

National Outbreak Reporting System (NORS)

Appendix E — List Value

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1. INTRODUCTION

This document provides a list of values and select definitions for fields in the National Outbreak Reporting System (NORS). This document has been organized to correspond to the sections in NORS and can be used in conjunction with the NORS Guidance document, the NORS Training Documents, and the NORS form on the [NORS website](#). For some fields, additional values can be added by the user. Otherwise, please contact NORSAdmin@cdc.gov to add a value to list.

2. SIGNS & SYMPTOMS

List values for fields in the Signs and Symptoms section are displayed below.

- Abdominal cramps
- Abdominal swelling
- Abdominal tenderness
- Alopecia (hair loss)
- Altered cry
- Altered mental status
- Anemia
- Anorexia (loss of appetite)
- Arthralgia (joint pain)
- Asymptomatic
- Ataxia (loss of coordination)
- Backache
- Belching
- Bilateral rhonchi
- Bloody stools
- Bloody vomitus
- Blurred vision
- Body ache
- Bradycardia (decreased heart rate)
- Burns (e.g., chemical burns)
- Cardiac symptoms (nonspecific)
- Chest pain
- Chest tightness
- Chills
- Clay colored stool
- Coma
- Congestion
- Conjunctivitis (pinkeye)
- Constipation
- Cough
- Dark stool
- Dark urine
- Dehydration
- Descending paralysis
- Diarrhea
- Difficulty walking
- Dilated pupils
- Diplopia (double vision)
- Disoriented
- Dizziness
- Dry mouth
- Dysarthria (speech difficulty)
- Dysconjugate gaze
- Dysesthesia (sensory impairment)
- Dysphagia (difficulty swallowing)
- Dysuria (pain with urination)
- Ear ache/pain
- Ear infection
- Ear symptoms (unspecified)
- Edema (swelling)
- Electrolyte imbalance
- Elevated ALT
- Eosinophilia
- Erythema (skin redness)
- Euphoria
- Eye discharge
- Eye irritation
- Eye symptoms (unspecified)
- Facial swelling
- Facial weakness
- Faintness/lightheadedness
- Fatigue
- Fever
- Fixed pupils

- Floating sensation
- Flu-like symptoms
- Flushing
- Gas/bloating
- Gastroenteritis (unspecified)
- Greasy stool
- Hallucinations
- Headache
- Heartburn
- Hematuria (blood in urine)
- Hemolytic anemia
- Hemoptysis
- Histamine reaction
- Hoarse
- Hot flash/flush
- Hypotension (low blood pressure)
- Hypoxia
- Insomnia
- Intussusception
- Irritable
- Irritated skin
- Itching
- Jaundice
- Legionnaires' disease
- Lethargy
- Loss of consciousness
- Lymphadenopathy (swollen glands)
- Malaise
- Memory loss
- Meningitis symptoms
- Metallic taste
- Methemoglobinemia
- Mouth sores
- Mucus in stool
- Muscle cramps
- Muscle fatigue
- Muscle spasm
- Myalgia (muscle ache/pain)
- Nausea
- Neurological symptoms (unspecified)
- Night sweats
- Numbness
- Oral swelling
- Pain
- Painful eyes
- Pallor
- Palpitations
- Paralysis
- Parasthesia (tingling sensation)
- Periorbital edema
- Pharyngitis
- Photophobia
- Pneumonia
- Pontiac Fever
- Poor feeding
- Pre-term labor
- Ptosis
- Rash
- Red eyes
- Renal failure
- Respiratory arrest
- Respiratory irritation
- Respiratory symptoms (unspecified)
- Rhabdomyolysis (muscle breakdown)
- Rhinitis (nasal congestion)
- Seizures
- Shakes
- Shock
- Skin blisters
- Skin infection
- Skin symptoms (unspecified)
- Sneezing
- Sore throat
- Sores
- Stiff neck
- Sweating
- Swollen tongue
- Syncope
- Tachycardia (rapid heartbeat)
- Tachypnea (shortness of breath)
- Taste disturbance
- Temperature reversal
- Thirst
- Thrombocytopenia
- Tinnitus (ringing in ears)
- Toothache
- TTP (Thrombotic thrombocytopenic purpura)

