



# National Outbreak Reporting System

## Waterborne Disease Transmission



This form is used to report waterborne disease outbreak investigations. This form has 6 parts, indicated by tabs at the top of each page. Part 1 asks for the minimum or basic information about the outbreak investigation. Part 2 asks for epidemiological data and clinical specimen test results. Parts 3, 4, 5 and 6 collect information about types of water exposure (treated recreational water, untreated recreational water, drinking water, and water not intended for drinking/unknown intent). Only 1 of these 4 water exposure parts should be completed for an outbreak investigation report.

**CDC USE ONLY**

CDC Report ID

State Report ID

Form Approved  
OMB No. 0920-0004

### General Section

#### Primary Mode of Transmission (check one)

- Food (Complete CDC 52.13)
- Water (Complete tabs for General, Water-General and type of water exposure)
- Animal contact (Complete CDC 52.13)
- Person-to-person (Complete CDC 52.13)
- Environmental contamination other than food/water (Complete CDC 52.13)
- Indeterminate/Other/Unknown (Complete CDC 52.13)

#### Investigation Methods (check all that apply)

- Interviews only of ill persons
- Case-control study
- Cohort study
- Food preparation review
- Water system assessment: Drinking water
- Water system assessment: Nonpotable water
- Treated or untreated recreational water venue assessment
- Investigation at factory/production/treatment plant
- Investigation at original source (e.g., farm, water source, etc.)
- Food product or bottled water traceback
- Environment/food/water sample testing
- Other

#### Comments

### Dates (mm/dd/yyyy)

Date first case became ill (required) \_\_\_\_/\_\_\_\_/\_\_\_\_ Date last case became ill \_\_\_\_/\_\_\_\_/\_\_\_\_

Date of initial exposure \_\_\_\_/\_\_\_\_/\_\_\_\_ Date of last exposure \_\_\_\_/\_\_\_\_/\_\_\_\_

Date of report to CDC (other than this form) \_\_\_\_/\_\_\_\_/\_\_\_\_

Date of notification to State/Territory or Local/Tribal Health Authorities \_\_\_\_/\_\_\_\_/\_\_\_\_

### Geographic Location

Reporting state: \_\_\_\_\_

- Exposure occurred in multiple states
- Exposure occurred in a single state but cases resided in multiple states

Other states: \_\_\_\_\_

Reporting county: \_\_\_\_\_

- Exposure occurred in multiple counties in reporting state
- Exposure occurred in a single county but cases resided in multiple counties in reporting state

Other counties: \_\_\_\_\_

City/Town/Place of exposure: \_\_\_\_\_

*Do not include proprietary or private facility names*

### Primary Cases

Number of Primary Cases		Sex (estimated percent of the primary cases)				
# Lab-confirmed cases	(A)	Male		%		
# Probable cases	(B)	Female		%		
# Estimated total primary ill						
	# Cases	Total # of cases for whom info is available	Approximate percent of primary cases in each age group			
# Died			<1 year	%	20-49 years	%
# Hospitalized			1-4 years	%	50-74 years	%
# Visited Emergency Room			5-9 years	%	≥ 75 years	%
# Visited health care provider (excluding ER visits)			10-19 years	%	Unknown	%

**Incubation Period, Duration of Illness, Signs or Symptoms for Primary Cases only**

Incubation Period <i>(circle appropriate units)</i>			Duration of Illness <i>(among recovered cases-circle appropriate units)</i>		
Shortest		Min, Hours, Days	Shortest		Min, Hours, Days
Median		Min, Hours, Days	Median		Min, Hours, Days
Longest		Min, Hours, Days	Longest		Min, Hours, Days
Total # of cases for whom info is available			Total # of cases for whom info is available		
<input type="checkbox"/> Unknown incubation period			<input type="checkbox"/> Unknown duration of illness		

**Signs or Symptoms** *(\*refer to terms from appendix, if appropriate, to describe other common characteristics of cases)*

Feature	# Cases with signs or symptoms	Total # cases for whom info available
Vomiting		
Diarrhea		
Bloody stools		
Fever		
Abdominal cramps		
HUS		
Asymptomatic		
*		
*		
*		

**Secondary Cases**

Mode of Secondary Transmission <i>(check all that apply)</i>	Number of Secondary Cases	
<input type="checkbox"/> Food <input type="checkbox"/> Water <input type="checkbox"/> Animal contact <input type="checkbox"/> Person-to-person <input type="checkbox"/> Environmental contamination other than food/water <input type="checkbox"/> Indeterminate/Other/Unknown	# Lab-confirmed secondary cases	(A)
	# Probable secondary cases	(B)
	Total # of secondary cases	
	Total # of cases (Primary + Secondary)	

