

## ENTERIC OUTBREAK SUMMARY REPORT

**Note:** This form should only be used if the reporter is not a registered user of the Canadian Network for Public Health Intelligence (CNPHI) Outbreak Summaries application. All registered users should submit summaries of enteric outbreaks using the web-based application (<https://www.cnphi-rcrsp.ca>). For detailed instruction on how to complete this form, refer to attached data dictionary and guidelines. For a list of diseases monitored through the Enteric, Food and Water Borne Disease Module of the Outbreak Summaries application, please refer to Appendix 1.

**IF YOU ARE NOT A REGISTERED USER OF CNPHI OUTBREAK SUMMARIES,  
EMAIL COMPLETED FORM TO: [OUTBREAK@GOV.MB.CA](mailto:OUTBREAK@GOV.MB.CA) OR FAX TO: (204) 948-3044**

<input type="checkbox"/> INITIAL REPORT		<input type="checkbox"/> FINAL REPORT	
Today's date: (YYYY/MM/DD): _____ / ____ / ____		Contact person:	
Contact phone:		Contact fax:	
EVENT IDENTIFICATION AND DURATION:			
Outbreak title:		CPL outbreak code:	
Date outbreak investigation started (YYYY/MM/DD): _____ / ____ / ____		Date outbreak investigation ended (YYYY/MM/DD): _____ / ____ / ____	
Earliest known case onset date (YYYY/MM/DD): _____ / ____ / ____		Onset date of most recent case (YYYY/MM/DD): _____ / ____ / ____	
CASE INFORMATION:			
Case definition: _____ _____			
# Lab confirmed case(s):	# Clinical case(s) only:	Total # hospitalized:	Total # deaths:
ADDITIONAL INSTITUTION OUTBREAK INFORMATION (IF APPLICABLE):			
STAFF		PATIENTS/RESIDENTS	
Total # previously immunized:	Total # at risk:	Total # previously immunized:	Total # at risk:
Total # cases:	Total # hospitalized:	Total # cases:	Total # hospitalized:
Total # deaths:		Total # deaths:	
ORGANISM DESCRIPTION:			
Agent or toxin confirmation (check <b>one</b> ): <input type="checkbox"/> Lab-confirmed <input type="checkbox"/> Suspect <input type="checkbox"/> Unknown			Phage type:
Etiologic agent/Organism:		Subtype:	PFGE:
Agent details: _____ _____			
EXPOSURE DETAILS			
Exposure/Transmission setting: <input type="checkbox"/> Agricultural facility <input type="checkbox"/> Community <input type="checkbox"/> Food service establishment <input type="checkbox"/> Institutional – Residential <input type="checkbox"/> Institutional – Non-residential <input type="checkbox"/> Laboratory <input type="checkbox"/> Non-institutional facility <input type="checkbox"/> Private function <input type="checkbox"/> Recreational facility <input type="checkbox"/> Travel-related – outside Canada <input type="checkbox"/> Travel-related – within Canada <input type="checkbox"/> Other, specify: _____			
Facility/Community name:	Province(s) of exposure:	RHA of exposure:	
LOCATION DETAILS:			
Location of cases (choose <b>one</b> ): <input type="checkbox"/> Localized to one RHA <input type="checkbox"/> Multiple RHAs <input type="checkbox"/> >1 province/territory <input type="checkbox"/> International <input type="checkbox"/> Unknown			
Case(s) province/territory:	Specify RHA:	First Nations community: <input type="checkbox"/> Yes <input type="checkbox"/> No	

**SOURCE DETAILS:**

Primary mode of transmission: (check one)  
 Animal-to-person       Multiple       Waterborne  
 Environment-to-person       Person-to-person       Unknown  
 Foodborne       Sexual       Other, specify: \_\_\_\_\_