- Unknown
- Urinary tract infection
- Urinary urgency
- Urticaria (hives)
- Vomiting
- Watery diarrhea
- Watery eyes
- Watery stools
- Weak pulse
- Weakness
- Weight loss
- Wheezing

3. LABORATORY AND ENVIRONMENTAL INVESTIGATION

List values for fields in the Laboratory and Environmental Investigation section are displayed below.

3.1 Sampling Locations (Waterborne Disease Outbreak Environmental Investigation section)

- Cooling Tower
- Distribution System - Water Utility
- Faucet/Tap
- Hot Tub/Spa/Whirlpool
- Lake/Reservoir
- Pool
- Shower
- Sink
- Other (specify)
- Unknown

4. ETIOLOGY AND ISOLATES

List values for fields in the Etiology and Isolates section are displayed below.

4.1 Source/sample type

- Patient/human
- Food
- Environmental
- Water
- Animal
- Unknown

5. SETTINGS

5.1 Settings

List values for the setting fields found throughout the Settings section are displayed below. These fields include:

- Setting(s) of Exposure: Animal Contact, Environmental Contamination, Food, Person-to-Person, and Indeterminate/Unknown (Major Setting and Setting 1 – Setting 4)
- Setting(s) of Preparation: Food (Setting 1 – Setting 4)
- Setting(s) of Exposure and Implicated Vehicle Description: Water (Setting of Exposure)

Some picklist values are only allowed for a subset of outbreaks, based on the mode of transmission, as indicated by icons in the table below. Allowable food setting values are the same for the Setting of Exposure section, which captures the setting in which the implicated food was eaten, and the Setting of Preparation.

 Animal contact

 Environmental contamination

 Food

 Person-to-person

 Unknown/indeterminate

 Water

	Agricultural feed store	A retail store which sells products for agriculture, lawn and garden maintenance, livestock, equine, and pet care.
	Animal shelter or sanctuary	A facility that houses homeless, lost, or abandoned animals.
     	Backcountry/wilderness area	An undeveloped outdoor area with no amenities.
	Beach	The shore of a body of water that can be privately or publicly owned land.
	Camp/cabin	Any designated place providing simple group accommodations or a gathering place outdoors, such as campgrounds, summer camps, or day camps.
    	Campground	An outdoor area developed for tent or RV camping with some amenities.
	Casino	A building dedicated to gambling. <i>Note: If the outbreak occurred at a casino with a hotel, please select the setting in which exposures occurred. If exposures occurred in both, please select "Hotel/motel".</i>
     	Child daycare/preschool	A facility designed to care for children during the day when not in school. This includes preschools and daycares based in residential homes.
	Community/municipality	A city, town, or other settlement where a large group of people live and work served by a community or municipal water system.
	Commissary/rental kitchen	An established or commercial kitchen/prep-area that is rented out or intended for temporary or shared use.
	Caterer	The kitchen or store front of a caterer, in which food is typically prepared to be delivered/set-up and eaten at another location.
     	Correctional/detention facility	A prison, jail, juvenile detention center, immigration detention center, or similar facility.

