



## INVESTIGATION OF A WATERBORNE OUTBREAK

1. Where did the outbreak occur? _____ (1-2) City or Town _____ County _____		2. Date of outbreak: (Date of onset of 1st case) _____ (3-8)
3. Indicate actual (a) or estimated (e) numbers: Persons exposed _____ (9-11) Persons ill _____ (12-14) Hospitalized _____ (15-16) Fatal cases _____ (17)	4. History of exposed persons: No. histories obtained _____ (18-20) No. persons with symptoms _____ (21-23) Nausea _____ (24-26) Diarrhea _____ (33-35) Vomiting _____ (27-29) Fever _____ (36-38) Cramps _____ (30-32) Other, specify (39) _____	5. Incubation period (hours): Shortest _____ (40-42) Longest _____ (43-4) Median _____ (46-48)
		6. Duration of illness (hours): Shortest _____ (49-51) Longest _____ (52-54) Median _____ (55-57)

7. Epidemiologic data (e.g., attack rates [number ill/number exposed] for persons who did or did not eat or drink specific food items or water, attack rate by quantity of water consumed, anecdotal information) \* (58)

ITEMS SERVED	NUMBER OF PERSONS WHO ATE OR DRANK SPECIFIED FOOD OR WATER				NUMBER WHO DID NOT EAT OR DRINK SPECIFIED FOOD OR WATER			
	ILL	NOT ILL	TOTAL	PERCENT ILL	ILL	NOT ILL	TOTAL	PERCENT ILL

8. Vehicle responsible (item incriminated by epidemiologic evidence): (59-60) \_\_\_\_\_

9. Water supply characteristics

(A) Type of water supply\*\* (61)

- Municipal or community supply (Name \_\_\_\_\_)
- Individual household supply
- Semi-public water supply
  - Institution, school, church
  - Camp, recreational area
  - Other, \_\_\_\_\_
- Bottled water

(B) Water source (check all applicable):

- Well
- Spring
- Lake, pond
- River, stream

- |   |   |   |   |
|---|---|---|---|
| a | b | c | d |
| a | b | c | d |
| a | b | c | d |
| a | b | c | d |

(C) Treatment provided (circle treatment of each source checked in B):

- a. no treatment
- b. disinfection only
- c. purification plant — coagulation, settling, filtration, disinfection (circle those applicable)
- d. other \_\_\_\_\_

10. Point where contamination occurred: (66)

- Raw water source       Treatment plant       Distribution system

\*See CDC 4.245 Investigation of a Foodborne Outbreak, Item 7.

\*\*Municipal or community water supplies are public or investor owned utilities. Individual water supplies are wells or springs used by single residences. Semipublic water systems are individual-type water supplies serving a group of residences or locations where the general public is likely to have access to drinking water. These locations include schools, camps, parks, resorts, hotels, industries, institutions, subdivisions, trailer parks, etc., that do not obtain water from a municipal water system but have developed and maintain their own water supply.

11. Water specimens examined: (67)

(Specify by "X" whether water examined was original (drunk at time of outbreak) or check-up (collected before or after outbreak occurred))

ITEM	ORIGINAL	CHECK UP	DATE	FINDINGS		BACTERIOLOGIC TECHNIQUE (e.g., fermentation tube, membrane filter)
				Quantitative	Qualitative	
Examples: Tap water	X		6/12/74	10 fecal coliforms per 100 ml.		
Raw water		X	6/2/74	23 total coliforms per 100 ml.		

12. Treatment records: (Indicate method used to determine chlorine residual):

Example: Chlorine residual - One sample from treatment plant effluent on 6/11/74 - trace of free chlorine

Three samples from distribution system on 6/12/74 - no residual found

13. Specimens from patients examined (stool, vomitus, etc.) (68)

SPECIMEN	NO. PERSONS	FINDINGS
Example: Stool	11	8 <i>Salmonella typhi</i> 3 negative

14. Unusual occurrence of events:

Example: Repair of water main 6/11/74; pit contaminated with sewage, no main disinfection. Turbid water reported by consumers 6/12/74.

15. Factors contributing to outbreak (check all applicable):

- Overflow of sewage
- Seepage of sewage
- Flooding, heavy rains
- Use of untreated water
- Use of supplementary source
- Water inadequately treated
- Interruption of disinfection
- Inadequate disinfection
- Deficiencies in other treatment processes
- Cross-connection
- Back-siphonage
- Contamination of mains during construction or repair
- Improper construction, location of well/spring
- Use of water not intended for drinking
- Contamination of storage facility
- Contamination through creviced limestone or fissured rock
- Other (specify) \_\_\_\_\_

16. Etiology: (69-70)

Pathogen \_\_\_\_\_ Suspected ..... 1  
 Chemical \_\_\_\_\_ Confirmed ..... 2 (Circle one)  
 Other \_\_\_\_\_ Unknown ..... 3

17. Remarks: Briefly describe aspects of the investigation not covered above, such as unusual age or sex distribution; unusual circumstances leading to contamination of water; epidemic curve; control measures implemented; etc. (Attach additional page if necessary)

Name of reporting agency: (72)

Investigating Official: \_\_\_\_\_

Date of investigation: \_\_\_\_\_

Note: Epidemic and Laboratory assistance for the investigation of a waterborne outbreak is available upon request by the State Health Department to the Center for Disease Control, Atlanta, Georgia 30333.

To improve national surveillance, please send a copy of this report to: Center for Disease Control  
 Attn: Enteric Diseases Branch, Bacterial Diseases Division  
 Bureau of Epidemiology  
 Atlanta, Georgia 30333

Submitted copies should include as much information as possible, but the completion of every item is not required.