If foodborne, type:  
 Dairy products       Eggs       Fruit  
 Legumes/Nuts/Seeds       Meat       Mixed Foods  
 Sauces/Condiments       Seafood       Vegetables  
 Breads/Grains       Herbs/Spices       Fungi  
 Other: \_\_\_\_\_       Unknown

If waterborne, type:  
 Drinking water – bottled       Drinking water – municipal  
 Drinking water – private well       Drinking water – surface water  
 Drinking water – other       Ice  
 Recreational – treated       Recreational – untreated  
 Other: \_\_\_\_\_       Unknown

Additional source details: \_\_\_\_\_  
\_\_\_\_\_

Evidence of mode of transmission (check all that apply):

*Epidemiological:*  
 Cases had history of exposure to implicated source  
 Case control study showed elevated risk for cases exposed to implicated source  
 Cohort study showed elevated risk for cases exposed to implicated source

*Environmental investigation:*  
 Identified critical control point failures linked to implicated source  
 Traceback identified common source

*Laboratory:*  
 Pathogen identified in food handler  
 Pathogen/toxin/chemical identified in food, water, animal, or environmental sample

*Other:*  
 Other (specify under Event Description)  
 No evidence obtained

Contributing factors (check all that apply):

*Food:*  
 Cross contamination  
 Improper cooling  
 Improper hot holding  
 Contaminated at source  
 Inadequate reheating  
 Infected food handler  
 Inadequate cooking

*Water:*  
 Untreated water source  
 Treated water – treatment failure  
 Treated water – storage and/or distribution failure

*Environmental:*  
 Inadequate environmental sanitation

*Person-to-person:*  
 Poor hygiene  
 Personal caregiver contact  
 Sexual partner contact  
 Exposure to confirmed/probable cases

*Other:*  
 Other (specify under Event Description)

**PUBLIC HEALTH INTERVENTIONS (CHECK ALL THAT APPLY):**

Boil water advisory/order       CNPHI – Public Health Alert issued       Enhanced passive surveillance for cases       Cohorting/isolation of cases  
 Cohorting of staff       Education       Exclude staff       Immunize susceptible  
 Policy change       Press release       Product recall       Sanitize facility  
 Screening       Screening       Restriction of facility admission/transfer       Restriction of visitors  
 Active surveillance for cases       Close facility       Other: \_\_\_\_\_

**EVENT DESCRIPTION:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RECOMMENDATIONS FOR POLICY/PRACTICE CHANGE(S):**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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## DATA DICTIONARY AND GUIDELINES FOR COMPLETING THE ENTERIC OUTBREAK SUMMARY REPORT FORM

