0920-0004 National Disease Surveillance Program II-Disease Summaries

(expiration 8/31/14)

Change Request

April 5, 2013

Amy McMillen

CDC/NCEZID

1600 Clifton Rd

Atlanta GA 30333

404-639-1045

Auh1@cdc.gov

List of Attachments

National Outbreak Reporting System (NORS) - CDC 52.13 form

National Outbreak Reporting System (NORS) - CDC 52.12 form

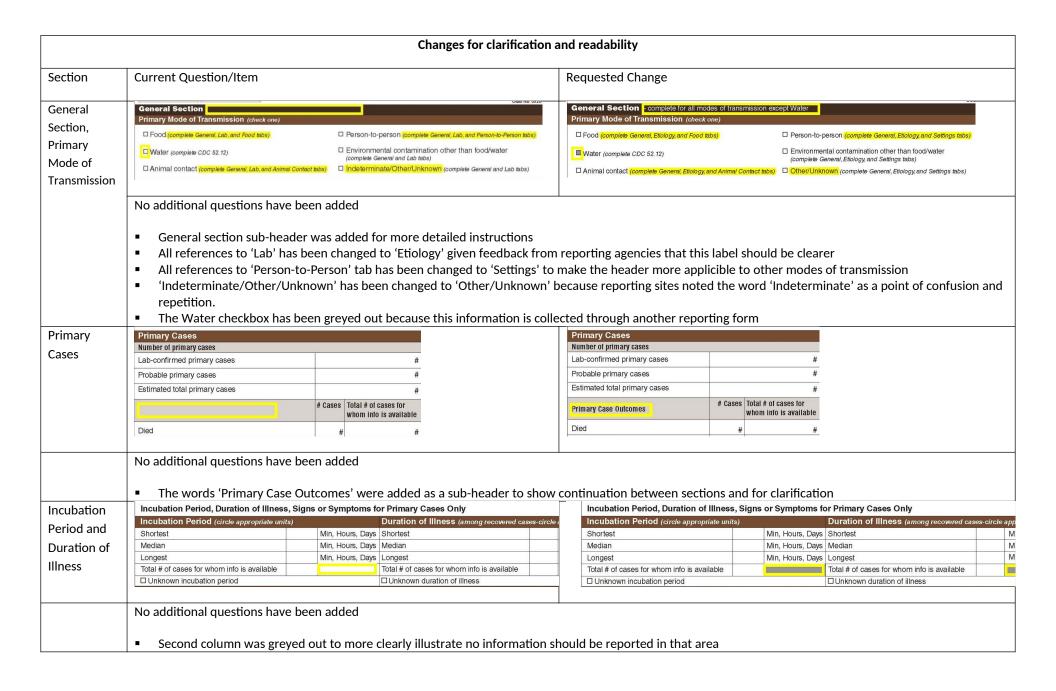
Human Infection with Novel Influenza A Virus Case Report Form

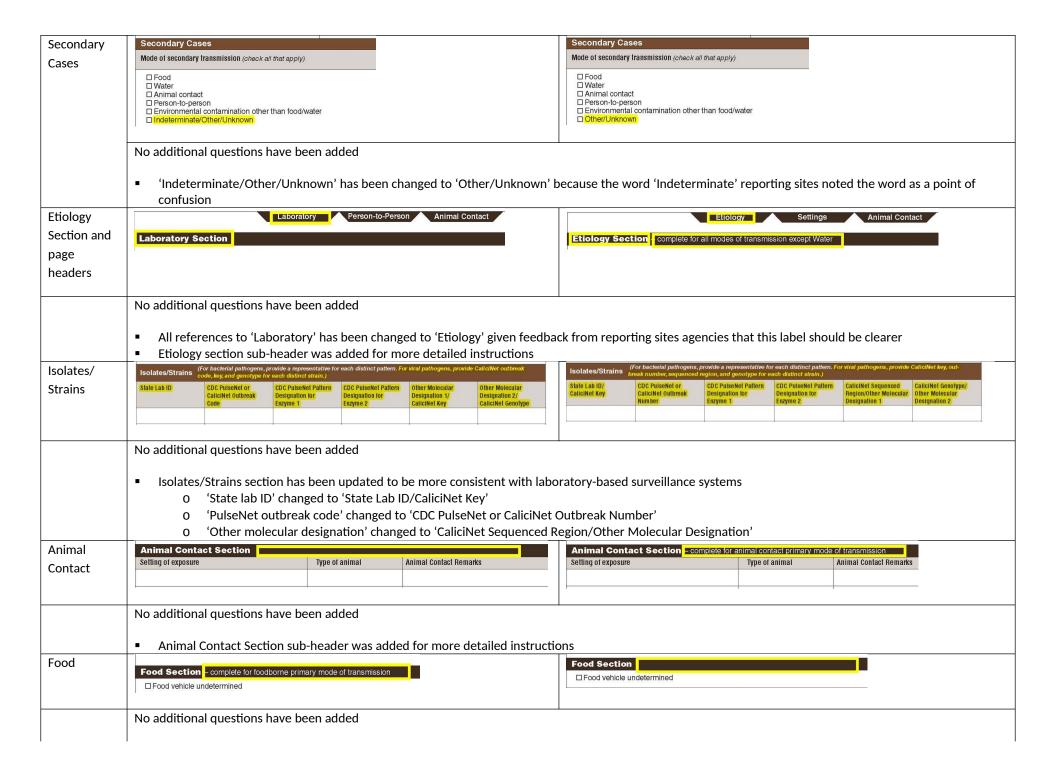
Antiviral-Resistant Influenza Case Report Form

National Outbreak Reporting System (NORS) - CDC 52.13 form, Circumstances of Change Request for OMB 0920-0004

This is a nonmaterial/non-substantive change request for #0920-0004, which received a 3-year extension through August 2014 for the reporting of foodborne, enteric person-to-person, animal contact, environmental contamination other than food/water, and other/unknown modes of transmission outbreak data from 59 reporting jurisdictions (50 states, and 9 territories) to the National Outbreak Reporting System (NORS).

Although foodborne outbreaks surveillance has occurred since the 1970's, NORS was launched in 2009 as the CDC Form 52.13, and collects aggregate outbreak data on foodborne, enteric person-to-person, animal contact, environmental contamination other than food/water, and other/unknown modes of transmission outbreaks. Data elements requiring change will improve clarification and readability of the data collection form; see table below. The settings or locations of the outbreak are routinely summarized in annual summaries and have been the subject of inquiry from the reporting agencies as well as US federal regulatory agencies. The setting or location where the outbreak occurred is important and essential to inform targeted intervention strategies, regardless of the primary mode of transmission. Currently, settings or locations of the outbreak are collected for animal contact, foodborne, and person-to-person outbreaks. However, the settings for environmental contamination other than food/water and other/unknown outbreaks are not collected. In response to the importance of the settings or locations of those outbreaks, reporting sites will be asked to complete an additional section, 'Settings', (formerly named 'Person-to-Person'); no data collection fields will be added or changed to this section. The data collection changes are summarized in the table below.





■ Food Section sub-header was added for more detailed instructions

	Changes in data collection r	elated to Settings								
Section	Current Question/Item	Requested Change								
Primary Mode of Transmissi on	Primary Mode of Transmission (check one) Food (complete General, Lab, and Food tabs)	Primary Mode of Transmission (check one) Food (complete General, Etiology, and Food tabs)								
	No additional questions have been added Instructions added for 'Environmental contamination other than food/water	and 'Other/Unknown' to complete the 'Settings' tab								
Page 3 Header	Laboratory Person Animal Contact	Etiology Settings Animal Contact								
	No additional questions have been added 'Person-to-Person' tab has been changed to 'Settings'									
Settings Section	Person-to-Person Section Major setting of exposure (choose one) Camp	Settings Section complete for person-to-person, environmental contamination, and other/unknown primary mode of transmission Major setting of exposure (choose one)								
	No additional questions have been added Settings Section sub-header was added for more detailed instructions This will be considered a new section for 'Environmental contamination other than food/water' and 'Other/Unknown' primary mode of transmission outbreaks									

At the national level, the outbreak surveillance data are used to describe outbreaks and their characteristics through publications and data inquiries, identify trends in common exposures (including foodborne attribution and burden of illness estimates), inform public health policies, determine reporting metrics, and grant funding allocation.

Burden

The annualized burden hours and cost to reporting agencies to submit this data to CDC will not change significantly, if at all, from the estimates providing during the 2008 Paperwork Reduction Act Change Worksheet OMB 83-C (E) for OMB #0920-0004. The change to the annualized burden hours and cost is minimal because the reporting agencies currently collect these data elements for foodborne, person-to-person, and animal contact outbreaks. In addition, the setting or location where the outbreak occurred is a common data element reporting agencies track for internal documentation. Therefore, the effort to include these additional data elements does require a minimal up-front cost in hours. In addition, the changes to the annual submissions to CDC are not expected to change after these changes are implemented. The burden hours were based on the average time to complete the common data collection fields by multiple team members. In addition, the burden cost was based on the form being completed by master-level staff at the reporting site.

Estimates of Annualized Burden Hours (no change)

Type of Respondents	Form name	Number of Respondents	Number of Responses per Respondent	Average Burden Per Response (in hours)	Total Burden (in hours)
State or local governments	CDC Form 52.13	50	33.5	20/60	558
Territories	CDC Form 52.13	9	2.9	20/60	9
Total		•			567

Estimates of Annualized Cost Burden (no change)

Respondents	Number of Respondents	Number of Responses per Respondent	Average Burden Per Response (in hours)	Hourly Wage Rate	Respondent Cost
State or local governments	50	33.5	20/60	\$19.92	\$11,122

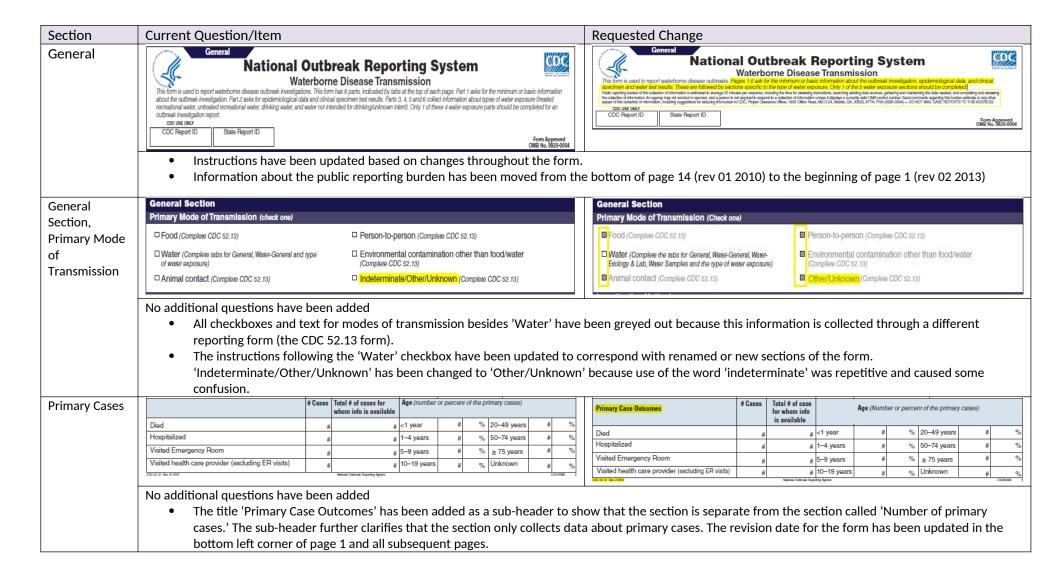
Territories	9	2.9	20/60	\$19.92	\$173.30
Total					\$11,295.30

Privacy Impact Assessment

No individually identifiable information is being collected.

National Outbreak Reporting System (NORS) - CDC 52.12 form, <u>Circumstances of Change Request for OMB 0920-0004</u>

The Waterborne Disease and Outbreak Surveillance System (WBDOSS) is a collaboration between the Centers for Disease Control (CDC), the Council of State and Territorial Epidemiologists (CSTE), and the Environmental Protection Agency (EPA). This system tracks and analyzes waterborne disease outbreaks in the United States. WBDOSS has received disease outbreak reports through the electronic National Outbreak Reporting System (NORS) since a revised form was approved by the Office of Management and Budget (OMB) in 2009. NORS variables correspond to variables in the CDC 52.12 form. The CDC 52.12 (rev 01 2010) has been revised to improve overall data quality and usability by local, state and national partners. Feedback from state and federal epidemiologists was solicited prior to making these changes. The most substantial changes on the revised form (CDC 52.12, rev 02 2013) are: 1) the simplification of an existing section that is used to report outbreak etiology; 2) the consolidation of questions about water sampling; and 3) the addition of a checkbox to better characterize exposures that cause waterborne disease outbreaks. Changes to the layout of the form are detailed in the table below. Neither the actual annual number of reports nor the burden hours for users are expected to increase or decrease as a result of the changes present in the CDC 52.12 (rev 01 2010), however a change has been made to how the numbers are calculated. This change is also described below.