	Event space	A venue designed to hold short-term events that does not offer overnight accommodations and does not fall into one of the other available setting categories. Event spaces may include convention centers, community centers, or reception venues other than hotels/motels, etc.
	Factory/industrial facility	An industrial facility where goods are produced or processed, such as a factory, warehouse, power plant, mill, or refinery.
	Farm/dairy/agricultural setting	An area of land or water (for aquafarming) where crops or animals are raised. This includes private and public farms, dairies, agricultural sites that host events or tours, and other agricultural facilities that do not fall into other available setting categories.
	Fairground	A dedicated location where fairs, circuses, and exhibitions are held. <i>Note: for outbreaks where a food truck prepared food at a fairground or festival venue, please select "Food truck/street vendor" as the location where food was prepared and "Fairground" or "Park/outdoor area" as the location where eaten, as appropriate.</i>
	Fee-based facility/membership club	A place or club where individuals pay a fee or have a membership to attend, typically dedicated to an interest or activity. E.g., YMCA or athletic club.
	Food truck/street vendor	A vendor that sells or distributes food from a truck, stall, or other temporary/mobile food service. <i>Note: for outbreaks where a food truck prepared food at a festival venue, please select "Food truck/street vendor" as the location where food was prepared and "Fairground" as the location where eaten, if appropriate. If the food was distributed by the food truck but not prepared in the truck, please select the best match for where the food was prepared.</i>
	Grocery store/bakery/deli/convenience store	A shop in which food is prepared and/or eaten, for example, the deli, bakery, or seafood department of a grocery store.
	Hospital	A healthcare institution providing inpatient medical or surgical treatment and nursing care for sick or injured persons.
	Hotel/motel	An establishment that provides lodging and may offer meeting rooms for conferences/conventions or common areas for guests, such as a hotel, motel, lodge, inn, hostel, or resort.
	Laboratory	A laboratory that uses animals for research, teaching, or testing purposes.

	Live animal market	A place where customers can buy a live animal or live bird to be slaughtered for food.
	Long-term care/nursing home/assisted-living facility	A facility designed to provide long-term nursing or personal care, such as nursing homes and assisted living facilities. A long-term care facility may provide care to elderly or disabled persons, or other groups. <i>Note: Independent living facilities that do not provide care services and are not associated with a continuous care community should be classified as “Private residence—multi-unit housing”.</i>
	Military facility	A facility directly owned by or for the military or one of its branches that shelters military equipment and personnel, and facilitates training and operations
	Mobile home/trailer park	A place where mobile homes are located.
	Office/indoor workplace	An office building or other workspace that does not fall into one of the other available setting categories. For foodborne outbreaks, this includes outbreaks in which the implicated food was prepared/eaten at a workplace, but not at a work cafeteria.
	Organized camp facility	A facility designed and operated specifically to host organized camps, such as summer youth camps. <i>Note: If a camp is hosted in a facility with a different primary function, such as a school or conference center, the setting of exposure or preparation should be reported according to the facility’s primary function, and the event type should be reported as camp.</i>
	Other healthcare facility	A healthcare facility other than a long-term care facility or hospital, as defined above.
	Other (specify)	If the type of setting cannot be found in the provided list, select “Other (specify)” and specify the type of setting in the space provided.
	Outdoor Area (Public/Private)	An outdoor area that does not fall into other available setting categories, such as private land, botanical gardens, or green space not defined as a park.
	Outdoor Place of Work	An outdoor workplace other than setting of exposures listed above, such as a dock, construction site, or tree nursery.
	Park – Amusement/Waterpark	A park that features various attractions, such as rides and games, as well as other events for entertainment purposes. A waterpark might feature water play areas such as swimming pools, water slides, splash pads, water playgrounds, and lazy rivers, as well as areas for bathing, swimming, and other barefoot environments.