**Environmental Health Specialists Network** *(if applicable)*

EHS-Net Evaluation ID: 1.) \_\_\_\_\_ 2.) \_\_\_\_\_ 3.) \_\_\_\_\_

**Traceback** *(for food and bottled water only, not public water)*

Please check if traceback conducted

Source name <i>(If publicly available)</i>	Source type <i>(e.g. poultry farm, tomato processing plant, bottled water factory)</i>	Location of source		Comments
		State	Country	

**Recall**

Please check if any food or bottled water product was recalled

Type of item recalled:

Comments:

**Reporting Agency**

Agency name: \_\_\_\_\_ E-mail: \_\_\_\_\_  
 Contact name: \_\_\_\_\_ Contact title: \_\_\_\_\_  
 Phone no.: \_\_\_\_\_ Fax no.: \_\_\_\_\_

**Remarks** *Briefly describe important aspects of the outbreak not covered above. Please indicate if any adverse outcomes occurred in special populations (e.g., pregnant women, immunocompromised persons)*



**Water-General**

Specimen Type*	Specimen Subtype**	Tested for § (list all that apply)

\* Specimen Type: 1- Autopsy Specimen (specify subtype), 2-Biopsy (specify), 3-Blood, 4-Bronchial Alveolar Lavage (BAL), 5-Cerebrospinal Fluid (CSF), 6-Conjunctiva/Eye Swab, 7-Ear Swab, 8-Endotracheal Aspirate, 9-Saliva, 10-Serum, 11-Skin Swab, 12-Sputum, 13-Stool, 14-Urine, 15-Vomit, 16-Wound Swab, 17-Unknown

\*\* Specimen Subtype: 1-Bladder, 2-Brain, 3-Dura, 4-Hair, 5-Intestine, 6-Kidney, 7-Liver, 8-Lung, 9-Nails, 10-Skin, 11-Stomach, 12-Wound, 13-Other, 14-Unknown

§ Tested for: 1-Bacteria, 2-Chemicals/Toxins, 3-Fungi, 4-Parasites, 5-Viruses

Enter positive findings in the table below. If tests for a specific pathogen/agent were negative, please also list that pathogen/agent and fill in the Specimen Type, Specimen Subtype, Test Type, Total # of People Tested and Total # of People Positive.

Clinical Specimen Row Number	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype
1				
2				
3				
4				
5				

Clinical Specimen Row Number	Confirmed as Etiology ?	Concentration (number)	Unit (e.g., oocysts, CFU)	Specimen Type *	Specimen Subtype **
1	<input type="checkbox"/> yes				
2	<input type="checkbox"/> yes				
3	<input type="checkbox"/> yes				
4	<input type="checkbox"/> yes				
5	<input type="checkbox"/> yes				

Clinical Specimen Row Number	Test Type §	Total # People Tested	Total # People Positive
1			
2			
3			
4			
5			

\* Specimen Type: 1- Autopsy Specimen (specify subtype), 2-Biopsy (specify), 3-Blood, 4-Bronchial Alveolar Lavage (BAL), 5-Cerebrospinal Fluid (CSF), 6-Conjunctiva/Eye Swab, 7-Ear Swab, 8-Endotracheal Aspirate, 9-Saliva, 10-Serum, 11-Skin Swab, 12-Sputum, 13-Stool, 14-Urine, 15-Vomit, 16-Wound Swab, 17-Unknown

\*\* Specimen Subtype: 1-Bladder, 2-Brain, 3-Dura, 4-Hair, 5-Intestine, 6-Kidney, 7-Liver, 8-Lung, 9-Nails, 10-Skin, 11-Stomach, 12-Wound, 13-Other, 14-Unknown

§ Test Type: 1-Culture, 2-DNA or RNA Amplification/Detection (e.g., PCR, RT-PCR), 3-Microscopy (e.g., fluorescent, EM), 4-Serological/Immunological Test (e.g., EIA, ELISA), 5-Phage Typing, 6-Chemical Testing, 7-Tissue Culture Infectivity Assay

Isolates		
State Lab Isolate ID	Specimen Profile 1 (e.g., PFGE, MLVA, or genotype)	Specimen Profile 2 (e.g., PFGE, MLVA, or genotype method used)

**Water Not Intended for Drinking or Water of Unknown Intent (WNID/WUI)**

**Intent for Use**

What was the intended use for the implicated water? (check all that apply)

- Cooling/Air Conditioning (e.g., cooling tower, swamp cooler)
- Mister (e.g., produce in grocery store, public cooling system)
- Ornamental (e.g., a decorative non-interactive fountain intended for public display and not designed for swimming or recreational use)
- Industrial/Occupational (e.g., steam cleaner)
- Agricultural Irrigation
- Waste water
- Other (specify): \_\_\_\_\_
- Unknown