General	Incubation Period (select appropriate un	nits)	Duration of Illness	(among recovered cases-s	elect appropriate units)		Incubation Period (Select appropriate uni	ts)		Duration of Illness	(Among recovered case	s-select	t appropriate units)								
Section,	Shortest	Min, Hours, Days	Shortest		Min, Hours, Days		Shortest		Min, Hours, Days	Shortest			Min, Hours, Days								
Incubation	Median	Min, Hours, Days	Median		Min, Hours, Days		Median		Min, Hours, Days	Median			Min, Hours, Days								
Period	Longest	Min, Hours, Days	Longest		Min, Hours, Days		Longest		Min, Hours, Days	Longest			Min, Hours, Days								
	Total # of cases for whom info is available		Total # of cases for who	m info is available			Total # of cases for whom info is available			Total # of cases for who	om info is available	1									
	☐ Unknown incubation period		☐ Unknown duration of	illness			☐ Unknown incubation period			☐ Unknown duration of	illness										
	No additional questions	have been add	ed																		
	 Two rectangles 	have been grey	ed out to mo	re clearly illust	trate no info	rm	ation should be reported i	n the	ose areas.												
Signs or	Signs or Symptoms					Π	Signs or Symptoms														
- 1	Feature	# Cases with sign	ns or symptoms	Total # cases for whom in	fo available		Feature		# Cases with sign	s or symptoms	Total # cases for whom	info avai	ilable								
Symptoms	Vomiting						Vomiting Diarrhea														
	Diarrhea Bloody stools						Bloody stools														
	Fever						Fever														
	Abdominal cramps						Abdominal cramps														
	HUS						HUS														
	Asymptomatic					11	Asymptomatic														
						1															
						1															
									<u> </u>												
-									<u> </u>												
	No new questions have been added																				
	• An extra row has been added to the Signs or Symptoms table based on a review of outbreaks reported to CDC in 2009-2010, in which it was found that																				
			•				erborne disease outbreak			,											
Secondary	Secondary Cases	e additional syl	преотпэтнаа в	cerreported	in manapic w		Secondary Cases	ГСРС	71 03.												
Cases	Mode of Secondary Transmission (check one)		Number of Secondary Ca	ises			Mode of Secondary Transmission (Check all that a	apply)		Number of Secondary Cas	es										
	□Food		Lab-confirmed secon	dary cases	#	11	□Food			Lab-confirmed second	ary cases		#								
	☐ Water ☐ Animal contact		Probable secondary	cases	#		☐ Water ☐ Animal contact			Probable secondary ca	ises		#								
	☐ Person-to-person ☐ Environmental contamination other than	n food/water	Estimated total secon	ndary cases	#		☐ Person-to-person ☐ Environmental contamination other than for	od/wate	ır	Estimated total second	ary cases		#								
	□ Indeterminate/Other/Unknown		Estimated total cases	(Primary + Secondary)	#		□ Other/Unknown			Estimated total cases (Primary + Secondary)		#								
	No additional questions	have been add	ed																		
	'Indeterminate/	Other/Unknow	n' has been c	hanged to 'Ot	her/Unknow	'n,	because use of the word '	inde	terminate [,]	was renetitiv	e and caused	l son	me								
		Other, Onknov	vii ilas beeli e	nungea to ot	ilei, olikilow	••	because use of the word	iiiac	cerminate	was repetitiv	e ana caasee	1 3011	110								
confusion.																					
Environmental	Environmental Health Specialists No	etwork (if applicable)					Environmental Health Specialists Net	work (/	f applicable)												
Health	EHS-Net Evaluation ID: 1.)	2.)		3.)			EHS-Net Evaluation ID: 1.)		2.)	3.)	<u>4.)</u>										
						1															
Specialists																					
Network	No new questions have been added																				
	• An overa field be	as baan addad	4 - 4 h - Francisco	4 . 1 1 4		. I .			ر عے حدیدادا				onorts								
	• Allexida neid na	as been added	to the Environ	imentai Heaiti	n Specialists I	ve	twork section to facilitate.	the I	inking oi v	vaterborne di	sease outbre	ak re	 An extra field has been added to the Environmental Health Specialists Network section to facilitate the linking of waterborne disease outbreak reports with environmental health assessments in an electronic database. 								
					•	vе	twork section to facilitate	the	inking of v	vaterborne di	sease outbre	ak re	ерогіз								

Waterborne	Torrest Maker Emperous (1, 1, AMEL)						ш	Water - General sec Type of Water Exposure ()										
Disease and	Type of Water Exposure (check	k ONE box)									☐ Treated recreational water (ues such as	pools, spas	/whirlpools.	hot tubs,	spray pads	, at-home kiddie	pools)
Outbreaks -	□ Water intended for recreational process.	nurnoene – troatod v	onuo (o a. no	ol ena/whirl	nool/hot tul	h onravn	ad)				☐ Untreated recreational water	(e.a. waterin	natural ve	nues such a	is a freshwat	ter lakes h	nt springs	marine he	aches/oceans)	
General	□ Water intended for recreational p						-													
	☐ Water intended for drinking (incl					g,	,				 Drinking water in public or individual water systems (e.g., municipal system, private well, commercially-bottled water, water kiosk), regardless of the exposure pathway (i.e., not limited to ingestion). 						isk), regardiess			
	☐ Water not intended for drinking of	or water of unknown	intent (e.g., c	ooling/indus	trial, occup	ational, de	ecorative/di	splay)			☐ Other water (e.g., cooling/ii back-country streams)	dustrial, water	reuse, irrig	gation, occup	pational, dec	orative/disp	olay; inclu	des water c	onsumed from	sources such as
											☐ Unknown water uses (i.e., t	e intended pu	rpose or us	se of the wat	ter is unknov	vn or the w	ater expo	sure catego	ry could not be	determined)
	The header	r has been	shorter	ed fro	m 'Wa	aterbo	orne C	isease a	nd Outbre	-ak	s – General' to 'W	ater – G	enera	Lsectio	nn'					
											k boxes, based on					of th	e oris	ginal to	ext was i	not always
	clear.	1410 500111	naac te		,,,, c 0,55	Colar					K BONCS, Buscu ST	.ccaba	on cria		rearm,	5 01 11		5111611 6	one mas .	iot airrays
		sociated w	ith the	fourth	check	hox	has he	en revis	ed for clai	ritv	Further, while it	nitially (omhi	ned tw	n diffe	rent c	ateo	ories o	of inform	ation it
										-		-					-			· ·
	now only describes one category. A fifth check box option has been added to describe the final category. T fifth check box are based on feedback from public health professionals who report waterborne disease out										•		CAL	ana ti	ic additi	on or the				
Epidemiologic	Epidemiologic Data	DOX arc ba	oca on	CCuba	ick II o	iii pu	DIIC IIC	aitii pi o	1C33IOHal3	, vv.	Epidemiologic Data	THE GISC	asc o	иштса	K3 to C	DC.				
	Estimated total number of persons with primary exposure:									11	Estimated total number of	nersons with n	rimary wate	er exposure						
Data	2. Were data collected from com			□ Yas (sna	cify in table	a halaw)	□No		□ Unknown		Were data collected from					cify in tabl	a halaw)	□No		□ Unknown
	If No or Unknown , was was shared by persons who	rater the <mark>only</mark> commo	n source	□Yes	ony mrtaba	o Dolow)	□No		Unknown		If No or Unknown , was shared by persons	s water the co			□Yes	rony in tubi	o Dolow)	□No		□ Unknown
									p-Value											
(e.g.,pool—waterpark; Exposed Exposed Exposed Exposed Rate (%) Ratio Risk (provide exact Interval								Ш	(e.g., pool, waterpark, hot spring, well water)	Exposed		Exposed	# III Not Exposed	Rate (%)	Odds Ratio	Relative Risk	(provide exact	95% Confidence Interval		
		(B/A)			vaue)		Ш	not spring, well water)	(A)	(B)			(B/A)			vauey				
										11										
										11										
]										
										11										
	And the formal date of the			Au-d-				*		+1										
	Attack rate for residents of rep	orting state:	%	Απασκι	ate for noi	n-residen	ts of repor	ting state:	%	1	Attack rate for residents of	eporting stat	e:	%	Attack	rate for no	n-resider	its of repo	rting state:	%
	No additional quest	ions have b	een ad	ded																
	•				been	move	ed hig	ner up oi	n Page 3.	lt n	ow follows the Ty	e of W	ater E	xposur	e secti	on.				
	• The word '	•					_	•	•		,			•						
		•				•			-	nos	ure in epidemiolo	gic inve	stigati	on'						
Geographic	Geographic Loca							. 2.1.			Geographic Lo		7 1. 60. 11							
location,	9										3									
Symptoms	Percent of primary	y cases living	j in repo	rting sta	ate:_		%				Percent of ill pe	rsons (pr	imary	cases)	living in	report	ting st	ate:		%
Symptoms																				
	N. 1.1919 1 1																			
	No additional quest										•.•									
											s now positioned		-		_				, .	,
	• .		•		nas b	een r	eword	led from	Percent	ot	orimary cases livin	g in rep	orting	state'	to 'Pei	rcent (ot III	persor	ns (prima	iry cases)
	living in rep	porting stat	e' tor c	larity																

For each category, indicate # of persons with: Gastrointestinal symptoms/ conditions Respiratory symptoms/ conditions Skin symptoms/conditions Ear symptoms/conditions Eye symptoms/conditions Neurologic symptoms/ conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis): For each category, indicate the # of fill persons (primary cases) with: Gastrointestinal symptoms/ conditions Respiratory symptoms/ conditions Skin symptoms/ conditions Ear symptoms/conditions Eye symptoms/conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):	Symptoms	Symptoms/Conditions
Conditions Respiratory symptoms/ conditions Skin symptoms/conditions Ear symptoms/conditions Eye symptoms/conditions Neurologic symptoms/ conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):		# of ill persons (primary cases)
conditions Skin symptoms/conditions Ear symptoms/conditions Eye symptoms/conditions Neurologic symptoms/ conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):		7
Ear symptoms/conditions Eye symptoms/conditions Neurologic symptoms/ conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):		
Eye symptoms/conditions Neurologic symptoms/ conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):	Skin symptoms/conditions	Skin symptoms/conditions
Eye symptoms/conditions Neurologic symptoms/ conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):	Ear symptoms/conditions	
conditions Wound infections Other, specify (e.g., hepatitis A, leptospirosis):	Eye symptoms/conditions	
Wound infections Other, specify (e.g., hepatitis A, leptospirosis):		
Other, specify (e.g., heptospirosis):	Wound infections ———	

- Symptoms This section has been moved down on page 3 and is now positioned below the Epidemiologic Data section
- Symptoms The header has been changed from 'Symptoms' to 'Symptoms/Conditions'
- Symptoms The question has been revised for clarity. It was originally worded 'For each category, indicate # of persons with:' It now asks 'For each category, indicate the # of ill persons (primary cases) with:'

Page 4 Header		Water-General			Water-Etiology & La						
rage rriedaei		Water denotes			Water Ellology of Est						
	·										
	No additional questions ha										
	-		changed from 'Water-General' t								
	requested. The pa	ge has been reorganiz	ed to place high-priority questic	ns about the outb	reak etiology first, followed b	y questions about outbreak					
	isolates, clinical sp	ecimens, and a new se	ection call test type. The change	s are detailed belo	ow.						
Clinical	Clinical Specimens - Laboratory Result	(refer to the laboratory findings from the out	break investigati n)	Clinical Specimens							
Specimens -		· ·	~	1. Were clinical diagnostic specimens taken from persons? Yes No Unknown							
Laboratory				If Yes, from how many persons were specimens taken?							
Results	Were clinical diagnostic specimens taken fro	m persons? □ Yes □ No (go to next ta	b) □ Unknown (go to next tab)	Specimen Type†	Specimen Subtypes	Tested for¹ (list all that apply)					
	If Yes , from how many persons were spe	ecimens taken?	_								
	Specimen Type*	Specimen Subtype**	Tested for § (list all that apply)								
				<mark> </mark>							
	* Specimen Type: 1- Autopsy Specimen (specify subtype), 2-Biopsy 8-Endotracheal Aspirate, 9-Saliva, 10-Serum, 11-Skin Swab, 12-Sput	(specify), 3-Blood, 4-Bronchial Alveolar Lavage (BAL), 5- um, 13-Stool, 14-Urine, 15-Vomitus, 16-Wound Swab, <mark>17-Ur</mark>	Cerebrospinal Fluid (CSF), 6-Conjunctiva/Eye Swab, 7-Ear Swab, known	t pecimen Type: 1- Autopsy Specimen (s	specify subtype), 2-Biopsy (specify subtype), 3-Blood, 4-Bronchial Alveolar	Lavage (BAL					
	** Specimen Subtype: 1-Bladder, 2-Brain, 3-Dura, 4-Hair, 5-Intestine		2-Wound, 13-Other, 14-Unknown	7 ar Swab, 8-Endotracheal Aspirate, 9-Si	aliva, 10-Serum, 11-Skin Swab, 12-Sputum, 13-Stool, 14-Urine, 15-Vomitus, 16 3-Dura, 4-Hair, 5-Intestine, 6-Kidney, 7-Liver, 8-Lung, 9-Nails, 10-Skin, 11-Ston	-Wound Swa 17-Other (describe in the general remarks), 18-Unknown					
	Tested for: 1-Bacteria, 2-Chemicals/Toxins, 3-Fungi, 4-Parasites,	5-viruses		1	ins, 3-Fungi, 4-Parasites, 5-Virusee 6-Other (describe in general remarks), 7-						
	No additional questions ha	ve heen added									
	' '		tory Results' has been shortene	d as a reference t	o laboratory results is now na	art of the new tab name					
		•	-		o laboratory results is now pa	art of the new tab hame.					
	·		down and is now table three on								
			o the table to accommodate info	ormation and to πι	I out white space on the page	·.					
		bols have been update									
	• The footnote for the 'Specimen Type' field has been updated to add a new value for specimen types that might not match the provided list. '17- Other										
	(describe in the general remarks) has been added and '17-Unknown' has been changed to '18- Unknown'										
	The footnote for t	he 'Tested for' field ha	s been updated to add two add	itional values. '6- C	Other (describe in general rem	narks)' and '7- Unknown' have					
	been added.		-		-						

Etiology Clinical Specimen Genus/ Chemical/ Toxin Species Serotype/ Serogroup/ Serovar Genotype/ Subtype 2 3 4 Clinical Specimen Confirmed as Concentration Specimen Type ' Specimen Subtype ** Row Number Etiology ? 2 ☐ Yes 3 ☐ Yes 4 ☐ Yes Clinical Specimen Test Type § 2 3

Confirmed as Etiology?	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype		Total # Peo Positive
□ Yes						
□ Yes						
□ Yes						
□ Yes						
□ Yes						
□ Yes						
□ Yes						
□ Yes						