	Park - Community/Municipal	A park owned by community/municipality.
	Park - State Park	A park or other protected area managed by the state.
	Park – Other/Unspecified	A park in which the ownership was not known or clear.
	Park/outdoor area	A park, greenspace, or other outdoor area not captured by other settings such as “backcountry/wilderness area” or “farm/dairy/agricultural setting”. This includes sites that have some amenities (e.g., bathrooms, pavilions, and grills), and sites that utilize temporary sanitation facilities (e.g., portable toilets and sinks) to host events, such as races, parades, or festivals held in parks, parking lots, or streets.
	Petting zoo	A place where animals are kept or temporarily held for the specific purpose of viewing, touching, holding, and petting. <i>Note: Many petting zoos are held within other settings, e.g. zoos, fairgrounds, and schools. For a petting zoo within a zoo where the exact exposure location within the zoo is not known (given that animal contact exposure includes exposure to an animal's environment), select both Petting zoo and Zoo or animal exhibit as Settings. For other petting zoo locations, if all primary cases were exposed at the petting zoo, select only petting zoo. Multiple settings may be selected if some primary cases could not be linked to the petting zoo.</i>
	Residence—Single-family home	A detached, private residence, e.g., a house. Short-term rentals of single-family homes should be reported here and may be specified as a vacation rental in the Other (specify) field.
	Residence—Multi-unit housing	A private residence or residential community wherein housing units share one or more walls with other units. Townhomes, apartments, and condos are included in this category. Independent living facilities and retirement communities that do not provide personal or medical care should be reported here and may be specified in the Setting of Exposure Remarks field. Short-term rentals in multi-unit housing should be reported here and may be specified as a vacation rental in the Setting of Exposure Remarks field.
	Recreational facility	A public facility designed for recreational activities, such as swimming, basketball, or racquetball.
	Religious facility	A church, temple, or other facility designed to house religious meetings.
	Restaurant	Any establishment designed to provide meals for paying customers.

	Restaurant: Buffet	A buffet-style restaurant is any restaurant in which food is cooked and served from a buffet station. Some restaurants have both sit-down and buffet options; choose whichever best fits the meal leading to the outbreak.
	Restaurant: "Fast-food" (drive up service or pay at counter)	A fast-food restaurant is any restaurant where patrons are not served by a server at a table and patrons are responsible for carrying their own food tray.
	Restaurant: Other	A restaurant that does not fall under the categories of "buffet," "fast-food," or "sit-down dining" restaurant, such as a bakery or stand-alone deli. Provide additional details in the Setting of Exposure/Preparation Remarks section below.
	Restaurant: Sit-down dining	A restaurant where staff direct patrons to their seat and are responsible for clearing the tables. Many traditional sit-down restaurants now offer patrons an opportunity to have their food prepared for takeout; identify these restaurants in "location where food was prepared" as sit-down dining restaurants.
	School/college/university	A school setting, such as a university, college, kindergarten, grade school, or summer school. This includes residential facilities at schools (e.g., dormitories).
	Shelter/group home/transitional housing	A homeless shelter, group home, or other temporary, communal housing.
	Ship/boat	Any ship or boat, such as a cruise ship. Some cruise ship outbreaks are not reportable to NORS and should be reported directly to the Vessel Sanitation Program (http://www.cdc.gov/nceh/vsp/default.htm).
	Soup kitchen/meal center	A place where food is offered for free or at below-market price to persons experiencing homelessness or undernutrition
	Subdivision/Neighborhood	A district or area of housing, within a community or town served by either a private water system or a municipal/community water system.
	Unknown	Indicate if no setting of exposure or food preparation could be identified.
	Veterinary clinic	A hospital, doctor's office, or medical facility for medical care and treatment of animals.

	Zoo or animal exhibit	<p>A facility in which animals are confined within enclosures, displayed to the public, and in which they may also be bred. If exposure occurred at the petting area of the zoo, please select “Petting zoo” as the setting.</p> <p><i>Note: If the petting zoo is within the zoo and the exact exposure location within the zoo is not known (given that animal contact exposure could be simply due to an exposure to the animal's environment), select both Petting zoo and Zoo or animal exhibit as Settings.</i></p>
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5.2. Associated Events

List values for fields in Associated Events section are displayed below.