INITIAL VS. FINAL REPORT:	
<b>INITIAL REPORT:</b>	Upon suspicion of a communicable disease outbreak, please check off "INITIAL REPORT". Complete all sections that are known at the time the initial report is submitted.
<b>FINAL REPORT:</b>	Once the outbreak investigation is over, re-submit the report form and check off "FINAL REPORT". Complete all sections that are known at the time the final report is submitted. Ensure that the same outbreak title is provided so that the initial and final reports can be linked together.
<b>Today's date:</b>	Enter the date the outbreak summary report form was filled out.
<b>Contact person/phone/fax:</b>	Contact information of the person submitting the outbreak report form or to whom questions about the outbreak should be directed.
EVENT IDENTIFICATION AND DURATION:	
<b>Outbreak title:</b>	Do not use the name of the implicated facility/community. Instead, outbreak titles should use <syndrome or organism detected> and <type of facility> as the naming convention. For example, " <i>E. Coli Outbreak in Long Term Care Facility</i> " (if organism is known), or " <i>Enteric Illness in Long Term Care Facility</i> " (if etiologic agent unknown).
<b>CPL outbreak code:</b>	If applicable, include the outbreak code assigned to the outbreak by Cadham Provincial Laboratory. Leave blank if none assigned.
<b>Date outbreak investigation started:</b>	Date the public health authority or facility started the outbreak investigation.
<b>Date outbreak investigation ended:</b>	Date the public health authority or facility closed the outbreak investigation. This field is only applicable when submitting the final report.
<b>Earliest known case onset date:</b>	The date when the first case involved in the outbreak first experienced symptoms.
<b>Onset date of most recent case:</b>	The date when the last case involved in the outbreak first experienced symptoms.
CASE INFORMATION:	
<b>Case definition:</b>	Enter the final definition that was used during the outbreak investigation. The use of case definitions is very important in epidemiology in order to standardize criteria for identification of cases. All case definition(s) must include the three classical dimensions of epidemiological variables: person, place, and time.
<b># Lab confirmed case(s):</b>	Number of cases for whom laboratory results are available and are positive for the pathogen/agent associated with the outbreak. Consider both primary and secondary cases.
<b># Clinical case(s):</b>	Cases for whom laboratory results are not available but who have a clinical presentation which matches the clinical definition of a case. Cases can be epidemiologically linked (place, person and time) to the outbreak. Consider primary and secondary cases.
<b>Total # hospitalized:</b>	The number of cases admitted to hospital for $\geq 24$ hours for treatment of the illness associated with the outbreak (exclude ER visits).
<b>Total # deaths:</b>	The number of cases for whom information was available about death resulting from illness associated with the outbreak.
ADDITIONAL INSTITUTION OUTBREAK INFORMATION (IF APPLICABLE):	
Enter this information only if outbreak occurred in an institutional setting.	
<b>Total # previously immunized:</b>	Total number of employees at the institution or patients/residents residing in or attending the institution immunized against the outbreak etiologic agent prior to the outbreak.
<b>Total # at risk:</b>	Total number of employees at the institution or patients/residents residing in or attending the institution at the time the outbreak occurred and have the potential to be exposed to the pathogen.
<b>Total # cases:</b>	Total number of employees at the institution or patients/residents residing in or attending the institution at the time the outbreak occurred.
<b>Total # hospitalized:</b>	Total number of employees at the institution or patients/residents residing in or attending the institution with stay in hospital $\geq 24$ hours for treatment of the illness associated with the outbreak.
<b>Total # deaths:</b>	Total number of employees or patients/residents for whom information was available about death resulting from the illness associated with the outbreak.