- The outbreak etiology table has been given its own header labeled as 'Outbreak Etiology,' which is followed by corresponding guidance
- The outbreak etiology table has been moved to the top of page 4.
- The 'Confirmed as Etiology?' column has been moved to the beginning of the table.
- The table has been simplified. Variables have been either removed or added from this table to make the table easier to use while still retaining fields for critical questions.
 - O Removed 'Clinical Specimen Row Number' This field is no longer needed. It was used to link rows when the table was divided into three sections.
 - 0 Removed 'Concentration' and 'Unit' columns, which were infrequently used and were not needed to answer the question asked by this section.
 - Removed 'Specimen Type' and 'Specimen Subtype' as well as corresponding footnotes as addressed in 'Clinical Specimens' section. This information can be sufficiently captured in the Clinical Specimens table (described previously).
 - O Removed the 'Test Type' column and corresponding footnote from this table. Created a new section in the reporting form (Test Type section, described below).
 - O Added a new question called 'Detected in*' with a corresponding footnote ('1-Clinical Specimens, 2-Water Samples, 3-Clinical Specimens & Water Samples, 4- Other (describe in general remarks), 5- Unknown, 6- None'). This new question is comparable to one that is asked on the CDC 52.13 form. It provides a quick way to report the evidence supporting each etiology that has been entered in this table.
 - O Reduced the overall size of the outbreak etiology table, which created space to add four rows to the table. Based on historical data, the four rows in the original form were sufficient for almost all outbreak reports, but some outbreaks require more than four entries.

solates	Isolates					Outbreak Isolates (Links da distinct molecular designation)	ta about molecular characteriza	ation across multiple systems	s. For eacl	h pathogen, provide a re	epresentative for each
	Which system contains this isolate profile? (e.g., PulseNet, State Lab)	Lab Isolate ID	Specimen Profile	Lab Method Used (e.g., PFGE, MLVA, GP60, PCR)		Which CDC system contains this isolate profile? (e.g., PulseNet, CaliciNet)	CDC Lab System Outbreak Number (e.g., PulseNet tracking number)	State Lab ID (i.e., Lab tracking number)	M	lolecular Designation 1	Molecular Designation 2
					41						
					41						
					╛╽						
	profession The Outbre The colum linking dat To support Outbreak N Specimen Lab Metho	als who use the feak Isolates table in, 'Which systen a in NORS with C Ilinking of labora Number' (a new f profile' has beer od Used' has bee	form. has been moved in contains this isoled in the contains this isoled in the contains this isoled in the contains at both field) and 'State Lan renamed 'Molecuen inconsistently file.	oth CDC and state levels,	but wo 'La arity ed b	remains directly a rded to 'Which CDo b Isolate ID' has be y. by some people as	ofter the Outbrea C system contain een replaced by a field to enter a	ak Etiology tablons this isolate p	e. rofile estio	e?' in order to	o focus on System
	 Two additi 	onal rows have b	peen added to this	table to provide more fi	elds	for reporting mol	ecular data.				
Test Types						Test Types (Select all test ty) □ Culture □ DNA or RNA Amplication/Di □ Microscopy (e.g., fluorescer □ Serological/Immunological T □ Other (describe in the general	etection (e.g., PCR, TR-PCR) nt, EM) Fest (e.g., EIA, ELISA)	☐ Phage Typing	/ Assay		
	A section called Tes	t Types has beer	n added to the bott	om of page 4.							
	This sectio	n has replaced a	column in the Out	break Etiology table. It s	imp	olifies how test type	e information is	reported. Previ	iously	, it was nece	essary to

- This section has replaced a column in the Outbreak Etiology table. It simplifies how test type information is reported. Previously, it was necessary to enter multiple rows of data in the etiology table and to select one test type for each row. Now multiple test types can be reported more easily by marking the appropriate checkboxes within this section.
- The Test Type options have not changed. The options were formerly listed in a footnote for the Outbreak Etiology table. The list has been used to create the new set of checkboxes.

Laboratory Section

Laboratory Section - Recrea	tional W	ater Samples fror	n Treated Venues	1					
Was water from treated recre	ational w	ater venues ested	ter venues ested? □ Yes (specify in table below) □ No □ Unknow						
Results									
Sample		1	2	3	4	5			
Source of Sample (e.g., swimming pool, hot tub)									
Additional Description (e.g., time of day, backwash sample, etc.)									
Date (mm/dd/yyyy)									
Volume Tested	Number								
	Unit								
Temperature	Number								
	Unit								
Residual/Free Disinfectant Level (if total and combined disinfectant	Number								
levels given, total - combined = free)	Unit								
Combined Disinfectant Level (if total and free disinfectant levels	Number								
given, total - free = combined)	Unit								
рН									

П							
١	Laboratory Section - Recrea	ational W	ater Samples fro	m Untreated Venu	les		
l	Was water from untreated red	creational	water venues test	ed? [Yes (specify in table	e below) □ No I	□ Unknown
١	Results						
١	Sample		1	2	3	4	5
l	Source of Sample (e.g., lake or stream)						
l	Additional Description (e.g., specific location, time of day, etc.	:)					
١	Date (mm/dd/yyyy)						
١	Volume Tested	Number					
١	Totalio Total	Unit					
١	Temperature Number						
١		Unit					

Laboratory Section - Drin	iking Wa	ater				
Was drinking water tested?						No Unknown
Results						
Sample		1	2	3	4	5
Source of Sample						
Additional Description (e.g., kitchen faucet, well, reservoir)					
Date (mm/dd/yyyy)						
Volume Tested	Number					
	Unit					
Temperature	Number					
	Unit					
Residual/Free Disinfectant Level (if total and combined	Number					
disinfectant levels given, total - combined = free) Unit						
pH						
Turbidity (NTU)						

Laboratory Section - Water	Not Int	ended for Drinkin	g of Water of Unk	nown Intent	•	
Was the implicated water test	ed?			☐ Yes (specify	in table below) □ N	lo 🗆 Unknown
Results						
Sample		1	2	3	4	5
Source of Sample						
Additional Description (e.g., time of day, specific location, et	c.)					
Date (mm/dd/yyyy)						
Volume Tested	Number					
Volume rested	Unit					
Temperature	Number					
Tomporaturo	Unit					
Residual/Free Disinfectant Level (if total and combined disinfectant	Number					
levels given, total - combined = free)	Unit					
Turbidity (NTU)						
рН						

Water Samples Water Samples (Provide representative data about water quality testing, chemical or pathogen testing. Additional sample data can be described in the remarks or attached) Was water tested? ☐ Yes (specify in table below) ☐ No ☐ Unknown Hesults Sample Number Source of Sample (e.g., swimming pool, lake) Additional Description (e.g., time of day, location of sample collection) Date (mm/dd/yyyy) Number Volume Tested Unit Number Temperature Unit Residual/Free Disinfectant Level (if total and combined disinfectant levels given, total - combined = free) Number Number Combined Disinfectant Level (if total and free disinfectant levels given, total - free = combined) Number Unit Turbidity (NTU)

No additional questions have been added

• Previously, there were four different sections about water sampling in the form. One section would be filled in per report, depending on the type of water exposure selected at the top of page 3 (i.e., Recreational water – treated, Recreational water – untreated, Drinking Water, and Water Not Intended for Drinking or Unknown). Each water sample section collected the same type of information. As a result, the sections were very similar. The four sections have been removed and consolidated into one section and page. The consolidated section and page have been labeled as a new tab called Water Samples. The Water Samples page, which can be used for any outbreak report, has been placed on page 5 so that it precedes sections of the form that are specific to the type of water exposure categories.

The four water sample tables (below, at left) have been combined into one (below, at right):

- The multiple choice question that preceded every water sample table has been reworded to be more general, so that it asks about any water testing, rather than water testing for specific types of water exposures. This better reflects the original intent of the question and makes the question generalizable across all types of waterborne disease outbreaks.
- The header has been changed from 'Laboratory Section' to 'Water Samples.' Additional guidance has been provided after the header.
- The consolidated water sample table has been placed at the top of page 5.
- All of the fields from the original tables on pages 5, 7, 9, and 13 have been consolidated into one table. The final table contains some fields that may not apply to all reports but provides more flexibility for reporting water samples if multiple types of water samples are collected during an outbreak investigation.
- The final table contains all variables listed in the four source tables: 'Sample (number)', 'Source of Sample', 'Additional Description', 'Date', 'Volume Tested w/Number and Unit', 'Temperature w/Number and Unit', 'Residual/Free Disinfectant level w/Number and Unit', 'pH', and 'Turbidity'.

Water Quality Indicator

	Quality Indicator			
Sample	Type (e.g., fecal coliforms)	Concentration (numerical value)	Unit	
Number				

Water Samples - Water Quality Indicators (Might not be applicable for treated recreational water samples)										
Type (e.g., fecal coliforms)	Concentration (numerical value)	Unit								

The three water quality indicator tables have been combined into one (below, at right). The left side of table shows an example of the original tables, because all three tables are the same:

- The header has been changed from 'Water Quality Indicator' to 'Water Samples Water Quality Indicator' with corresponding guidance. This table was previously not available for treated recreational water outbreaks. The guidance explains that these questions may not apply for those outbreaks but does not prevent the use of this table.
- All of the fields from the original tables on pages 7, 10, and 13 have been consolidated into one table.
- Two additional rows have been added to allow for the submission of more water quality data.

Microbiology
or Chemical/
Toxin Analysis

Sample Number	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype	PFGE Pattern
Sample Number	Test Results Positive?	Concentration (numerical value)	Unit	Test Type⁺	Test Method (reference: National Environmental Methods Index: http://www.nemi.gov)
	☐ Yes				
	☐ Yes				
	☐ Yes				
	☐ Yes				

ample umber	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype	PFGE Pattern
ample umber	Test Results Positive?	Concentration (numerical value)	Unit	Test Type*	Test Method (reference: Nation Environmental Methods Index: http://www.nemi.gov)
	☐ Yes				
	☐ Yes				
	☐ Yes				
	☐ Yes				
	□ 162				
	☐ Yes				
	☐ Yes				
	☐ Yes				

The four microbiology or chemical/toxin analysis tables have been combined into one (below, at right). The left side of table shows an example of the original tables, because all four tables are the same:

- The header has been changed from 'Microbiology or Chemical/Toxin Analysis' to 'Water Samples Microbiology or Chemical/Toxin Analysis' with corresponding guidance.
- The guidance following the header has been revised in response to questions and data received from form users.
- All of the fields from the original tables on pages 7, 10, and 14 have been consolidated into one table.
- Four additional rows have been added to allow for the submission of additional water testing results.

nal nicle n	Mater Vehicle Number 1 2 3 3 Water Vehicle Number reference the appropriate Water Vehicle Number) Water Vehicle Number (reference the appropriate Water Vehicle Number)	Water Type (e.g., spalwhirlpoolihot tub; pool- swimming pool; pool- waterpark) USUAL Water Treatment Provided at Venue (e.g., no treatment; coagulation; dishinaction; fibroculation; fibration (pool); unknown) Fill Water Type (e.g., public water supply; see water;	Water Subtype (salect indoor, outdoor, or unknown) Venue Treatment Subtype (disinfaction or pool fitration: e.g., UV; chlorina dioxide; bag filter; carridge filter; unknown)	Setting of Exposure (e.g., club, requiring membership; hosellmotellhodge/inn; waserpark) Chlorination Subtype (chlorine disinfection only-e.g., gaseous; sodium hypochloriis; cyanurates /stabilized chlorine)		Venue Number (use this number of use this number of use this number of init the venue with water treatment or fill water data below) 1 2 3 4	r- Recreational Water Venue Desci Water Venue (e.g., spalwhirlpoolihot tub; pool- swimming pool; pool- waterpark)	Water Venue Subtype (select indoor, outdoor, or unknown)	Setting of Exposure (e.g., club, requiring membe hosel/moselflodge/inn; water
n icle	2 3 Water Vehicle Number relevence happropriate Water Vehicle Number) Water Vehicle Number relevence the appropriate Water suppropriate Water Water Water Suppropriate Suppropriate Water Suppropriate Suppr	Provided at Venue (e.g., no reatment; coagulation; dishinaction; flicoulation; filtration (pool); unknown) Fill Water Type	(disinfection or pool filtration: e.g., UV; chlorine dioxide; bag filter; cartridge filter;	(chlorine disinfection only- e.g., gaseous; sodium hypochlorite; cyanurates /stabilized		1 2 3 4			
cle	3 Water Vehicle Number relevance the appropriate Vehicle Number) Water Vehicle Number relevance the appropriate Number relevance the appropriate Water	Provided at Venue (e.g., no reatment; coagulation; dishinaction; flicoulation; filtration (pool); unknown) Fill Water Type	(disinfection or pool filtration: e.g., UV; chlorine dioxide; bag filter; cartridge filter;	(chlorine disinfection only- e.g., gaseous; sodium hypochlorite; cyanurates /stabilized		3 4			
(ir a a v	Water Vehicle Number (reference the appropriate Water Vehicle Number) Water Vehicle Number (reference Number reference Appropriate Water	Provided at Venue (e.g., no reatment; coagulation; dishinaction; flicoulation; filtration (pool); unknown) Fill Water Type	(disinfection or pool filtration: e.g., UV; chlorine dioxide; bag filter; cartridge filter;	(chlorine disinfection only- e.g., gaseous; sodium hypochlorite; cyanurates /stabilized		4			
a, v.	appropriato Water Vehicle Number) Water Vehicle Number reference the appropriato Water	(e.g., no treatment; coagulation; disinfaction; fibroculation, filtration (pool); unknown) Fill Water Type	(disinfection or pool filtration: e.g., UV; chlorine dioxide; bag filter; cartridge filter;	(chlorine disinfection only- e.g., gaseous; sodium hypochlorite; cyanurates /stabilized		5			
(/ (/ a	Water Vehicle Number (reference the appropriate Water	(pool); unknown) Fill Water Type	инкломп)	chiorine)					
(I	reference the appropriate Water					Venue Number			
(r a	reference the appropriate Water					(Reference the appropriate Venue Number from above)	USUAL Water Treatment Provided at Venue (e.g., no treatment; coagulation; disinfection; floculation; fitration (pool); unknown)	Venue Treatment Subtype (disinfection or pool filtration: e.g., UV; chlorine dioxide; bag filter; cartridge filter; unknown)	Chlorination Subtype (chlorine disinfection only sodium hypochlorite; cyal chlorine)
a	appropriate Water	(a.a. nublic water cupply con water	IF PUBLIC WATER WAS USED	IF PUBLIC WATER WAS USED TO FILL.	+1		(pool); anknown)		
		(e.g., public water supply; sea water; untreated ground or surface water; unknown)	TO FILL, USUAL Water Treatment Provided for Fill Water Before Coming to the Venue (e.g., no treatment; disinfection;	Fill Water Treatment Subtype (disinfection or fitration: e.g., UV; chlorine dioxide; bag fiter; cartridge fiter; unknown)					
			filtration (treatment plant); unknown)						
					41	<u>-</u>			
					+1				
						Venue Number (Reference the appropriate Venue Number from above)	Fill Water Type (e.g., public water supply; sea water; untreased ground or surface water; unknown)	IF PUBLIC WATER WAS USED TO FILL, USUAL Water Treatment Provided for Fill Water Before Coming to the Venue (e.g., no treatment; disinfaction; Iflication (treatment plant); unknown)	IF PUBLIC WATER WAS Fill Water Treatment Sul (disinfection or filtration: dioxide; bag filter; carrid
						_ <mark>_</mark>			
L									
N	The s DescAll 'VRefeThree Five s	ription' Vater Vehicle Numb rences to 'Water Ty e additional rows ha additional rows hav	ion has been changed per' column names hav pe' and 'Water Subtyp ave been added to the e been added to both	from 'Recreational Wat we been changed to 'Ve be' in the first table have first table to allow for t the second and third ta	nue e be the : bles	Number' en changed submission o s to allow fo	to 'Water Venue' and of more data. r the submission of mo	'Water Venue Subtyp ore data. More rows w	e', respective
F	table	es because for a sing	le row in the first tabl	e, multiple rows of data		y be filled o		tables.	
y	Did the venue meet	state or local recreational water of	quality regulations? □ Yes □ N	o □Unknown □Not applicable		Tiooroanomai ma	ter Quality neet state or local recreational water q	uality regulations?	o □Unknown □Not
	If No, explain:					If No, explain:			
	Was there a pool of training or certifica	operator on the payroll with state- tion?	approved □Yes □N	o □Unknown					
						Was there a poot	ol operator on the payroll with state-ap cation?	proved □ Yes □ No	□Unknown