- Class/meeting (single day) — A class, training, or meeting. This event type is intended to capture single day, local gatherings.
- Convention/conference (multiday) — A large, multiday gathering where participants may have travelled to attend, and many participants spend the night in the same hotel or neighborhood.
- Day trip/field trip — A group of people travelling together for no more than one day. Day trips can include organized groups, such as a schools, daycares, and church groups, or private family/friend groups.
- Fair/Festival— A fair, festival, circus, etc. in which temporary exhibits and vendors are open for public visitation
- Farmer's market — A market where vendors set up temporary shops to sell produce and homemade/small batch goods to the public
- Family reunion/gathering — A family gathering that includes members of multiple households.
- Mass evacuation/disaster — A mass evacuation or disaster that may cause exposure community-wide or in a shelter or other concentrated gathering of those affected.
- Mud run/obstacle course — A sporting event in which participants run through water or mud and/or complete other obstacles that may expose them to untreated water or soil.
- Other (specify) — Select if the outbreak was associated with an event that does not fall under the other categories listed and specify in the space provided.
- Overnight trip/retreat — A group of people travelling together or meeting outside of the home for more than one day for an event that does not fall into other available event categories. Examples include spiritual or yoga retreats, regional bus tours, and family vacations.
- Party/picnic/banquet — A party, picnic, or banquet not captured in any other event option.
- Themed activity day — A special activity such as water day, animal day, or a carnival at a school, daycare, church, etc.
- Sporting event/practice — A sporting event such as a match, race, or tournament, which may be organized through schools, professional sporting organizations, or public/community groups, or a team practice.
- Unspecified — Select if the outbreak was associated with an event, but the nature of the event was unknown/unspecified.
- Wedding — A wedding ceremony, reception, or other wedding festivity.
- Wilderness camping/hiking — A trip in nature with limited access to man-made amenities, where water sources, food preparation implements, and sanitation facilities may be rudimentary or non-existent.

- Youth day camp — A multiday gathering of children or adolescents, outside of their normal social group, where participants return home each night. Day camps often occur in multiuse settings, like schools, churches, or parks.
- Youth overnight camp — A multiday gathering of children or adolescents, outside of their normal social group, where participants sleep at the facility overnight. An overnight camp may occur at a dedicated camp facility, such as a YMCA camp, or use the facilities at a university, farm, campground or other setting.

Settings and Associated Events examples

Scenario	Mode	Setting(s)	Associated event
Employees from multiple branches of a company become ill after a public vomiting incident during a company-wide training at the main office	Person-to-person	Office/indoor workplace	Class/meeting (single day)
Individuals attend a multiple day conference at a hotel and are exposed to <i>Legionella</i> through a decorative water feature	Water	Hotel/motel	Convention/conference (multiday)
School children become ill after swimming in contaminated water during a school outing to a waterpark	Water	Park – Amusement/waterpark	Day trip/field trip
Art fair attendees become ill after eating contaminated food from a food truck at the county fairgrounds	Food	Exposure/where eaten: Fairground Preparation: Food truck/street vendor	Fair/Festival
Individuals become ill after sampling goods from a local bakery at a farmer’s market hosted at a park	Food	Exposure/where eaten: Park/outdoor area Preparation: Grocery store/bakery/deli/convenience store	Farmer's market
Several households become ill after sharing likely contaminated food during Thanksgiving dinner at a relative’s house	Food	Exposure/where eaten: Residence – single family home Preparation: Residence – single family home	Family reunion/gathering
Community members drink water from a well that was contaminated with flood waters and was not remediated	Water	Community/municipality	Mass evacuation/disaster

