teams, often led by the Medical Officer of Health (MOH), follow systematic steps during food poisoning outbreak investigations:

1. Notification:

As soon as suspected cases are identified by the Public Health Officer through notifications from general practitioners (GPs), outpatient departments (OPDs), and hospital wards via Infection Control Nursing Officers (ICNOs), as well as through reports from school health teams and factory health teams. In addition, members of the public may report suspected food poisoning incidents through complaints. The Regional Epidemiologist (RE) and the National Epidemiology Unit must be informed without delay.

2. Rapid Response:

A field investigation team should visit the outbreak site quickly. The period from reporting

of the first food poisoning case to the initial visit of the Public Health Team to the suspected site is considered the Golden Hour in food poisoning. Prompt action during this critical period is essential to gather first-hand information, prevent further spread of the illness, and avoid the loss or destruction of valuable evidence is needed for effective investigation and control.

3. Detecting a Possible Outbreak:

Investigators look for clusters of people showing similar symptoms, such as diarrhoea, vomiting, or abdominal pain. Linking these illnesses to a shared food or water source is the first clue.

4. Site Inspection:

A thorough site inspection is essential to gather vital evidence during a food poisoning investigation. The public health team should systematically assess the following components:

- **Raw materials and additives:**
  e.g., rice, lentils, curry powders, oils, food additives used in preparation, and bills/receipts for the purchase of raw materials.
- **Storage conditions:**
  Availability and adequacy of refrigeration facilities, maintenance of temperature records, and methods of storing raw and cooked foods.
- **Utensils and equipment:**
  Cleanliness and suitability of utensils, cooking vessels, and food-contact equipment.
- **Food preparation areas:**
  Cleanliness of cutting, cooking, and serving areas
- **Packaging and distribution methods:**
  Methods of packaging, transportation, and handling of food.
- **Food display practices:**
  How food is displayed for sale and protection from contamination.
- **Pest control measures:**
  Presence and effectiveness of fly and rodent control measures.
- **Water supply:**
  Source of water, storage facilities, and safety of water used for cooking and cleaning.
- **Waste disposal systems:**
  Methods of solid and liquid waste disposal.
- **Structural and environmental conditions:**
  General architecture of food preparation areas. (e.g., open drains, canals, gullies, ventilation)
- **Food handlers:**
  Personal hygiene, food handling practices, health status, and typhoid vaccination status.
- **Photographic evidence strengthens the record.**

5. Timeline of Events:

Establishing a clear timeline of events, including when the food was prepared, packaged, distributed, and consumed, as well as the onset of symptoms, helps determine the incubation period and identify the most likely source of contamination.

6. Curative sectors Coordination (Hospital staff/GPs) to actively find the conditions of the patients admitted:

Hospitals, GPs, laboratories, and microbiologists are alerted to look out for and record cases. Admission details, including timing and severity, are collected.

7. Hospital Visits:

The investigation team visits hospitals where affected patients are treated or admitted, reviews medical records, and completes line listings to ensure the systematic collection of consistent and comparable information.

Compiled by:

Dr. Charuhasini Sivapirashanth
Medical Officer
Epidemiology Unit
Ministry of Health

References:

1. Centers for Disease Control and Prevention (CDC). Foodborne outbreak response guidelines. Atlanta: CDC; 2009.
2. Ministry of Health, Sri Lanka. Manual for the Sri Lanka Public Health Inspector: Contents (ii–xi) [Internet]. Colombo: Ministry of Health; 201
3. Second FAO/WHO Global Forum of Food Safety Regulators. (2024). Fao.org. https://www.fao.org/4/ae337e/ae337e.htm
4. World Health Organization. Five keys to safer food manual. Geneva: World Health Organization; 2006.
5. World Health Organization. Foodborne disease outbreaks: guidelines for investigation and control. Geneva: World Health Organization; 2008.

 To be Continued….

Table 1: Selected notifiable diseases reported by Medical Officers of Health 15th – 21st Nov 2025 (47th Week)