	ŗ	orevious quest	ion has	been ar	nswered 'No'			
	•	Additional	lines ha	ave bee	n added after	this quest	ion to pr	ovide more s
Laboratory	Labora	tory Section - Recrea	tional Water	r Samples fr	rom Treated Venues			
Section -		water from treated recre	ational water	r venues teste	ed?	Yes (specify in tal	ble below) 🗆 No	∪nknown
Recreational	Results Sample			1	2	3	4	5
	Source of			•	-	· ·	-	
Water Samples		mming pool, hot tub)						
from Treated	(e.g., time	of day, backwash sample, et	rc.)					
Venues	Volume 1	m/dd/yyyy) [ested	Number					
			Unit					
	Temperat	ture	Number Unit					
		/Free Disinfectant Level	Number					
		en, total - combined = free)	Unit					
		d Disinfectant Level	Number					
		nd free disinfectant levels al - free = combined)	Unit					
	рН							
	•				eted from pa			ed into a sec
Microbiology		biology or Chemical/T Genus/ Chemical/ Toxin	Oxin Analys Species					Pattern
or Chemical/	Number	Genus/ Chemical/ Toxin	Species	26	erotype/ Serogroup/ Serov	er Genotype/ Subtyp	e Prut	Pattern
Toxin Analysis	-							
1 5/111 / 11/11/515								
	Sample	Test Results Positive?	Concentra		nit	Test Type*		lethod (reference: Nationa
	Number		(numerica	al value)				nmental Methods Index: www.nemi.gov)
		☐ Yes						
	-	☐ Yes				+		
		□ Yes						
	* Test Type 6-Chemica	: 1-Culture, 2-DNA or RNA Amplificat I Testing, 7-Tissue Culture Infectivity	ion/Detection (e.g., Assay	, PCR, RT-PCR), 3-Mi	licroscopy (e.g., fluorescent, EM),	1-Serological/Immunologic	al Test (e.g., EIA, ELIS	A), 5-Phage Typing,
ł								
	•	inis sectio	iii iias D	een del	eted from pa	ge o and co	ภารบแนลเ	eu iiito a sec

		Documented/ Suspec	Factors Contributing to Recreational Water Contamination and/or Increased Exposu	re in Treated Venues	Suspected
ontributing to	Factors (check all that apply)**	Observed***	Continuing ratios (Cricon an ana apply)	Observed†	
ecreational	Exceeded maximum bather load Primary intended use of water is by diaper/toddler-aged children (e.g., kiddle pool)		Primary intended use of water is by diaper/toddler-aged children (e.g., kiddie pool)		
	Heavy use by child care center groups Fecal/vomitus accident		Heavy use by child care center groups Fecal/vomitus accident		
/ater	Patrons continued to swim when ill with diarrhea Operator error		Patrons continued to swim when ill with diarrhea Operator error		
ontamination	Intentional contamination (explain in remarks) Combined pool filtration/recirculation systems led to cross-contamination		Intentional contamination (explain in remarks) Combined pool filtration/recirculation systems led to cross-contamination		
nd/or	Hygiene facilities (e.g., toilets, diaper changing facilities) inadequate or distant Some spray feature water bypasses filtration/freatment system and returns to feature unfiltered/untreated				
creased	Son supplemental disinfection installed that would have inactivated pathogen (e.g., Crypospordium) Water temperature >30°C (>86°+)			į	
	Cross-connection with wastewater or non-potable water				H
posure in	Disinfectant control system malfunctioning, inadequate, or lacking (e.g., hand feed chemicals) Incorrect settings on disinfectant control system		Incorrect settings on disinfectant control system		ä
eated	pH control system malfunctioning, inadequate, or lacking (e.g., hand feed chemicals) Incorrect settings on pH control system		pH control system malfunctioning, inadequate, or lacking (e.g., hand feed chemicals) Incorrect settings on pH control system Filtration system malfunctioning or inadequate (e.g., low flow rate)		
nues	Filtration system malfunctioning or inadequate (e.g., low flow rate) Supplemental disinfection system malfunctioning or inadequate (e.g., ultraviolet light, ozone)		Supplemental disinfection system malfunctioning or inadequate (e.g., ultraviolet light, ozone)		
ilacs	Insufficient system checks so breakdown detection delayed No preventive equipment maintenance programs to reduce breakdowns		Insufficient system checks so breakdown detection delayed No preventive equipment maintenance programs to reduce breakdowns		
	No preventive equipment maintenance programs to reduce breakdowns Ventilation insufficient for indoor aquatic facilities Chemical handling error (e.g., chemical hookup, improper mixing or application)		Ventilation insufficient for indoor aquatic facilities Chemical handling error (e.g., chemical hookup, improper mixing or application)		
	Maintenance chemicals not flushed from system before opening to swimmers Recirculation pump off or restarted with swimmers in water		Maintenance chemicals not flushed from system before opening to swimmers Recirculation pump off or restarted with swimmers in water		
	Low or zero water flow combined with continuous feed of chemicals resulted in excess chemicals in water		Low or zero water flow combined with continuous feed of chemicals resulted in excess chemicals in water Extensive slime/biofilm formation		
	Extensive slime/biofilm formation Recent construction		Recent construction		H
	Cyanurate level excessive Lack of draining/cleaning		Cyanurate level excessive Lack of draining/cleaning		ä
	Stagnant water in spa piping was aerosolized No aquatics operators on payroll who have completed state/local training		Stagnant water in spa piping was aerosolized No aquatics operators on payroll who have completed state/local training		
	Untrained/inadequately trained staff on duty Remote monitoring system replaces on-site water quality testing		Untrained/inadequately trained staff on duty Hemote monitoring system replaces on-site water quality testing		믐
	Unclear communication chain for reporting problems Inadequate water quality monitoring (e.g., inadequate test kit, inadequate testing frequency)		Unclear communication chain for reporting problems		
	Employee illness policies absent or not enforced No or inadequate policies on good chemical handling and storage practices		Employee illness policies absent or not enforced		
	No operator on duty at the time of incident Facility falls outside aquatic health code				
	No shock/hyperchlorination policy				
	Other, specify: Unknown		Unknown		H
	"Only check off what was found during investigation. "The release of swange does not have to occur at the property/venue/setting where the people were exposed. The sewage may have occurred at a dist property/venue/setting in question. No additional questions have been added The sub-header text has been changed 'Factors' to	'Contributing F		re to factors that probably occurred bu	t for which no
	No additional questions have been added the sub-header text has been changed 'Factors' to The footnote symbols have been updated as part of A correction has been made to the second footnote.	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for		
emarks	The relaxe of sequegades not have to occur at the propertylvenuclecting where the people were exposed. The sewage may have occurred at a data propertylvenuclecting in questions. No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part of	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for		
marks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
marks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
marks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
marks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
marks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
emarks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
emarks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		
emarks	No additional questions have been added The sub-header text has been changed 'Factors' to The footnote symbols have been updated as part o A correction has been made to the second footnot provided guidance from another section about con	Gontributing F f an effort to ma e, which should	actors' ake them more consistent throughout the form. have provided guidance on reporting suspected contributing for related to sewage releases.		

Recreational	Recreational Water - Untreat			П	Recreational Water - Untreat Implicated Water - Recreational Water			
Water – Untreated	Water Type (e.g., canal; lake; river/stream; ocean)	IF SPRING OR HOT SPRING, Water Subtype (select indoor, outdoor or unknown)	Setting of Exposure (e.g., beach-public; camp/cabin/recreational area)		Water Venue (e.g., canal; lake; river/stream; ocean)	IF SPRING OR HOT SPRING, type (select indoor, outdoor		Setting of Exposure (e.g., beach-public; camp/cabin/recreational area)
Venue. Recreational								
Water Vehicle Description	Description'	description has been cha	nged from 'Recreational Wate ubtype' have been changed to		·			
Recreational	Recreational Water Quality				Recreational Water Quality			
Water Quality	Did the venue meet state or local recre If No, explain:	ational water quality regulations? Yes	□ No □ Unknown □ Not applicable		Did the venue meet state or local recreat quality regulations?		recreational v	e meet Environmental Protection Agency (EPA) water quality standards?
	Did the venue meet Environmental Pro	tection Agency (EPA) recreational water qu	uality standards?		□Yes □No □Unknown □Notap	plicable	Yes [No Unknown Not applicable
	If No, explain:	□Yes	□ No □ Unknown □ Not applicable		If No , explain:		If No , explain	11:
	No additional questions h	nave been added ave been reformatted to	appear side by side.					
Laboratory Section - Recreational Water Samples from Untreated Venues Water Quality Indicator	Laboratory Section - Recreational Was water from untreated recreational Results Sample Source of Sample (e.g., lake or stream) Additional Description (e.g., specific location, time of day, etc) Date (mm/dd/yyyy) Volume Tested Number Unit Temperature This section has Water Quality Indicator Sample Number Vipe (e.g., fecal coliforms)	ater Samples from Untreated Venues water venues tested?	7 and consolidated into a sect					
	This section has	been deleted from page	7 and consolidated into a sect	tior	n called Water Samples (d	escribed previo	usly).	
Microbiology or Chemical/ Toxin Analysis								

Microb	olology or Chemical/Toxir	n Analysis (refer to	the laboratory findings from th	e outbreak investigation)	
Sample Number	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype	PFGE Pattern
Sample Number	Test Results Positive?	Concentration (numerical value)	Unit	Test Type*	Test Method (reference: National Environmental Methods Index: http://www.nemi.gov)
	☐ Yes				
	☐ Yes				
	□ Yes				
	☐ Yes				
*Test Type: 6-Chemical	1-Culture, 2-DNA or RNA Amplification/De Testing, 7-Tissue Culture Infectivity Assay	etection (e.g., PCR, RT-PCR),: /	3-Microscopy (e.g., fluorescent, EM), 4-Se	erological/Immunological Test (e.g.,	EIA, ELISA), 5-Phage Typing,

• This section has been deleted from page 7 and consolidated into a section called Water Samples (described previously).

Factors
Contributing to
Recreational
Water
Contamination
and/or
Increased
Exposure in
Untreated
Venues

_	(check all that apply)*	Documented/ Observed**	Suspected**
	Exceeded maximum bather load		
	Primary intended use of water is by diaper/toddler aged children (e.g., kiddle pool)		
	Heavy use by child care center groups		
5	-ecal/vomitus accident		
E - F	Patrons continued to swim when ill with diarrhea		
5	Staff error		
	ntentional contamination (explain in remarks)		
5	Hygiene facilities (e.g., toilets, diaper changing facilities) inadequate or distant		
DESIGN	Malfunctioning or inadequate on-site wastewater treatment system *** ≠		
	Poor siting/design of on-site wastewater treatment system *** ≠		
	Stagnant or poorly circulating water in swim area		
· — F	Heavy rainfall and runoff		
5	Sanitary sewer overflow (SSO) impact ***		
	Combined sewer overflow (CSO) impact ***		
	Domestic animal contamination (e.g., livestock, pets)		- i
	Wildlife contamination - Birds		
V	Wildlife contamination - Mammals		
	Wildlife contamination - Fish kill	Ī	i i
₹ - 1	Wastewater treatment plant effluent flows past swim area		
	Wastewater treatment plant malfunction ***		П
	Sewer line break ***		
<u> </u>	Nearby biosolid/land application site (e.g., human or animal waste application)		
	Contamination from agricultural chemical application (e.g., fertilizer, pesticides)		n
(Contamination from chemical pollution not related to agricultural application	T T	
V	Water temperature ≥30°C (≥86°F)		
	Seasonal variation in water quality (e.g., lake/reservoir turnover events)		
	nappropriate dumping of sewage into water body (e.g., from boat, RV)		
- 4	Algal bloom		
	Dumping of ballast water		П
	Tidal wash (i.e., tide exchange or influence by inland water)		
5 T	No or inadequate monitoring of water quality		- i
	No managers have completed state/local required training		
MANAGEMENT	Untrained/inadequately trained staff on duty		
1≦ ⊤	Unclear communication chain for reporting problems		П
' ≨ ⊤	Employee illness policies absent or not enforced		
-	Other, specify:		
	Unknown		