Fire evacuees become ill while staying in a temporary shelter. No common food or water sources were identified among cases, but people from one household reported diarrhea the day before the fire.	Person-to-person	Shelter/group home/transitional housing	Mass evacuation/disaster
Race participants become ill after getting water in their mouths during an obstacle course event at a public beach.	Water	Beach	Mud run/obstacle course
Funeral goers are exposed to contaminated food at a catered reception in a church multipurpose room	Food	Exposure/where eaten: Religious facility Preparation: Caterer	Other (specify) - Funeral
A group of friends becomes ill after a road trip during which they shared hotel rooms and ate all meals together.	Unknown	Unknown	Overnight trip/retreat
Children become ill after attending a birthday party at an indoor play place where a child had vomited and likely contaminated the playground equipment earlier in the day.	Environmental	Other(specify) - Indoor play place	Party/picnic/banquet
Children become ill after a daycare used non-potable water for slip-and-slide and kiddie pools.	Water	Child daycare/preschool	Themed activity day
Children and family members become ill after attending Grandparents' Day activities at an elementary school. One child reported feeling ill before going to school the day of the event.	Person-to-person	School/college/university	Themed activity day
Triathletes become ill after swimming in a lake at a state recreation area and using temporary sanitation facilities with no hand washing stations. No environmental specimens were tested.	Unknown	Park/outdoor area	Sporting event/practice
Outbreaks occur among several wrestling teams that attended a regional tournament in a university gym facility. One wrestler reported feeling ill the morning of the tournament but attended anyway.	Person-to-person	School/college/university	Sporting event/practice
Individuals from several counties become ill after attending a large wedding at a vineyard. No food or water samples were available for testing, and no wedding attendees reported attending while sick.	Unknown	Farm/dairy/agricultural setting	Wedding

Boy Scouts become ill after drinking inadequately treated water from a mountain creek during a backpacking trip.	Water	Backcountry/wilderness area	Wilderness camping/hiking
Teenagers staying in a college dormitory while attending music camp become ill after exposure to an infected peer.	Person-to-person	School/college/university	Youth overnight camp
University students become ill after encountering infected cattle during a class visit to a nearby dairy farm.	Animal contact	Farm/dairy/agricultural setting	Day trip/field trip
Several individuals become ill after attending a holiday gathering at the home of an extended family member who owns a backyard flock.	Animal contact	Residence – single-family home	Family reunion/gathering
Children become ill after petting and feeding goats at their local nature center during a summer camp.	Animal contact	Petting zoo	Youth day camp

6. IMPLICATED WATER — RECREATIONAL WATER VENUE DESCRIPTION

List values for fields in the Recreational Water Section in the Implicated Water section are displayed below.

6.1 Water Venue (Implicated Water section)

6.1.1 Treated Recreational Water Venue

- Pool – Kiddie/Wading, Permanent
- Pool – Kiddie/Wading, Temporary
- Pool – Other Swimming Pool
- Hot Tub/Spa/Whirlpool
- Temporary Water Slide
- Splash Pad/Interactive Fountain/Water Playground
- Other (specify)
- Unknown

6.1.2 Untreated Recreational Water Venue

- Hot Spring
- Lake/Reservoir
- Ocean
- Pond
- River/Stream
- Spring
- Other (specify)
- Unknown

6.2 Water Venue Subtype (Implicated Water section)

- Indoor
- Outdoor
- Unknown

6.3 Setting of exposure (Implicated Water section)

Please see [Section 5.1](#) for water picklist values.

6.4 Water Treatment Provided at Venue (Implicated Water section)

Note: “Water Treatment” is only available if the Water Exposure is “Treated Recreational Water”

- Disinfection + Filtration + Coagulation/Flocculation
- Disinfection + Filtration
- Filtration + Coagulation/Flocculation
- Disinfection (Only)
- Filtration (Only)
- No Treatment
- Other (specify)
- Unknown

6.5 Water Treatment Description Provided at Venue (Implicated Water section)

Note: “Water Treatment Description” is only available if the Water Exposure is “Treated Recreational Water”

- Biguanide
- Bromine
- Chloramine
- Chlorine (without stabilizer)
- Chlorine Dioxide
- Copper-Silver Ionization
- Cyanuric Acid
- Dichlor/Trichlor
- Hydrogen Peroxide
- Ozone
- Povidone-Iodine
- Ultraviolet (U.V.)
- Other (specify)
- Unknown

7. IMPLICATED WATER — DRINKING WATER SYSTEM DESCRIPTION

List values for fields in the Drinking section in the Implicated Water section are displayed below.