<b>ORGANISM DESCRIPTION:</b>	
<b>Agent or toxin confirmation:</b>	The agent, pathogen, or toxin responsible for illness experienced by outbreak cases. <i>Lab confirmed:</i> The infectious agent or toxin was identified through laboratory testing in at least one case associated with the outbreak. <i>Suspected:</i> Laboratory evidence does not exist. The agent or toxin is suspected based on knowledge of the source and/or clinical presentation of cases. <i>Unknown:</i> The infectious agent or toxin is not known.
<b>Etiologic Agent/Organism:</b>	See Appendix 1 for a list of diseases monitored by the Enteric Module of Outbreak Summaries.
<b>Subtype:</b>	See Appendix 1 for a list of disease subtypes included.
<b>Phage type &amp; PFGE:</b>	These are nomenclature for microorganisms based on specific laboratory test. They are used to differentiate strains in order to identify whether case and suspected source retrieved microorganisms are the same. If available, these will likely only be reported in the final summary.
<b>Agent details:</b>	Additional information on the agent. This can include further characterization such as genotype, etc.
<b>EXPOSURE DETAILS:</b>	
<b>Exposure/Transmission setting:</b>	The setting in which the outbreak occurred (e.g. where the cases were exposed to the infectious agent or toxin) or if not known, the setting where cases became ill. Select one or more exposure/transmission setting(s), if applicable. If "other", please specify in the space provided.
<b>Facility/Community name:</b>	Provide name of facility or community where the exposure took place, if known. It is important to note that the location of cases (next section) may differ from the place of exposure if cases were exposed in a different location than where they reside.
<b>Province &amp; RHA of exposure:</b>	Province and Regional Health Authority where exposure likely occurred.
<b>LOCATION DETAILS:</b>	
<b>Location of cases:</b>	Location refers to the residence of the case(s). <i>Localized to one RHA:</i> The residence of cases is confined to one RHA. <i>Multiple RHAs:</i> The residence of cases involves several RHAs within the same province. <i>&gt;1 province:</i> The residence of cases involves more than one province. <i>International:</i> The residence of cases involves more than one country. <i>Unknown:</i> The residence of cases is not known.
<b>Case(s) province/territory:</b>	Specify the residence of the cases.
<b>Specify RHA:</b>	Specify the RHA(s) of residence of the cases.
<b>First Nations community:</b>	Specify whether cases reside in First Nations community.
<b>SOURCE DETAILS:</b>	
<b>Primary mode of transmission:</b>	Specify the primary mode of transmission. Consider the context of the outbreak (e.g. if the mode is from consumption of a food, the mode of transmission is food borne, regardless of how the food was contaminated). <i>Food borne:</i> Food (meat, vegetable or other) intended for human consumption and carries the pathogen associated with human illness. Includes all cooked, processed and raw foods. <i>Waterborne:</i> water source carries the pathogen or agent. Exposure is through water consumption or recreational use. <i>Person-to-person:</i> Ill persons or asymptomatic carriers are the source for other cases. Passed by person-to-person contact or shared environments (e.g. bathrooms). <i>Other:</i> The mode of transmission is known but not covered by the above categories (e.g. animal exposure, soil, etc). <i>Unknown:</i> The mode of transmission has not been identified.
<b>Food/Water type:</b>	Specify food or water type, if known.
<b>Additional source details:</b>	Include any additional source information such as specific type or brand of food product, etc.
<b>Evidence of mode of transmission:</b>	<i>Epidemiological:</i> 1. Background information is gathered on each case, usually using standard case reporting form. This usually includes information about case exposures (e.g. what foods did they consume, where did they go). 2. A study where groups of people who have become ill and those who haven't are identified. Questions about the risk factor responsible (e.g. food consumed) are asked of both groups to