Cont	ributing,Factors (Check all that apply)*	Documented/ Observed+	Suspecter
	Exceeded maximum bather load		
	Primary intended use of water is by diaper/toddler aged children (e.g., kiddle pool)		
	Heavy use by child care center groups		
₽_	Fecal/vomitus accident		
•	Patrons continued to swim when ill with diarrhea		
	Staff error		
	Intentional contamination (explain in remarks)		
GN	Hygiene facilities (e.g., toilets, diaper changing facilities) inadequate or distant		
돌호	Malfunctioning or inadequate on-site wastewater treatment system § 1		
	Poor siting/design of on-site wastewater treatment system ^{5 1}		
<u> </u>	Stagnant or poorly circulating water in swim area		
	Heavy rainfall and runoff		
	Sanitary sewer overflow (SSO) impact ⁵		
	Combined sewer overflow (CSO) impact ⁵		
	Domestic animal contamination (e.g., livestock, pets)		
_	Wildlife contamination - Birds		
	Wildlife contamination - Mammals		
₹ _	Wildlife contamination - Fish kill		
5 -	Wastewater treatment plant effluent flows past swim area		
_ H	Wastewater treatment plant malfunction ⁶		
₹ -	Sewer line break ⁶		-
	Nearby biosolid/land application site (e.g., human or animal waste application)		
	Contamination from agricultural chemical application (e.g., fertilizer, pesticides)	T T	i i
	Contamination from chemical pollution not related to agricultural application		
	Water temperature >30°C (>86°F)		
	Seasonal variation in water quality (e.g., lake/reservoir turnover events)		
	Inappropriate dumping of sewage into water body (e.g., from boat, RV)		
	Algal bloom		
	Dumping of ballast water		
	lidal wash (i.e., tide exchange or influence by inland water)		
οŻ.	No or inadequate monitoring of water quality		
MANA GEMENT	No managers have completed state/local required training		
58.	Untrained/inadequately trained staff on duty		
MANA	Unclear communication chain for reporting problems		
Σ₹.	Employee illness policies absent or not enforced		
	Other, specify:		
	Unknown		
ti Doc	check off what was found during investigation. umented*Observed* refers to information gathered through document reviews, direct observations, and/or interviews. "Suspecte entation (as defined previously) is available.	d" refers to factors that probably occurred b	out for which no
p per	elease of sewage does not have to occur at the property/venue/setting where the people were exposed. The sewage may have or ty/venue/setting in question.	curred at a distant site but still affected the	

- The sub-header text has been changed 'Factors' to 'Contributing Factors'
- The footnote symbols have been updated as part of an effort to make them more consistent throughout the form.

Remarks	Remarks	Remarks
Kemana		
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	No additional questions have been added	
	 The space for the remarks section has been reduced to fit within the rem 	aining space on the page.

Drinking	Drinking Wate	er Vehicle	Description	on					Drinking Wate) P								
Water Vehicle	Drinking Water Ve		•						Implicated Water	- Drinking W	ater System I	Description						
Description	Water Type* (e.g., commercially-bot- tled water, community water system, individual water system)	ID Number**	Water Source (select ground water, surface water or unknown)	Water Source Description (e.g., spring; well; lake)	Setting of Exposure (e.g., airport, mobile home park)	USUAL Water Treatment Provided (e.g., no treatment, disinfection, home fitration)	Water Treatment Subtype (disinfection or fitration: e.g., boiling; chlorine; rapid sand fiter; reverse osmosis)		Water System* (e.g., commercially- bouled water, community water system, individual water system)	Public Water System EPA ID Number [†]	Water Source (select ground water, surface water or unknown)	Water Source Description (e.g., spring; well; lake)	Setting of Exposure (e.g., airport, mobile home park)	USUAL Water Treatment Provided (e.g., no treatment, disinfection, home fitration)	Water Treatment Subtype (disinfection of filtration: e.g., boiling; chlorine; rapid sand filter; reverse osmosis)			
	*Water system definitions: Co munity water system serves	ommunity and nonce year-round residents	ommunity water system of a community, subd	ms are public water systems that h division, or mobile home park. A no- ne same persons for > 6 months of estaurants, highway rest stations,	ave ≥ 15 service connections or oncommunity water system serv	serve an average of ≥ 25 resider es an institution, industry, camp	nts for ≥ 60 days/year. A com- park, hotel, or business and											
	water to places in which pers that have < 15 connections o	sons do not remain for or serve < 25 persons	or long periods (e.g., r	estaurants, highway rest stations,	and parks). Individual water syst	tems are small systems not own	ed or operated by a water utility											
	" Number used for EPA repo selecting a state and then se	orting that uniquely id electing a county.	dentifies the water sys	stem within a specific state. The wa	ter system ID number can be foo	und at http://www.epa.gov/safewi	ater/dwinfo/index.html by first	*Water system definitions: Community and noncommunity water systems are public water systems that have \$\(\frac{1}{2}\) Service connections or serve an average of \$\(\frac{1}{2}\) 5 residents for \$\(\frac{1}{2}\) 6 days/year. A community water system serves year-round residents of a community, subdivision, or mobile home park. A noncommunity water system serves as institution, industry, camp, park, hotel, or business and can be nontensined retrainself. Motensiented systems serve; 25 of the same persons of the same person										
	No additiona	al questi	ions have	e been added														
		-			om Drinking V	Water Vehicl	e Description	to	Drinking Wa	ater.								
				-	_		king Water Ve		_		mnlicate	d Water – Dri	nking Water	System Desc	rintion'			
				•	_		n changed to 'V		-		прпсасс	a vvater Bri	mang water	System Desi	cription			
				, ,			mission of mo		•									
									•									
	A for Drinking Water Quantum Control of the Co		symbol i	nas been upa	ated as part	or an eπort t	o make the fo	TO			consiste	ent throughou	it the form.					
Drinking Water		•							Drinking Water Q		ve any monito	ring violations in the 1	month prior to the or	rthreak?				
Quality	Did the drinking wa	ater system ha	ave any monito	oring violations in the 1		utbreak?	- Net englischie		Did the drinking water system have any monitoring violations in the 1 month prior to the outbreak?									
	If Yes , explain:				Lites	_ NO _ ORKIOWI	If Yes, explain:											
	' '		wo any mayim	num contaminant level	(MCL) violations in th	oo 1 month prior to th	o outbrook?											
	Did tile dillikilig wa	ater system ne	ave any maxim	idili contaminant lever		□ No □ Unknown									<u> </u>			
					Lifes	LINO LI OTIKTOWI	I I Not applicable											
	If Yes, explain:																	
	Did the drinking wa	ater system ha	ave any violatio	ons in the 12 months p			- Not confinite		Did the drinking wa	ter system ha	ve any maxim	um contaminant level						
					□ Yes	□ No □ Unknown	□ Not applicable						□ Yes	□ No □ Unknown	□ Not applicable			
	If Yes, explain:		violations can b	e obtained from utility red	cords, consumer confide	ence reports (water quali	ty reports), or violation		If Yes, explain:									
	records from state or			o o o o o o o o o o o o o o o o o o o	oras, consumer connuc	moo reports (mater quan	i, reperies, er menanen											
									<u> </u>									
									Did the drinking wa	ter system ha	ve any violatio	ns in the 12 months p	rior to the outbreak?⁵ □ Yes	□ No □ Unknown	☐ Not applicable			
									If Yes , explain:									
															<u> </u>			
									ources of information records from state or l	on about past vi ocal health dep	olations can be artments	obtained from utility recor	rds, consumer confiden	ce reports (water quality	reports), or violation			
	No addition	al questi	ions have	e been added														

Additional lines have been added following all three questions that begin with 'If Yes, explain' in order to provide more space for the explanations.

A footnote symbol has been updated as part of an effort to make the footnote symbols more consistent throughout the form.

Laboratory	Labora	tory Section - Drinking W	/ater					
Section -	Was dri	inking water tested?			☐ Yes (specify in table	e below) 🗆 l	No □Unknown	
Drinking Water	Results							
Drinking Water	Results Sample		1	2	3	4	5	
	Source of	f Sample						
	Additiona	al Description hen faucet, well, reservoir)						
		nen raucet, well, reservoir) nm/dd/yyyy)						
	Volume T	Tested Number Unit	r					
	Temperat	Number	r					
	-	/C Disinfortent I Unit						
	(if total an	nd combined Number	r					
	total - con	ant levels given, mbined = free) Unit						
	рН							
	Turbidity	(MTII)						
	Turbialty	(NIU)						
	•	This section	has been d	eleted from pag	e 9 and cons	olidate	d into a sect	on called Water Samples (described previously).
Water Quality	Water	Quality Indicator						
	Sample Number	Type (e.g., fecal coliforms))	Concentration (numerical value	9)	Unit		
Indicator	Number							
	•	This section	has been d	eleted from nag	e 10 and cor	solidat	ed into a sec	ition called Water Samples (described previously).
		THIS SCCTION	nas been d	cicted from pag	c 10 and cor	isonuat	cu into a sco	tion called water samples (described previously).
Microbiology		biology or Chemical/Toxir						
or or	Sample Number	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup/ Serovar	Genotype/ Subtype	PFGE Patt	tern	
Chemical/Toxi								
· ·								
n Analysis	Samule	Test Results Positive?	Concentration	Unit	Test Type*	Test Meth	od (reference: National	
	Sample Number		(numerical value)		Took Typo	Environme	ental Methods Index: v.nemi.gov)	
		☐ Yes						
	l	☐ Yes						
	*TestType	:: 1-Culture, 2-DNA or RNA Amplification/D al Testing, 7-Tissue Culture Infectivity Assa	Detection (e.g., PCR, RT-PCR)	, 3-Microscopy (e.g., fluorescent. EM). 4-5	 	e.g., EIA, ELISA). 5-	-Phage Typing,	
	6-Chemica	al Testing, 7-Tissue Culture Infectivity Assa	ny ,				- " "	
	•	This section	has been d	eleted from pag	e 10 and cor	solidat	ed into a sec	tion called Water Samples (described previously).

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

Source Water Factors

id a problem with the source water (i.e., ground water or surface water) contribute to the dis ☐Yes (specify in table l	sease or outbreak? below) □No □Unkn	own
ource Water Factors (check all that apply)**	Documented/ Observed***	Suspected***
anitary sewer overflow (SSO) ****		
ombined sewer overflow (CSO) ****		П
alfunctioning on-site wastewater treatment system **** ≠		
ewage treatment plant malfunction ***		
ewer line break ***		
oor siting/design of on-site wastewater treatment system **** ≠		
earby biosolid/land application site (e.g., human or animal waste application)		
ontamination from agricultural chemical application (e.g., fertilizer, pesticides)		
ontamination from chemical pollution not related to agricultural application		
ontamination by a chemical that the current treatment methods were not designed to remove	T T	i i
omestic animal contamination (e.g., livestock, concentrated feeding operations, pets)	- H	
Midlite contamination - Birds		<u> </u>
fidife contamination - Mammals	T i	H
Midlife contamination - Fish kill	- i	H
ooding/heavy rains		H
gal bloom		<u> </u>
easonal variation in water quality (e.g., lake/reservoir turnover events, resort community with seasonal loading)	- i	i i
ow water table (e.g., drought, over-pumping)		
round water under direct influence of surface water (e.g., shallow well)≠≠		<u> </u>
ontamination through limestone or fissured rock (e.g., karst)	H	H
ontaminated recharge water	— H	
se of an alternate source of water by a water utility		
ixing of raw water from different sources	<u> </u>	<u> </u>
nproper construction or location of a well or spring		
later system intake failure (e.g., cracked well casing, cracked intake pipe)		H
tentional contamination (e.g., ordaned with eating, ordaned mane pipe)	- 	
ther, specify:		H
nknown	— H	H
Only check off what was found during investigation. "Documented/Observed" refers to information gathered through document reviews, direct observations, and/or interviews. "Suspected" recumentation (as defined previously) is available. "The release of sewage does not have to occur on the property in which persons have become iil. The sewage release may have occurred a conclusion of the property of containing and design. Any waster beneath the surface of the ground with substantial occurrence of insects or other macroorganisms, algae, or large-diameter pay prosposorition, no published in such substantial and elastively repid shifts in sweet characteristics (e.g., surfacility, respensary, or pH) that closely, or pH) that closely one property or published in sweet characteristics (e.g., surfacility, respensary, or pH) that closely.	at a distant site but still affected the on the property where the wastewate y where treatment and disposal take thogens (e.g., Giardia intestinalis or	property in question or is generated (e.g., es place due to migr

 Did a problem with the source water (i.e., ground water or surface water) contribute to the disease Yes (specify in table below) 		own
Source Water Contributing Factors (Check all that apply)*	Documented/ Observed†	Suspected ¹
Sanitary sewer overflow (SSO) ⁶		
Combined sewer overflow (CSO) ⁶		
Malfunctioning on-site wastewater treatment system 9 1		
Sewage treatment plant malfunction 9		
Sewer line break ^s		
Poor siting/design of on-site wastewater treatment system § 1		
Nearby biosolid/land application site (e.g., human or animal waste application)		
Contamination from agricultural chemical application (e.g., fertilizer, pesticides)	П	П
Contamination from chemical pollution not related to agricultural application		
Contamination by a chemical that the current treatment methods were not designed to remove		
Domestic animal contamination (e.g., livestock, concentrated feeding operations, pets)		П
Wildlife contamination - Birds		
Wildlife contamination - Mammals		
Wildlife contamination - Fish kill		
Flooding/heavy rains		
Algal bloom		
Seasonal variation in water quality (e.g., lake/reservoir turnover events, resort community with seasonal loading)		
Low water table (e.g., drought, over-pumping)		
Ground water under direct influence of surface water (e.g., shallow well)**		
Contamination through limestone or fissured rock (e.g., karst)		
Contaminated recharge water		
Use of an alternate source of water by a water utility		
Mixing of raw water from different sources		
Improper construction or location of a well or spring		
Water system intake failure (e.g., cracked well casing, cracked intake pipe)		
Intentional contamination (explain in remarks)		
Other, specify:		
Unknown		

No additional questions have been added

- The multiple choice question has been numbered '1' because it is the first of four questions. The sub-header text has been changed from 'Source Water Factors' to 'Source Water Contributing Factors'.
- The footnote symbols have been updated as part of an effort to make them more consistent throughout the form.
- This section now begins at the top of page 10 so any footnote text has been moved to the bottom of the page (see next section).