7.1 Water System (Implicated Water section)

- Bulk Water Purchase — Hauled water delivered in a large tank.
- Commercially Bottled Water — Drinking water sold in single units (e.g., bottles or cans).

- Community Water System — A public water system that has ≥ 15 service connections used by year-round residents or regularly serves ≥ 25 year-round residents. A community water system might be owned by a private or public entity providing water to a community, subdivision, or mobile home park.
- Individual/Private Water System (also known as Non-Public Water System) — A water system that does not meet the Environmental Protection Agency's (EPA) definition for a public water system. An individual/private water system is not owned or operated by a water utility. It has <15 service connections or serves <25 people. For more information about public water systems, please refer to the CDC's Drinking Water website (<http://www.cdc.gov/healthywater/drinking/public/>).
- Non-Transient Non-Community Water System — A public water system that is not a community system. A non-transient non-community water system has ≥ 15 service connections or serves ≥ 25 of the same persons for >6 months/year (e.g., a factory or school) but does not serve year-round residents.
- Transient Non-community Water System — A public water system that is not a community system. A transient non-community water system has ≥ 15 service connections or serves an average of ≥ 25 people for ≥ 60 days/year where persons do not remain for long periods of time (e.g., restaurants, highway rest stations, and parks).
- Other (specify)
- Unknown

7.2 Water Source (Implicated Water section)

- Ground Water
- Ground Water & Surface Water
- Ground Water Under Influence of Surface Water
- Surface Water
- Other (specify)
- Unknown

7.3 Water Source Description (Implicated Water section)

- Lake/Reservoir
- Lake/Reservoir & Well
- Ocean
- Pond
- River/Stream
- River/Stream & Well
- Spring
- Well
- Other (specify)
- Unknown

7.4 Water Treatment Provided (Implicated Water section)

- Disinfection

- Disinfection + Filtration
- Filtration
- No Treatment
- Other (specify)
- Unknown

7.5 Water Treatment Description (Implicated Water Section)

- Boiling/Heating
- Chloramine
- Chlorine
- Chlorine Dioxide
- Copper-Silver Ionization
- Cyanurates
- Ozone
- Ultraviolet (U.V.)
- Other (specify)
- Unknown

7.6 Setting of Exposure (Implicated Water section)

Please see [Section 5.1](#) for water picklist values.

8. OTHER EXPOSURES TO WATER, INCLUDING OTHER ENVIRONMENTAL EXPOSURES TO WATER

List values for fields in the Other and Undetermined Exposures to Water Section in the Implicated Water section are displayed below.

8.1 System or source of the water (Implicated Water section)

Note: If water exposure is “Undetermined exposures to water”, then the system or source of the water defaults to “Unknown”.

- Cooling Tower
- Ornamental Fountain
- Hot Spring
- Lake/Reservoir
- River/Stream
- Spring
- Other (specify)

8.2 Setting of Exposure (Implicated Water section)

Please see [Section 5.1](#) for water picklist values.

8.3 Water Treatment Provided (Implicated Water section)

Note: This list for “Water Treatment” is available when the question “Was the water system/source treated to reduce or prevent the risk of disease transmission” is “Yes”.

- Disinfection
- Disinfection + Filtration
- Filtration
- Other (specify)
- Unknown

9. REASON(S) CONFIRMED OR SUSPECTED (FOR FOODBORNE AND ANIMAL CONTACT OUTBREAKS)

- Epidemiologic evidence — An exposure occurs more often in case-patients than in controls, or more often in case-patients than expected in the general population. Multiple unrelated case-patients report a common exposure.
- Laboratory evidence — The pathogen or pathogen subtype causing illness is found and isolated.
- Traceback investigation — A common point of contamination is identified through reviewing records collected from various locations and sources.
- Environmental evidence — A common point of contamination is identified through an environmental investigation or assessment conducted at a location.
- Other data — Select other data if there is evidence not covered by the previous three options. Provide further details in the “General Remarks” section. Do not select this option if the vehicle is confirmed.