	<p>determine how frequently it was reported for each.</p> <p>3. A study involving a group of people all associated with an outbreak setting, whether or not they are cases (e.g. all attendees of a church supper). Information on if they became ill and what they were exposed to is assessed.</p> <p><i>Laboratory:</i> Laboratory evidence that the pathogen was found in a food handler from the establishment.</p> <p><i>Environmental investigation:</i></p> <p>1. Identified critical control point failures linked to implicated source. Includes visits by an outbreak investigator to the site where processing of food, water or other sources occurs. This could include investigations of the site itself in addition to the processing of the source.</p> <p>2. This is a process which identifies the origin of the food, water or other source of the outbreak. It may also identify other places where the suspected source had been distributed.</p> <p><i>Other:</i> Other evidence to support the mode of transmission.</p>
<b>Contributing factors:</b>	<p><b>Food:</b></p> <p><i>Cross Contamination:</i> The spreading of bacteria and/or disease by carrying them from an infected area to a non-infected area. E.g. raw food or their fluids touch or drip into foods that are not subsequently cooked.</p> <p><i>Improper Cooling:</i> Foods are refrigerated in large quantities or stored in a manner in which cooling is impeded, allowing pathogens to multiply.</p> <p><i>Improper Hot Holding:</i> The temperature exposure of cooked foods that are held warm is insufficient to prevent bacterial growth and may even promote such growth over time.</p> <p><i>Inadequate reheating:</i> The time/temperature exposure during reheating or heat processing of a previously heated food (which often has been cooled, and frequently held overnight) was inadequate to kill the pathogen or inactivate heat-labile toxins.</p> <p><i>Infected food handler:</i> A food handler who is infected with the organism responsible for the outbreak. He / she may be a symptomatic or an asymptomatic carrier.</p> <p><i>Inadequate cooking:</i> The time/temperature exposure during initial heat processing or cooking was inadequate to kill the pathogen under investigation.</p> <p><b>Water:</b></p> <p>1. <i>Untreated source water:</i> An interruption of the water treatment process in either drinking or recreational water. This would include: no disinfection, inadequate concentration/contact time, inadequate filtration, inadvertent bypass of treatment process, poorly operated/poorly maintained system; poorly maintained system; and inadequate treatment system for use/demand.</p> <p>2. <i>Treated water – treatment failure:</i> Contamination of water by human/animal feces. Overflow of sewage or outfalls near water intake. Heavy rains and or flooding. Seepage/surface runoff of contaminants into well/spring. Chemical contamination. Ingestion of untreated water. Water temperature of favouring microbial growth.</p> <p>3. <i>Treated water – storage and/or distribution failure:</i> this includes: unprotected storage tanks, water runoff/sewage seepage/nearby animal clustering, cross connections, back siphonage, contamination of mains during construction/repair, water temperature favouring microbial growth, water stagnation, and contamination of water by human/animal feces.</p> <p><b>Person-to-person:</b></p> <p>1. Person responsible for the transmission of the organism did not practice proper hygiene.</p> <p>2. Infection transferred from a care giver to a dependent; a dependent to a care giver; or both.</p> <p>3. Infection transferred between persons who are sexual partners.</p> <p><b>Environmental:</b> Environment is not maintained in a sanitary manner (e.g. washrooms).</p> <p><b>Other:</b> Other evidence of contributing factor(s).</p>
<b>PUBLIC HEALTH INTERVENTIONS:</b>	
<b>Boil water advisory/order:</b>	A preventative measure issued to protect the health of the community from water borne infectious agents.
<b>CNPHI – Public Health Alert issued:</b>	Use of the Public Health Alerts application within CNPHI to notify other public health jurisdictions of the outbreak.
<b>Close facility:</b>	Closure of facilities (e.g. school, day care, areas of public gathering) depending upon the epidemiology of the outbreak (e.g. severity of infection, high attack rates, severe complications).
<b>Cohorting/isolation of cases:</b>	The physical separation of infected individuals from those uninfected for the period of communicability of a particular disease.
<b>Cohorting of staff:</b>	The practice of assigning specific personnel to care only for patients/residents known to be exposed to, or infected with, the same organism.
<b>Education:</b>	Communicates facts, ideas and skills that change knowledge, attitudes, values, beliefs,

	behaviours, and practices of individuals, families, systems, and/or communities.
<b>Exclude staff:</b>	Exclude infectious or exposed staff from work.
<b>Immunize susceptibles:</b>	Provide vaccination to individuals considered at risk for developing infection.
<b>Policy change:</b>	Policy development results in law, rules and regulation, ordinances, and policies.
<b>Press release:</b>	A formal communication about the outbreak investigation and response to the media.
<b>Product recall:</b>	A method of removing or correcting violative products that may present a health hazard to the consumer. It is an action taken by a manufacturer, distributor, or importer to carry out their responsibility to protect the public health and well-being.
<b>Sanitize facility:</b>	Effective cleaning, disinfection, and sterilization of patient care equipment and/or areas of the facility where disease transmission may occur.
<b>Screening:</b>	Screening for symptoms or infection/colonisation (through laboratory testing) in selected facility staff, residents, and visitors or among travellers.
<b>Restriction of facility admission/transfer:</b>	Suspension of new entries, transfers, and/or elective surgeries.
<b>Restriction of visitors:</b>	Request persons at risk of acquiring or transmitting the disease causing the outbreak not to visit the facility.
<b>Active surveillance for cases:</b>	Active searching for cases within a population.
<b>Enhanced passive surveillance for cases:</b>	Increasing awareness to encourage reporting of cases.
<b>Other:</b>	Provide additional information for other public health interventions.
<b>EVENT DESCRIPTION:</b>	
Please include key points such as age range of cases, sex distribution, symptoms being experienced, etc.	
<b>RECOMMENDATIONS FOR POLICY/PRACTICE CHANGE(S):</b>	
This section will likely only be completed at the end of an outbreak investigation. Please include any recommendations or lessons learned from the outbreak investigation in this space.	