**Water Description**

Water Type <i>(e.g., cooling tower; drainage ditch; fountain- ornamental)</i>	Setting of Exposure <i>(e.g., airport; hospital/health care facility, nursing home; park- state park)</i>	USUAL Water Treatment Provided <i>(e.g., no treatment; disinfection; settling/sedimentation)</i>	Water Treatment Subtype <i>(disinfection or filtration: e.g., boiling; chlorine; rapid sand filter; reverse osmosis)</i>

**Laboratory Section**

Was the implicated water tested?  Yes (specify in table below)  No  Unknown

Results	1	2	3	4	5
<b>Sample</b>					
<b>Source of Sample</b>					
<b>Additional Description of Source of Sample</b> <i>(e.g., stream not intended for drinking, main A/C unit)</i>					
<b>Date</b> <i>(mm/dd/yyyy)</i>					
<b>Volume Tested</b>	<b>Number</b>				
	<b>Unit</b>				
<b>Temperature</b>	<b>Number</b>				
	<b>Unit</b>				
<b>Residual/Free Disinfectant Level</b> <i>(if total and combined disinfectant levels given, total - combined = free)</i>	<b>Number</b>				
	<b>Unit</b>				
<b>Turbidity (NTU)</b>					
<b>pH</b>					

**Water Quality Indicator**

Sample Number	Type (e.g., fecal coliforms)	Concentration (number)	Unit (e.g., CFU)

**Microbiology or Chemical/Toxin Analysis** (refer to the laboratory findings from the outbreak investigation)

Sample Number	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype	PFGE Pattern
Sample Number	Test Results Positive?	Concentration (number)	Unit (e.g., oocysts, CFU)	Test Type*	Test Method (reference: National Environmental Methods Index: <a href="http://www.nemi.gov">http://www.nemi.gov</a> )
	<input type="checkbox"/> yes				
	<input type="checkbox"/> yes				
	<input type="checkbox"/> yes				
	<input type="checkbox"/> yes				

\* Test Type: 1-Culture, 2-DNA or RNA Amplification/Detection (e.g., PCR, RT-PCR), 3-Microscopy (e.g., fluorescent, EM), 4-Serological/Immunological Test (e.g., EIA, ELISA), 5-Phage Typing, 6-Chemical Testing, 7-Tissue Culture Infectivity Assay

**Factors Contributing to Contamination and/or Increased Exposure to Contaminated Water**

Factors (check all that apply)*	Documented/ Observed**	Suspected**
Cooling tower/evaporative condenser – shutdown for >3 days without draining to waste	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – lack of a maintenance program	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – lack of a qualified water quality specialist	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – presence of scale or corrosion	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – presence of dirt, organic matter, or other debris in the cold water basin	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – absence of drift eliminators	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – presence of damaged drift eliminators	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – history of recent repairs to the device	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – siting of device near building air intakes	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – siting of device near windows that can be opened	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – siting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or other sources of organic matter	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – construction on the premises of the device within 6 months before the index case	<input type="checkbox"/>	<input type="checkbox"/>
Cooling tower/evaporative condenser – construction within 100 meters of the premises of the device within 6 months before the index case	<input type="checkbox"/>	<input type="checkbox"/>
Ornamental fountain – presence of submerged lighting	<input type="checkbox"/>	<input type="checkbox"/>
Ornamental fountain – lack of a written cleaning and maintenance program	<input type="checkbox"/>	<input type="checkbox"/>
Ornamental fountain – presence of dirt, organic matter, or other debris in the water basin	<input type="checkbox"/>	<input type="checkbox"/>
Broken/damaged sewer pipe	<input type="checkbox"/>	<input type="checkbox"/>
Recycling of water	<input type="checkbox"/>	<input type="checkbox"/>
Water temperature $\geq 30^{\circ}\text{C}$ ( $\geq 86^{\circ}\text{F}$ )	<input type="checkbox"/>	<input type="checkbox"/>
Other, specify:	<input type="checkbox"/>	<input type="checkbox"/>
Unknown	<input type="checkbox"/>	<input type="checkbox"/>

\* Only check off what was found during investigation

\*\* “Documented/Observed” refers to information gathered through document reviews, direct observations, and/or interviews. “Suspected” refers to factors that probably occurred but for which no documentation (as defined previously) is available.

**Remarks**

Epidemic and laboratory assistance for the investigation of a waterborne disease outbreak is available upon request by the State Health Department to the Centers for Disease Control and Prevention. Please enter this report into the National Outbreak Reporting System (NORS). State/Local investigation reports and questionnaires can also be attached to the report in the electronic system. Communications and requests for epidemic and laboratory assistance may be directed to: Waterborne Disease and Surveillance Coordinator, Division of Parasitic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases, Coordinating Center for Infectious Diseases, CDC 4770 Buford Highway, NE, MS F-22, Atlanta, GA, 30341-3724 or (770) 488-7775

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Project Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA, 30333, ATTN: PRA (xxxx-xxxx) --DO NOT MAIL CASE REPORTS TO THIS ADDRESS--