Treatment Factors

Treatment Factors (check all that apply)*

Documented/ Observed**

Change in treatment process (explain in remarks)

No distribution

Temporary interruption of disinfection

Chronically inadequate disinfection

No filtration

Inadequate filtration

Inadequate filtration

Inadequate filtration

Corrisoin in or leaching from pipes or storage tanks

Corrisoin in or leaching from pipes or storage tanks.

Corrisoin on or repair of pipes/components

Construction or repair of pipes/components without evidence of contamination

Operator error

Other, specify:

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

Did a problem with the water treatment prior to entry into a house or building contribute to the disease or outbreak?

- The multiple choice question has been numbered '2' because it is the second of four questions.
- The sub-header text has been changed from 'Treatment Factors' to 'Treatment Contributing Factors'.

- The footnote symbols have been updated as part of an effort to make them more consistent throughout the form.
- This section has been moved from the top of page 11 to the bottom of page 10 and is followed by all of the footnote text for this page.

Distribution and Storage Factors

No additional questions have been added

- The multiple choice question has been numbered '3' because it is the third of four questions.
- The sub-header text has been changed from 'Distribution and Storage Factors' to 'Distribution and Storage Contributing Factors'
- The footnote symbols have been updated as part of an effort to make them more consistent throughout the form.

Factors Not Under the Jurisdiction of a Water Utility or Factors at the Point of Use

Did a problem occur after the water meter or outside the jurisdiction of a water utility that contributed to the disease or outbreak? (e.g., in a service line leading to a house/building, in the plumbing inside a house/building, during shipping/hauling, during storage other than in the distribution system, at the point of use, involving commercially-bottled water □ Yes (specify in table below) ΠNo □ Unknown Factors Not Under the Jurisdiction of a Water Utility or Factors at the Point of Use (check all that apply)* Legionella species in water system Cross-connection of potable and nonpotable water pipes resulting in backflow Lack of backflow prevention in plumbing Low pressure or change in water pressure in the plumbing Change in water flow direction in the plumbing Corrosion in or leaching from pipes or storage tanks Pipe/component failure or break (e.g., pipes, tanks, valves) Aging plumbing components (e.g., pipes, tanks, valves)

Contamination of plumbing during construction or repair

Construction or repair of plumbing without evidence of contamination Deficiency in building/home-specific water treatment after the water meter or property line Deficiency or contamination of equipment/devices using or distributing water Contamination during shipping, hauling, or storage Contamination at point of use – Tap Contamination at point of use – Rose Contamination at point of use – Commercially-bottled water Contamination at point of use – Container, bottle, or pitcher Contamination at point of use – Unknown Water temperature ≥30°C (≥86°F) Intentional contamination (explain in remarks) Unknown

4 Did a problem occur after the water meter or outside the jurisdiction of a water utility that contributed to the disease or outbreak? e.g., in a service line leading to a house/building, in the plumbing inside a house/building, during shipping/hauling, during storage other than in the distribution system, at the point of use, involving commercially-bottled water) ☐ Yes (specify in table below) □No □ Unknown Factors Not Under the Jurisdiction of a Water Utility or Contributing Factors at the Point of Use (Check all that apply)* Legionella species in water system Lack of backflow prevention in plumbing Low pressure or change in water pressure in the plumbing Change in water flow direction in the plumbing Corresion in or leaching from pipes or storage tanks.

Ppelcomponent tallure or break (e.g., pipes, tanks, valves).

Aging plumbing components (e.g., pipes, tanks, valves).

Contamination of pumbing during construction or repair.

Construction or repair of plumbing without evidence of contamination. Deficiency in building/home-specific water treatment after the water meter or property line Deficiency or contamination of equipment/devices using or distributing water Contamination during commercial bottling
Contamination during shipping, hauling, or storage
Contamination at point of use 1-gp
Contamination at point of use 1-gp
Contamination at point of use 1-gp Contamination at point of use – Commercially-bottled water Contamination at point of use - Container, bottle, or pitcher Contamination at point of use – Unknown Water temperature ≥30°C (≥86°F) Intentional contamination (explain in remarks) Inly check off what was found during investigation cumented/Observed" refers to information gathered the mentation (as defined previously) is available.

- The multiple choice question has been numbered '4' because it is the fourth of four questions.
- The sub-header text has been changed from 'Factors Not Under the Jurisdiction of a Water Utility or Factors at the Point of Use' to 'Factors Not Under the Jurisdiction of Water Utility or Contributing Factors at the Point of Use'
- The footnote symbols have been updated as part of an effort to make them more consistent throughout the form.

Remarks	Remarks		Remarks
	No additional questions have been added		
	The space for the remarks section has been reduced to fit within the ren	ma	aining snace on the nage
	The space for the remarks section has been reduced to he within the re-	1110	anning space on the page.

Section	Current Question/Item		Requested Change				
Water Not Intended for Drinking or	Water Not Intended for Drinking or Water of Unknown Intent (WNID/WUI)	Other or Unknown Water Other or Unknown Water					
Water of Unknown Intent	order to match the revisions to the type of water exposu	ıre categories on	ded for Drinking or Water of Unknown Intent' to 'Other or Unknown Water' in n page 3. Water of Unknown Intent (WNID/WUI) to Other or Unknown Water.				
Intent for Use	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) Conamental (e.g., a decorative non-interactive fountain intended for public display and not designed for sw recreational use) Industrial/Occupational (e.g., steam cleaner) Agricultural Irrigation Waste water Other (specify): Unknown	imming or	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				
	No additional questions have been added • The section has been reformatted to reduce the total am	nount of space re	equired.				
Water Description	(e.g., cooling tower, drainage ditch; health care facility, nursing home; (e.g., no treatment; disinfection; (disinfection	atment Subtype on or fiteration: e.g., boiling; apid sand fiter; reverse	Mater Type Setting of Exposure Ge.g., cooling towar; drainage ditch; fountain-ornamental) Setting frome; park-state park) USUAL Water Treatment Provided (e.g., no treatment; distribution; settling/sedimentation) Ge.g., no treatment; distribution; settling/sedimentation; settling/sedimentation; distribution; settling/sedimentation; settling/sed				
	 The sub-header has been changed from 'Water Descripti One additional row has been added to allow for the subr 	•	·				
Laboratory Section - Water Not Intended for Drinking of Water of Unknown Intent	Laboratory Section - Water Not Intended for Drinking of Water of Unknown Intent Was the implicated water tested? Results Sample 1 2 3 4 Source of Sample Additional Description (e.g., sme of day, specific location, etc.) Date (mmiddlypyy) Volume Tested Unit Temperature Number (If total and combined disinfectant levels given, total - combined = fixe) Turbidity (NTU) pH This section has been deleted from page 13 and consolided.	No Unknown					
	200 200 Edicted it offi page 10 dild combolic						