## APPENDIX 1. LIST OF ENTERIC DISEASES MONITORED THROUGH THE ENTERIC, FOOD AND WATER BORNE DISEASE MODULE OF CNPHI OUTBREAK SUMMARIES

Agent Type:	Etiologic Agent/Organism:	Etiologic Agent Subtype:
Bacterium	Bacillus	cereus, sp
	Brucella	abortus, canis, melitensis, suis
	Campylobacter	coli, concisus, curvus, fetus ssp fetus, hyointestinalis, jejuni, jejuni/coli, lanienae, lari, showae-like, sp, upsaliensis
	Clostridium	Botulinum, Difficile, Perfringens, sp
	Escherichia	coli, coli Non-O157 VTEC, coli Non-Typed VTEC, coli O103, coli O103:H11, coli O103:H2, coli O103:H25, coli O111, coli O113:H21, coli O114, coli O118, coli O119, coli O121:H19, coli O125, coli O126, coli O127, coli O127:NM, coli O127a, coli O128, coli O128:H2, coli O142, coli O145:NM, coli O157 VTEC, coli O18, coli O26, coli O26:H11, coli O26:NM, coli O28:NM, coli O44, coli O45:H2, coli O55, coli O5:NM, coli O86, coli O86a, coli O8:H8
	Legionella	bozemanii, dumoffii, longbeachae, micdadei, pneumophila, sp
	Listeria	monocytogenes, sp
	Salmonella	Any subtype, if known (e.g. enteritidis, agona, typhi, etc.)
	Shigella	boydii, dysenteriae, flexneri, sonnei
	Staphylococcus	aureus, sp
	Streptococcus	pyogenes (Group A), sp
	Vibrio	alginolyticus, bercovieri, cholerae O1, cholerae O1 bio E1 Tor, cholerae O139, cholerae non-O1, cholerae non-O1/O139, fluvialis, furnissii, hollisae, metschnikovii, mimicus, mollaretii, paraheamolyticus, sp, vulnificus,
	Yersinia	enterocolitica, frederiksenii, intermedia, kristensenii, pseudotuberculosis, rohdei, sp
Parasite	Cryptosporidium	parvum, sp
	Cyclospora	cayetanensis, sp
	Entamoeba	histolytica, sp
	Giardia	duodenalis, intestinalis, lamblia, sp
	Taenia	saginata, solium, sp
	Toxoplasma	gondii, sp
Toxin / Chemical Poison	Trichinella	nativa, nelsoni, pseudospiralis, spiralis, sp
	Antimony	N/A
	Arsenic	N/A
	Cadmium	N/A
	Carbonate	N/A
	Chlorinated hydrocarbon	N/A
	Ciguatera toxin	N/A
	Copper	N/A
	Fiddlehead Toxin	N/A
	Histamine (incl Scromboid) Poisoning	N/A
	Monosodium glutamate	N/A
	Nicotinic acid	N/A
	Nitrate	N/A
	Other Marine toxin	N/A
	Shellfish poisoning	N/A
	Sodium hydroxide	N/A
	Tetrodotoxin / Puffer-fish poisoning	N/A
	Tin	N/A
Zinc	N/A	
Virus	Adenovirus	N/A
	Astrovirus	N/A
	Enterovirus	N/A
	Hepatitis A	N/A
	Hepatitis E	N/A
	Norovirus	N/A
	Rotavirus	N/A
Yeast / Fungi	Amanita	N/A
	Aspergillus	N/A
	Claviceps	N/A
	Coccidioides	N/A
	Cryptococcus	N/A
	Dermatophyte	N/A
	Histoplasma	N/A
Mushroom poisoning	N/A	