RDHS	Dengue Fever		Dysentery		Encephalitis		En. Fever		F. Poisoning		Leptospirosis		Typhus F.		Viral Hep.		H. Rabiies		Chickenpox		Meningitis		Leishmania-		Tuberculosis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	226	10458	2	34	0	20	0	15	4	44	8	427	0	6	0	32	0	0	13	560	1	75	0	6	29	1870	100	100
Gampaha	159	6740	0	48	0	33	1	6	0	154	22	775	0	11	0	18	0	0	27	799	9	178	1	43	14	1071	80	100
Kalutara	34	2224	3	41	0	7	0	20	0	100	6	582	0	3	0	8	0	0	23	833	2	49	0	3	15	527	93	95
Kandy	88	4035	2	48	1	4	0	8	0	58	1	277	2	51	0	11	0	0	24	603	1	26	0	71	13	592	70	100
Matale	20	1178	0	25	0	3	0	2	3	92	19	258	0	7	0	9	0	0	2	133	0	9	7	333	2	140	100	100
Nuwara Eliya	8	327	0	81	0	6	0	7	0	76	2	183	3	60	0	9	0	0	7	319	0	37	0	0	4	262	100	100
Galle	48	1971	0	60	0	10	0	10	1	98	21	832	0	78	2	15	0	2	27	764	4	161	0	3	13	487	100	100
Hambantota	15	847	1	42	0	7	0	2	0	43	5	345	0	30	1	17	0	0	22	334	1	34	5	319	2	132	100	100
Matara	22	1456	0	17	0	3	0	1	0	25	11	450	1	17	2	23	0	1	15	440	1	53	3	114	2	160	100	100
Jaffna	57	1280	2	93	0	3	2	21	1	48	5	151	8	495	0	3	0	2	1	325	2	37	0	2	1	197	93	93
Kilinochchi	3	103	0	14	0	1	0	4	0	7	0	68	0	14	0	2	0	0	1	11	0	1	0	2	0	45	100	100
Mannar	5	178	0	6	0	0	0	1	0	3	0	32	0	18	0	2	0	0	0	19	0	15	0	9	1	46	100	100
Vavuniya	0	83	1	11	1	1	0	1	8	49	3	90	0	10	0	0	0	0	0	48	1	24	0	20	2	59	100	100
Mullaitivu	4	61	2	9	0	0	0	1	0	26	0	55	0	10	0	1	0	0	0	33	0	8	0	5	1	34	100	100
Batticaloa	21	1724	1	134	1	19	0	4	0	205	1	114	0	3	2	29	0	0	2	193	1	35	0	1	2	128	86	100
Ampara	10	246	0	59	0	11	0	3	0	43	9	235	0	3	0	13	0	1	5	236	1	55	1	25	1	62	100	100
Trincomalee	19	993	0	43	0	4	0	2	1	79	1	136	0	9	0	6	0	1	5	137	0	13	1	10	2	128	100	100
Kurunegala	23	1488	1	45	0	19	0	2	1	73	39	764	0	26	0	9	1	2	23	858	0	162	12	583	7	353	97	100
Puttalam	18	629	0	36	1	5	0	0	0	15	11	305	0	36	0	4	0	1	2	154	2	107	0	31	0	186	92	100
Anuradhapura	10	514	1	34	0	6	0	3	0	45	3	350	0	25	0	12	0	2	0	312	1	61	7	725	3	286	70	100
Polonnaruwa	15	349	0	16	0	9	1	2	0	145	8	261	0	1	0	25	0	0	6	202	3	28	13	469	3	92	100	90
Badulla	18	766	0	37	0	15	0	4	0	11	3	288	2	42	2	85	1	1	7	395	2	82	5	71	4	260	94	100
Monaragala	15	792	0	33	0	5	0	1	0	19	7	514	0	39	0	62	0	0	7	237	1	54	8	229	2	141	82	100
Ratnapura	54	4448	1	105	0	10	0	4	0	72	37	1468	0	33	1	21	0	2	6	438	0	103	9	221	6	372	100	100
Kegalle	34	1378	0	56	0	13	0	10	0	44	12	760	0	15	1	22	0	0	15	869	2	126	1	34	4	274	82	100
Kalmunai	14	403	3	53	0	8	0	0	0	52	4	114	0	2	1	6	0	1	11	269	0	60	0	1	4	141	83	92
SRILANKA	**940**	**44671**	**20**	**1180**	**4**	**222**	**4**	**134**	**19**	**1626**	**238**	**9834**	**16**	**1044**	**12**	**454**	**2**	**16**	**251**	**9521**	**35**	**1593**	**73**	**3330**	**137**	**8045**	**93**	**99**

Source: Weekly Returns of Communicable Diseases (esurvillance.epid.gov.lk). T=Timeliness refers to returns received on or before 21st Nov, 2025 Total number of reporting units 360 Number of reporting units data provided for the current week: 358. C**-Completeness

A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

15th - 21st Nov 2025 (47th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2025	Number of cases during same week in 2024	Total number of cases to date in 2025	Total number of cases to date in 2024	Difference between the number of cases to date in 2025 & 2024
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	01	00	00	00	00	00	00	00	00	01	02	56	72	-22.2%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	02	00	00	01	00	00	01	00	00	04	08	240	261	-8%
Measles	00	00	00	00	00	00	00	00	00	00	00	01	295	-99.6%
Rubella	00	00	00	00	00	00	00	00	00	00	00	04	02	-100%
CRS**	00	00	00	00	00	00	00	00	00	00	00	01	00	0 %
Tetanus	00	00	00	00	01	00	00	00	00	01	00	12	05	140 %
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Japanese Enceph-alitis	00	00	00	00	00	00	00	00	00	00	00	04	11	-63.6 %
Whooping Cough	01	00	00	03	00	00	00	00	00	04	02	28	61	-54.1 %

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

RDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS =**Congenital Rubella Syndrome

NA = Not Available

Number of Malaria Cases Up to End of November 2025,

02

All are Imported!!!

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

ON STATE SERVICE

Dr. Palitha Karunapema
CHIEF EPIDEMIOLOGIST
EPIDEMIOLOGY UNIT
231, DE SARAM PLACE
COLOMBO 10