Mater () Hality	water	Quality Indicator									
Vater Quality	Sample	Type (e.g., fecal coliforms)		Concentr	ation (numerical value)	Unit					
ndicator	Number										
	•	This section	has been o	deleted from	nage 13 and cor	solidated	linto a sec	tion called Water San	nples (described previously).		
		THIS SECTION	i ilas beeli e	acieted iron	i page 13 and coi	isolidated	i iiito a sec	tion called water San	ipies (described previously).		
1icrobiology	Microb	lology or Chemical/Tox	kin Analysis (refer t	to the laboratory findin	gs from the outbreak investigatio	n)					
crobiology	Sample	Genus/ Chemical/ Toxin	Species	Serotype/ Serogroup	/ Serovar Genotype/ Subtype	PFGE Pattern	1				
	Number										
emical/Toxi											
nalysis											
	Sample Number	Test Results Positive?	Concentration (numerical value)	Unit	Test Type*	Environmenta	reference: National I Methods Index:				
						http://www.ne	mi.gov)				
	-	☐ Yes	+								
	-	☐ Yes	+								
		☐ Yes									
	*TestType		n/Detection (e.g., PCR, RT-PCI	R), 3-Microscopy (e.g., fluores	cent, EM), 4-Serological/Immunological Test	e.g., EIA, ELISA), 5-Pha	ge Typing.				
	6-Chemica	Testing, 7-Tissue Culture Infectivity As	ssay	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
	•	This section	n has been d	deleted from	n page 14 and cor	nsolidated	l into a sed	tion called Water San	nples (described previously).		
ctors	Factor	s Contributing to Conta									
CLOIS			imination and/or i	Increased Exposu	re to Contaminated Water	Downwooded/	Commented		stamination and/or increased Exposure to Contaminated Water		
		check all that apply)*	amination and/or i	Increased Exposu	re to Contaminated Water	Documented/ Observed**	Suspected**	Factors Contributing to Con Contributing Factors (Check all that		Documented/ Observed [†]	Suspecte
ontributing to	Factors (check all that apply)* g tower/evaporative condenser -	- shutdown for >3 days \	without draining to waste		Observed**		Contributing Factors (Check all tha			
ntributing to	Cooling	check all that apply)* g tower/evaporative condenser- g tower/evaporative condenser-	- shutdown for >3 days v	without draining to waste program		Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense Cooling tower/evaporative condense	r apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program	Observed [†]	
ontributing to ontamination	Cooling Cooling Cooling Cooling Cooling	check all that apply)* g tower/evaporative condenser- g tower/evaporative condenser- g tower/evaporative condenser- g tower/evaporative condenser-	- shutdown for >3 days v - lack of a maintenance - lack of a qualified wate - presence of scale or c	without draining to waste program or quality specialist orrosion		Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense Cooling tower/evaporative condense Cooling tower/evaporative condense	t apply)* ar – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist	Observed [†]	
ontributing to ontamination od/or	Cooling Cooling Cooling Cooling Cooling Cooling	check all that apply)* glower/evaporative condenser- glower/evaporative condenser- glower/evaporative condenser- glower/evaporative condenser- glower/evaporative condenser-	- shutdown for >3 days v - lack of a maintenance - lack of a qualified wate - presence of scale or ci - presence of dirt, organ	without draining to waste program or organity specialist organism organism ic matter, or other debris		Observed**		Contributing Factors (Check all that Cooling tower/evaporative condenss	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or corrosion or – presence of dirt, organic matter, or other debris in the cold water basin	Observed [†]	
ontributing to ontamination nd/or	Cooling	check all that apply)* glower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser-	- shutdown for >3 days - lack of a maintenance - lack of a qualified wate - presence of scale or or presence of dirt, organ - absence of dirtf elimina presence of damaged	without draining to waste program or quality specialist corrosion ic matter, or other debris ators drift eliminators		Observed**		Contributing Factors (Check all that Cooling towerlevaporative condense	t apply)* ar – shutdown for >3 days without draining to waste br – lack of a maintenance program br – lack of a qualified water quality specialist br – presence of scale or corrosion br – presence of drift, organic matter, or other debris in the cold water basin br – absence of drift eliminators	Observed ¹	
ontributing to ontamination od/or creased	Factors (Cooling	check all that apply)* tower/evaporative condenser-	- shutdown for >3 days i lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimins presence of damaged history of recent repair	without draining to waste program or quality specialist orrosion its matter, or other debris ators drift eliminators s to the device		Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or corrosion or – presence of dirft, organic matter, or other debris in the cold water basin or – presence of drift eliminators or – presence of damaged drift eliminators	Observed [†]	
ontributing to ontamination d/or creased posure to	Factors (Cooling	check all that apply)* j twer/evaporative condenser	- shutdown for >3 days to lack of a mainfenance lack of a qualified wate presence of scale or copresence of dirt, organ absence of dirt elimina presence of damaged history of recent repair siting of device near busting of device near we stifling of device near we	without draining to waste program or qualify specialist ornosion iic matter, or other debris ators drift eliminators is to the device uilding air intakes indows that can be open	in the cold water basin	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or corrosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of drift eliminators or – presence of damaged drift eliminators or – bristory of recent repairs to the device or – string of device near building air intakes	Observed!	
ntributing to ntamination d/or creased posure to	Factors (Cooling	check all that apply)* j tower/evaporative condenser-	- shutdown for >3 days to lack of a mainfenance lack of a qualified wate presence of scale or copresence of dirt, organ absence of dirt elimina presence of damaged history of recent repair siting of device near busting of device near we stifling of device near we	without draining to waste program or qualify specialist ornosion iic matter, or other debris ators drift eliminators is to the device uilding air intakes indows that can be open	in the cold water basin	Observed**		Contributing Factors (Check all that Cooling lower/evaporative condense	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or corrorsion or – presence of dirt, organic matter, or other debris in the cold water basin or – absence of drift eliminators or – history of recent repairs to the device or – siting of device near building air intakes or – siting of device near windows that can be opened	Observed!	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling	check all that apply)* j twer/evaporative condenser sources of organic matter j twer/evaporative condenser	-shutdown for >3 days -shutdown for >3 days -should be a qualified wate -presence of scale or or -presence of dirt, organ -absence of drift elimina -presence of damaged -history of recent repair -siting of device near by -siting of device near w -siting of device in imm -construction on the pre	without draining to waste program or quality specialist or orosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes indows that can be open ediate area of kitchen exiemises of the device with	in the cold water basin ed haust fans, live plants, truck beys, in 6 months before the index case	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or conrosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt eliminators or – presence of damaged drift eliminators or – bristory of recent repairs to the device or – sitting of device near building air intakes or – sitting of device near windows that can be opened or – sitting of device in immediate area of kitchen exhaust fans, live plants, truck bays,	Observed!	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j twer/evaporative condenser	-shutdown for >3 days -shutdown for >3 days -should be a qualified wate -presence of scale or or -presence of dirt, organ -absence of drift elimina -presence of damaged -history of recent repair -siting of device near by -siting of device near w -siting of device in imm -construction on the pre	without draining to waste program or quality specialist or orosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes indows that can be open ediate area of kitchen exiemises of the device with	in the cold water basin ed haust fans, live plants, truck beys, in 6 months before the index case	Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense or other sources of organic matter Cooling tower/evaporative condense or other sources of organic matter Cooling tower/evaporative condense	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist r – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sitting of device near building air intakes or – sitting of device near windows that can be opened or – sitting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case	Observed	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling	check all that apply)* j twer/evaporative condenser sources of organic matter j twer/evaporative condenser	-shutdown for >3 days is lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimine presence of damaged history of recent repair siting of device near besting of device near we sting of device near we sting of device near we construction on the pre-	without draining to waste program or quality specialist or orosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes indows that can be open ediate area of kitchen exiemises of the device with	in the cold water basin ed haust fans, live plants, truck beys, in 6 months before the index case	Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist r – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirth eliminators or – psence of damaged drift eliminators or – siting of device near building air intakes or – siting of device near windows that can be opened or – siting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months	Observed	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser tower/evaporative condenser tower/evaporative condenser tower/evaporative condenser to tower/evaporative condenser	-shutdown for >3 days is lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimina presence of damaged history of recent repair siting of device near we siting of device near we siting of device in imme-construction on the pre-construction within 100 bearing of device in imme-construction within 100 bearing dighting is cleaning and maintenance of the dearing and maintenance of the dearing and maintenance of the dearing and maintenance or scale of the dearing and maintenance or present the dearing and maintenance or scale or sc	without draining to waste program or quality specialist ornosion ic matter, or other debris alors drift eliminators is to the device uilding air intakes inclows that can be open ediate area of kitchen exi emises of the device with meters of the premises ince program	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense or other sources of organic matter Cooling tower/evaporative condense Cooling tower/evaporative condense Cooling tower/evaporative condense before the index case Ornamental fountain – presence of	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist ar – presence of scale or conrosion or – presence of dirt, organic matter, or other debris in the cold water basin or – absence of drift eliminators or – presence of damaged drift eliminators or – shistory of recent repairs to the device ar – string of device near building air intakes or – string of device near building air intakes or – string of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Coolin) Coolin; Cool	check all that apply)* j tower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser- tower/evaporative condenser- nella fountain – presence of suf- ental fountain – presence of suf- ental fountain – presence of ental fountain – presence ental fountain – presence ental fountain – presence ental fountain – presence ental fountain –	-shutdown for >3 days is lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimina presence of damaged history of recent repair siting of device near we siting of device near we siting of device in imme-construction on the pre-construction within 100 bearing of device in imme-construction within 100 bearing dighting is cleaning and maintenance of the dearing and maintenance of the dearing and maintenance of the dearing and maintenance or scale of the dearing and maintenance or present the dearing and maintenance or scale or sc	without draining to waste program or quality specialist ornosion ic matter, or other debris alors drift eliminators is to the device uilding air intakes inclows that can be open ediate area of kitchen exi emises of the device with meters of the premises ince program	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist r – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirth eliminators or – psence of damaged drift eliminators or – siting of device near building air intakes or – siting of device near windows that can be opened or – siting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Coolin) Coolin; Cool	check all that apply)* j twer/evaporative condenser	-shutdown for >3 days is lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimina presence of damaged history of recent repair siting of device near we siting of device near we siting of device in imme-construction on the pre-construction within 100 bearing of device in imme-construction within 100 bearing dighting is cleaning and maintenance of the dearing and maintenance of the dearing and maintenance of the dearing and maintenance or scale of the dearing and maintenance or present the dearing and maintenance or scale or sc	without draining to waste program or quality specialist ornosion ic matter, or other debris alors drift eliminators is to the device uilding air intakes inclows that can be open ediate area of kitchen exi emises of the device with meters of the premises ince program	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense Cooling tower/	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or comosion or – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – shance of dirt eliminators or – presence of damaged drift eliminators or – string of device near building air intakes or – sitting of device near building air intakes or – sitting of device in air building air intakes or – sitting of device in air mindelate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ormamental Equation to the premise of as in the water basin an ormamental Equation to the premise of the premise of the device within 6 months	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j twer/evaporative condenser- the index case ental fountain – presence of sut ental fountain – presence of sut ental fountain – presence of dir/ damaged sewer pipe ng of water emperature 280°C (286°F)	-shutdown for >3 days is lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimina presence of damaged history of recent repair siting of device near we siting of device near we siting of device in imme-construction on the pre-construction within 100 bearing of device in imme-construction within 100 bearing dighting is cleaning and maintenance of the dearing and maintenance of the dearing and maintenance of the dearing and maintenance or scale of the dearing and maintenance or present the dearing and maintenance or scale or sc	without draining to waste program or quality specialist ornosion ic matter, or other debris alors drift eliminators is to the device uilding air intakes inclows that can be open ediate area of kitchen exi emises of the device with meters of the premises ince program	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense before the index case Ornamental fountain – presence of	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sting of device near building air intakes or – sting of device near windows that can be opened or – sting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ormamental fountain but utilized as an interactive fountain issindection for createrional use	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Coolin) Coolin; Cool	check all that apply)* j tower/evaporative condenser ental fountain – lack of a written ental fountain – governer ental fount	-shutdown for >3 days is lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimina presence of damaged history of recent repair siting of device near we siting of device near we siting of device in imme-construction on the pre-construction within 100 bearing of device in imme-construction within 100 bearing dighting is cleaning and maintenance of the dearing and maintenance of the dearing and maintenance of the dearing and maintenance or scale of the dearing and maintenance or present the dearing and maintenance or scale or sc	without draining to waste program or quality specialist ornosion ic matter, or other debris alors drift eliminators is to the device uilding air intakes inclows that can be open ediate area of kitchen exi emises of the device with meters of the premises ince program	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense Cooling tower/	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sting of device near building air intakes or – sting of device near windows that can be opened or – sting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ormamental fountain but utilized as an interactive fountain issindection for createrional use	Observed	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser he index case ental fountain – presence of sur- diamaged sewer jipe ing of water emperature ≥30°C (≥80°F) specify: ini	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or or presence of scale or or presence of dirt, organ absence of drift eliminary presence of damagad history of recent repair siting of device near we construction on the pre-construction within 100 bring digitality of the presence o	without draining to waste program or quality specialist ornosion ic matter, or other debris alors drift eliminators is to the device uilding air intakes inclows that can be open ediate area of kitchen exi emises of the device with meters of the premises ince program	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense or other sources of organic matter Cooling tower/evaporative condense Cooling tower/	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sting of device near building air intakes or – sting of device near windows that can be opened or – sting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ormamental fountain but utilized as an interactive fountain issindection for createrional use	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser- n sources of organic matter j tower/evaporative condenser- n sources of organic matter j tower/evaporative condenser- n sources of organic matter j tower/evaporative condenser- j tower/evaporat	-shutdown for >3 days ' -shutdown for >3 days ' -shutdown for >3 days ' -shutdown for shutdown f	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes inclows that can be open ediate area of kitchen exismises of the device with meters of the premises once program or debris in the water bas	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condense cooling tower/evaporative cooling tower/evaporative condense cooling tower/evaporati	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or comosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sting of device near building air intakes or – sting of device near windows that can be opened or – sting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ormamental fountain but utilized as an interactive fountain issindection for createrional use	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser- n sources of organic matter j tower/evaporative condenser- n sources of organic matter j tower/evaporative condenser- n sources of organic matter j tower/evaporative condenser- j tower/evaporat	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or c presence of drift elimine presence of drift elimine presence of drift elimine presence of damaged history of recent repair sitting of device near two sitting of device near we construction on the pre-construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes inclows that can be open ediate area of kitchen exismises of the device with meters of the premises once program or debris in the water bas	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Chock all that Cooling tower/evaporative condenses before the index case Omamental fountain – presence of Omamental fountain – presence of Omamental fountain – presence of Omamental fountain – inadequate to Omamental fountain – inadequate of Broken/damaged sewer pipe Becycling of water Water temperature ≥30°C (≥86°F) Other, Specify:	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist ar – presence of scale or conrosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirth eliminators or – bistory of recent repairs to the device ar – sting of device near building air intakes or – sting of device near windows that can be opened or – stiling of device in mediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornemental fountain but utilized as an interactive fountain listration for recreational use tration for recreational use	Observed	
ntributing to ntamination d/or reased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser entitle foundarie j tower/evaporative condenser entitle foundarie j tower/evaporative condenser the index case entit foundarie – presence of skilledmaged sewer jiple ing of water emperature 280°C (280°F) specify: with the properties of the properties	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or c presence of drift elimine presence of drift elimine presence of drift elimine presence of damaged history of recent repair sitting of device near two sitting of device near we construction on the pre-construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other cleaning and maintenant of the construction within 100 pmerged lighting cleaning and maintenant of the construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other cleaning and maintenan	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes inclows that can be open ediate area of kitchen exismises of the device with meters of the premises once program or debris in the water bas	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense Cooling towe	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist ar – presence of scale or conrosion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirth eliminators or – bistory of recent repairs to the device ar – sting of device near building air intakes or – sting of device near windows that can be opened or – stiling of device in mediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornemental fountain but utilized as an interactive fountain listration for recreational use tration for recreational use	Observed	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser entitle foundarie j tower/evaporative condenser entitle foundarie j tower/evaporative condenser the index case entit foundarie – presence of skilledmaged sewer jiple ing of water emperature 280°C (280°F) specify: with the properties of the properties	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or c presence of drift elimine presence of drift elimine presence of drift elimine presence of damaged history of recent repair sitting of device near two sitting of device near we construction on the pre-construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other construction within 100 pmerged lighting cleaning and maintenant, organic matter, or other cleaning and maintenant of the construction within 100 pmerged lighting cleaning and maintenant of the construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other construction within 100 pmerged lighting cleaning and maintenant or other cleaning and maintenan	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators to the device utiliding air intakes inclows that can be open ediate area of kitchen exismises of the device with meters of the premises once program or debris in the water bas	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months	Observed**		Contributing Factors (Check all that Cooling tower/evaporative condense Cooling towe	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or comorsion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sting of device near building air intakes or – sting of device near windows that can be opened or – sting of device near windows that can be opened or – sting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain sinforction for recreational use itration for recreational use itration for recreational use	Observed	
ntributing to ntamination d/or creased posure to ntaminated	Factors (Cooling Cool	check all that apply)* j tower/evaporative condenser intervention of the index case in the inde	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or or presence of dirt, organ absence of drift elimina presence of damaged history of recent repair siting of device near we construction on the pre-construction on the pre-construction within 100 bearing digiting of device in immediately device in the pre-construction on	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators of the device grain and the device grain and the device grain and the device with meters of the device with meters of the premises once program or debris in the water bas since program or debris in the water bas evices, direct observations, an existence of the device with meters of the premises and the premises of the device with meters of the premises are program or debris in the water bas since program.	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months in	Observed**	Dept for which no	Contributing Factors (Chock all that Cooling tower/evaporative condense cooling tower/evaporative cooling tower/evaporative condense cooling tower/evaporative condense cooling tower/evaporative condense cooling tower/evaporati	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water qualify specialist or – presence of scale or comorsion or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of dirt, organic matter, or other debris in the cold water basin or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – presence of damaged drift eliminators or – sting of device near building air intakes or – sting of device near windows that can be opened or – sting of device near windows that can be opened or – sting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain sinforction for recreational use itration for recreational use itration for recreational use	Observed	
ontributing to ontamination d/or creased posure to ontaminated	Factors (Cooling Cool	check all that apply)* a) tower/evaporative condenser- i tower/evaporative condenser- he index case i tower/evaporative condenser- the index case and i fountain – presence of suit damaged sewer pipe ing of water inger case of sewer pipe inger case of sewer pip	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or or presence of drift, organ absence of drift, organ absence of drift elimine presence of damagad history of recent repair sitting of device near we construction on the pre-construction on the pre-construction within 100 being dighting cleaning and maintenant, organic matter, or other devices of the device	without draining to waste program or quality specialist ornosion or control of the program or debris in the water basiness of the device with or meters of the premises of the device with or meters of the premises ince program or debris in the water basiness of the device, and the program or debris in the water basiness, affect observations, and as been chair	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months in	Observed** Observ	but for which no	Contributing Factors (Chock all that Cooling tower/evaporative condense Cooling tower	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or common or other debris in the cold water basin or – presence of drit, organic matter, or other debris in the cold water basin or – presence of drit eliminators or – presence of drit eliminators or – presence of damaged drift eliminators or – stiling of device near building air intakes or – stiling of device near windows that can be opened or – stiling of device in immediate area of fitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting en cleaning and maintenance program gratin, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain issinctor for recreational use litration for recreational use gation. gathered through document reviews, direct observations, and/or interviews. "Suspected" refers to factors believed.	Observed	
ontributing to ontamination nd/or creased cposure to ontaminated	Factors (Cooling Cool	check all that apply)* glower(evaporative condenser- j tower(evaporative condenser- tower(evaporative condenser- tower(evaporative condenser- the index case- ental fourtain – presence of sur- didmaged sewer pipe ing of water emperature 280°C (280°F) specify: which is to information of the sewer pipe into the sewer pipe in the sewer pipe ing of water emperature 280°C (280°F) specify: The sub-he. The footnote	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or or presence of drift elimine presence of drift elimine presence of drift elimine presence of drift elimine presence of damaged history of recent repair sitting of device near two sitting of device near we obtained the construction on the preconstruction within 100 pmerged lighting a cleaning and maintenant, organic matter, or other devices of the construction within 100 pmerged lighting a cleaning and maintenant, organic matter, or other devices of the construction within 100 pmerged lighting a cleaning and maintenant, organic matter, or other devices of the construction within 100 pmerged lighting a cleaning and maintenant, organic matter, or other devices of the construction within 100 pmerged lighting and the construction within 100 pm	without draining to waste program or quality specialist orresion consists of the program or quality specialist orresion did climinators drift climinators of the device guilding air intakes utilding air intakes area of kitchen extended area of kitchen extended area of kitchen extended area of the premises of the device with or meters of the premises ince program or debris in the water base wivews, direct observations, and as been chair have been under the program or debris in the water base wivews, direct observations, and have been under the program or debris in the water base wivews, direct observations, and have been under the program or debris in the water base wivews, direct observations, and the program or debris in the water base of the pro	in the cold water basin ed haust fans, live plants, truck beys, in 6 months before the index case of the device within 6 months in dior interviews. "Suspected" refers to factor interviews. The color interviews are supported to the color interviews. The color interviews are supported to the color interviews are supported to the color interviews. The color interviews are supported to the color interviews are supported to the color interviews. The color interviews are supported to the color interviews are supported to the color interviews.	observed** Observ	but for which no	Contributing Factors (Chock all that Cooling tower/evaporative condense Cooling towe	t apply)* or – shutdown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or consision or – presence of scale or consision or – presence of drift, organic matter, or other debris in the cold water basin or – presence of drift eliminators or – siting of device near building air intakes or – siting of device near windows that can be opened or – siting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain isinfection for recreational use tration for recreational use gettion. g	Observed	
ontributing to ontamination nd/or creased cposure to ontaminated	Factors (Cooling Cool	check all that apply)* glower/evaporative condenser- j tower/evaporative condenser- the index case- ental fountain – presence of sui- ental fountain – presence of sui- ental fountain – presence of diri- didamaged sewer pipe ing of water sumperature 20°C (286°F) specify: with the sub-free to information for (as defined previously) is available The sub-hear Three addit	-shutdown for >3 days to lack of a maintenance lack of a qualified wate presence of scale or or presence of drift organ absence of drift elimine presence of drift elimine presence of drift elimine presence of drift elimine stilling of device near but sitting of device near we stilling of de	without draining to waste program or quality specialist orresion in the matter of the program or quality specialist orresion in the matter of the device drift eliminators in the device suiting air intakes indows that can be open ediate area of kitchen extensions of the device with or meters of the premises or debris in the water bas one program or debris in the water bas eviews, direct observations, and as been characteristics of the premise wiviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas of the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program of the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews, direct observations, and the program or debris in the water bas eviews.	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months in difor interviews. "Suspected" refers to factor reged from 'Factor updated as part of ors have been add	observed** OBSERV	atributing I	Contributing Factors (Check all that Cooling tower/evaporative condense Cooling tower	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or controls on or – presence of scale or controls on or – presence of drift, organic matter, or other debris in the cold water basin or – presence of drift oliminators or – presence of drift oliminators or – presence of drift oliminators or – sitting of device near building air intakes or – sitting of device near building air intakes or – sitting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain listification for recreational use tration for recreational use tration for recreational use throughout the form. buntains:	Observed	
ontributing to ontamination nd/or creased sposure to ontaminated	Factors (Cooling Cool	check all that apply)* jt twer/evaporative condenser- jt twer	-shutdown for >3 days 1shutdown for >3 days 1shutdown for >3 days 1shutdown for a maintenance -lack of a qualified wate -presence of scale or or -presence of dart, organ -absence of dartified liminapresence of damaged -history of recent repair -siting of device near we -siting of device near we -siting of device in immeconstruction on the preconstruction on the preconstruction on within 100 -construction on within 100 -construction on within 100 -construction on within 100 -construction on the preconstruction on within 100 -construction on within 100 -construction on the preconstruction on the preconstruc	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators of the device quilding air intakes inclows that can be open ediate area of kitchen exismises of the device with meters of the premises more program or debris in the water bas existence program or debris in the water bas	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months in difor interviews. "Suspected" refers to factor updated as part of ors have been adort tended as an orn;	observed** observ	atributing I	Contributing Factors (Check all that Cooling tower/evaporative condense Cooling tower	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or controls on or – presence of scale or controls on or – presence of drift, organic matter, or other debris in the cold water basin or – presence of drift oliminators or – presence of drift oliminators or – presence of drift oliminators or – sitting of device near building air intakes or – sitting of device near building air intakes or – sitting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain listification for recreational use tration for recreational use tration for recreational use throughout the form. buntains:	Observed	
contributing to contributing to contamination and/or acreased apposure to contaminated dater	Factors (Cooling Cool	check all that apply)* jt twer/evaporative condenser- jt twer	-shutdown for >3 days 1shutdown for >3 days 1shutdown for >3 days 1shutdown for a maintenance -lack of a qualified wate -presence of scale or or -presence of dart, organ -absence of dartified liminapresence of damaged -history of recent repair -siting of device near we -siting of device near we -siting of device in immeconstruction on the preconstruction on the preconstruction on within 100 -construction on within 100 -construction on within 100 -construction on within 100 -construction on the preconstruction on within 100 -construction on within 100 -construction on the preconstruction on the preconstruc	without draining to waste program or quality specialist ornosion ic matter, or other debris ators drift eliminators of the device quilding air intakes inclows that can be open ediate area of kitchen exismises of the device with meters of the premises more program or debris in the water bas existence program or debris in the water bas	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months in difor interviews. "Suspected" refers to factor reged from 'Factor updated as part of ors have been add	observed** observ	atributing I	Contributing Factors (Check all that Cooling tower/evaporative condense Cooling tower	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or controls on or – presence of scale or controls on or – presence of drift, organic matter, or other debris in the cold water basin or – presence of drift oliminators or – presence of drift oliminators or – presence of drift oliminators or – sitting of device near building air intakes or – sitting of device near building air intakes or – sitting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain listification for recreational use tration for recreational use tration for recreational use throughout the form. buntains:	Observed	
ontributing to ontamination ad/or creased cposure to ontaminated	Factors (Cooling Cool	check all that apply)* a) tower/evaporative condenser-) tower/evaporative condenser- he index case- netal fountain – presence of sur- diamaged sewer pipe ing of water emperature 280°C (280°F) specify: In the sub-hear The sub-hear The footnot Three addit O Or O Or	-shutdown for >3 days or lack of a maintenance lack of a qualified wate presence of scale or or presence of orth organ absence of drift elimina presence of drift elimina presence of drift elimina presence of damagad history of recent repair siting of device near we construction on the pre-construction within 100 merged light of the presence of the device near we siting of device near we have been deviced to the present the device near we sit near the device near the de	without draining to waste program or quality specialist or country	in the cold water basin ed haust fans, live plants, truck bays, in 6 months before the index case of the device within 6 months in difor interviews. "Suspected" refers to factor updated as part of ors have been adort tended as an orn;	observed** Observ	atributing I to make to utbreaks in ountain bu ecreation.	Contributing Factors (Check all that Cooling tower/evaporative condense Cooling tower	t apply)* or – shuldown for >3 days without draining to waste or – lack of a maintenance program or – lack of a qualified water quality specialist or – presence of scale or controls on or – presence of scale or controls on or – presence of drift, organic matter, or other debris in the cold water basin or – presence of drift oliminators or – presence of drift oliminators or – presence of drift oliminators or – sitting of device near building air intakes or – sitting of device near building air intakes or – sitting of device in immediate area of kitchen exhaust fans, live plants, truck bays, or – construction on the premises of the device within 6 months before the index case or – construction within 100 meters of the premises of the device within 6 months submerged lighting ten cleaning and maintenance program dirt, organic matter, or other debris in the water basin an ornamental fountain but utilized as an interactive fountain listification for recreational use tration for recreational use tration for recreational use throughout the form. buntains:	Observed	

Remarks	Remarks	Т	Remarks
	Epidenic and laboratory, assistance for the investigation of a waterborne disease outhers is a enabled upon request by the State Health Department to the Centers for Disease Control and Phosention, Please outer this peri		
	Public supporting burdor of this collection of information is estimated to except 20 inhibits per response, including the time for notwards institutions, searching adding data excess, gathering and maintaining the data resolut, and completing and notwards of information already resolution of information already resolution and contract or growing resolution and institution of the collection of information already as country and so CREST contraction commands are reported to a solution of the collection of the collection of the collection of the collection and collection a		
	No additional questions have been added		
	 The information about how to access epidemic and laboratory assistance 	ce	has been removed.
	The information about the public reporting burden has been moved to the public reporting burden has been moved by the public reporting burden has been moved to the public reporting burden has been moved by the public reporting burden has been burden by the public reporting burden has been burden by the public reporting burden has been bu		
	The information about the public reporting burden has been moved to t	UH	e beginning of page 1 and defered from the end of the form.

Purpose and Use of Information Collection

At the national level, waterborne outbreak surveillance data are used to describe outbreaks and their characteristics through publications and data inquiries; identify trends in common exposures; and inform public health policies and interventions. WBDOSS has collected data since 1971. No other United States public health surveillance system collects aggregate data about waterborne disease outbreaks and human illness at a national level.

Burden

The annualized burden hours and cost to reporting agencies that submit waterborne disease outbreak data to CDC will not change significantly, if at all, from the estimates provided previously in 2010. The change to the annualized burden hours and cost is minimal because the form asks the same questions but has been revised to be easier to use. Additional fields or data table rows have been added based on form user feedback, reporting practices, or for convenience where extra space was available on a page. In addition, the form has been shortened by two pages, therefore, if any change in burden and cost were anticipated, the result would likely be a lower cost and burden. The number of annual submissions to CDC is not expected to change as a result of the modifications to form.

The burden hours and cost below are based on the calculations from the previous CDC 52.12 form OMB submission in 2010. The tables have been revised. The 2010 OMB paperwork described 57 respondents (50 states and 7 other reporting jurisdictions). NORS currently supports outbreak reporting by 59 sites (50 US states, the District of Columbia, five US territories, and three Freely Associated States), however, not all states or other reporting jurisdictions report waterborne disease outbreaks each calendar year. The burden hours have therefore increased from 19 to 23 but this represents a maximum value. The cost burden has also increased from \$1,322.40 to \$1,368.80 but this also represents a maximum value.

Privacy Impact Assessment

No individually identifiable information is being collected.

Estimates of Annualized Burden Hours (change to the total number of reporting sites from NORS, but no actual change in burden hours because not all reporting sites submit an outbreak report annually)

Type of Respondents	Form name	Number of Respondents	Number of Responses per Respondent	Average Burden Per Response (in hours)	Total Burden (in hours)
State governments	CDC Form 52.12	50	1	20/60	17
Territories, District of Columbia, Freely-associated states	CDC Form 52.12	9	1	20/60	3
Total		,	-	20,00	20

Estimates of Annualized Cost Burden (change to the total number of reporting sites from NORS, but no actual change in cost burden because not all reporting sites submit an outbreak report annually)

Respondents	Number of	Number of	Average	Cost Per	Respondent
	Respondents	Responses per	Burden Per	Response	Cost
		Respondent	Response (in		
			hours)		
State governments	50	1	20/60	\$23.20	\$386.67
Territories, District					
of Columbia,					
Freely-associated					
states	9	1	20/60	\$23.20	\$69.60
Total					\$456.27

Influenza - Revision of one form, addition of 1 form.

Novel influenza A virus:

In 2007, the Council of State and Territorial Epidemiologists (CSTE) adopted a position statement making human infection with a novel influenza A virus a nationally notifiable condition. Novel influenza A virus infections include all human infections with influenza A viruses that are different from currently circulating human influenza H1 and H3 viruses. These viruses include those that are subtyped as nonhuman in origin and those that are unsubtypable with standard methods and reagents. Rapid reporting of human infections with novel influenza A viruses will facilitate prompt detection and characterization of influenza A viruses.

From 2005 to early 2012, only 36 cases of variant (v) influenza virus infection were reported to the Centers for Disease Control and Prevention (CDC). From July–September 2012, however, 306 cases of H3N2v were reported in 10 states, representing the largest outbreak of human infections with a variant influenza virus since the 2009 H1N1 pandemic. A majority of cases had self-limited illness, but hospitalizations were more prevalent among those with young age and the presence of underlying medical conditions. Most cases reported prolonged and direct exposure to swine at an agricultural fair, suggesting that was the primary risk factor for illness.

This outbreak highlighted the assertion that every case of variant influenza virus infection has epidemic potential and must be investigated thoroughly and rapidly. Therefore, a working group was convened to identify and incorporate additional data elements that will be instrumental in the efficient and rapid investigations of all variant influenza virus infections. The additional elements include new sections to assess the signs and symptoms associated with the illness, the clinical course of the illness, the exposures to agricultural fairs and animals prior to illness onset, and the potential for human-to-human transmission, especially among household members and healthcare workers. These additional elements will accelerate the understanding of the basic epidemiology of new variant influenza viral infections and the implementation of effective public health responses, thereby preventing additional morbidity and mortality.

The Human Infection with Novel Influenza A Virus Case Report Form, is a standardized case questionnaire which contains detailed questions on relevant clinical and epidemiologic features of influenza, was developed by CSTE and CDC. State or territorial influenza surveillance epidemiologists report these data over the Internet on the Secure Data Network (SDN). The title of this form has been slightly revised from its original title of the Novel Human Influenza A Virus Infection Case Report Form.

Privacy Impact Assessment

Personal identifiers are collected by state or local public health officials and maintained at the state or local health department before submission to CDC.

Estimated Burden

The annualized total burden hours did increase from the previous approval. A significant increase in the number of human infections from novel influenza A virus were identified during 2012, compared to previous influenza seasons. The increase in the number of responses per respondent was needed to more accurately portray the burden on respondents. The annualized burden to complete one case report form did not change from the previous approval.

Human Infections with Novel Influenza A Virus

Type of Respondents	Form Name	No. of	No. of Responses	Hrs/response	Total Burden in
		Respondents	per Respondent		hrs.
State and Local	Human Infection	57	6	30/60	171 hours
Governments	with Novel				
	Influenza A Virus				
	Case Report Form				

Antiviral resistance form

Antiviral drugs are the second line of defense against influenza viruses. Currently, only 2 drugs are licensed for use and active against circulating viruses, oseltamivir and zanamivir; oral oseltamivir is used for almost all infections in the US. There are limited treatment options for an infection with an oseltamivir-resistant viruses, experimental drug use would e required; thus widespread circulation of resistant viruses is a public health emergency requiring special guidance and testing. After a resistant virus is identified by the laboratory, it is necessary to obtain key information from the infected patient to determine whether the resistant virus was circulating in the community or whether the resistant virus developed during treatment. This information is critical to antiviral recommendations and guidance. Over the past several seasons since the pandemic 2009 virus began circulating, we have seen a small but steady increase in the circulation of oseltamivir-resistant viruses. Any additional and significant increase will require new guidance and health alerts. This new form, Antiviral Resistant Influenza Infection Case Report Form, will be critical to the collection of information that is essential to antiviral use guidance. Since circulating viruses are constantly changing, annual monitoring is needed.

Privacy Impact Assessment

Personal identifiers are collected by state or local public health officials and maintained at the state or local health department before submission to CDC.

Antiviral Resistant Influenza Infection

Type of Respondents	Form Name	No. of	No. of Responses	Hrs/response	Total Burden in
		Respondents	per Respondent		hrs.
State and Local	Antiviral Resistant	57	3	30/60	86 hours
Governments	Influenza Infection				
	Case Report Form				