10. METHOD OF PROCESSING

List values for fields in the food vehicle section are displayed below.

- Pasteurized — A food preservation process whereby fluid milk and other foods are heat-treated for a specified time and temperature to destroy all disease-causing microorganisms and to reduce the total number of bacteria. These products should be labeled as having been pasteurized (e.g., fluid milk and milk products, juice, pasteurized egg-product, in-shell pasteurized eggs).
- Unpasteurized — Product that commonly is pasteurized for safety that has not gone through the pasteurization process. The product is not labeled as having been pasteurized (e.g., fluid milk, cheese, juice).
- Cut/shredded/riced/diced/chopped — Product that has been manually or mechanically shredded or cut at a processor and is received at the point of use without the need for further preparation except possible washing prior to service. This can also include shredded or cut cheese or meat/poultry that arrives at the point of service already shredded or cut (e.g., shredded beef, diced chicken, pulled pork, riced cauliflower)
- Ground — Product has been cut into very small pieces, typically by a grinder or similar machine (e.g., ground beef, ground spices).
- Tenderized — Product that has been manipulated by piercing with a set of needles, pins, blades or any mechanical device, which breaks up muscle fiber and tough connective tissue to increase tenderness (this process yields non-intact meat or poultry). This includes injection, scoring, and

processes which may be referred to as “blade tenderizing,” “jaccarding,” “pinning,” or “needling.”

- Breaded/battered — Product is coated with a binder, usually a starch mixed with liquids such as milk or eggs (e.g., breaded chicken, beer battered onion rings)
- Wrapped in dough — Product consists of certain ingredients—including but not limited to meat and poultry—that are wrapped or encased in dough, which, in some cases, increases convenience for hand-held eating (e.g., corn dogs, pizza rolls).
- Stuffed — Product is filled with an edible mixture that may be comprised of various ingredients, such as grains, fruits, vegetables, nuts, and meats (e.g., stuffed poultry, stuffed peppers, stuffed pasta, stuffed pastries,).
- Whole poultry (e.g., broiler, fryer, roaster, capon, cock/rooster)
- Poultry parts — Any poultry product that is not considered whole poultry, as listed above (e.g., mechanically separated, comminuted, tenders, fingers, strips, nuggets, breast, thigh, wing, leg)
- Canned — The product either arrived at the point of use in a can or another hermetically sealed container, such as pouches for products produced by thermal processing. Indicate “home-canned” or “commercially-canned” in the General Remarks field.
- Pickled — Product that has been soaked in an acidic liquid.
- Fermented — Process of subjecting food to the action of acid-producing microorganisms to reduce the pH of the food (e.g., sauerkraut, kimchi, fermented sausages, kombucha).
- Dried/dehydrated/freeze-dried — Product is dried naturally or by using heat, cold, or chemicals. These products should be labeled as dried/dehydrated, unless the name is one that consumers would recognize as a dried product (e.g., raisins, jerky).
- Cooled — Product is removed from heat and allowed to cool prior to consumption. Cooling methods may include but are not limited to adding ice, separating food into smaller portions, putting food in shallow pans, and using cooling equipment (e.g., ham or chicken salad).
- Frozen — Process of freezing food to temperatures 25is intended to destroy bacterial pathogens of concern (e.g., oysters, juice, lunch style meats).
- Irradiated — A controlled exposure of food to gamma rays from a radioactive source or to ionizing radiation to accomplish the equivalent of pasteurization. It may be labeled with a Radura symbol or otherwise labeled to indicate that it was irradiated.
- Commercially processed pre-cooked, may require heating for palatability —The product has been prepared or packaged by a commercial entity and is fully cooked, but may need additional heating for palatability prior to consumption (e.g., pre-cooked frozen shrimp, chicken nuggets, frozen dinners).
- Commercially processed, further cooking required —The product has been prepared or packaged by a commercial entity but requires further cooking before consumption (e.g., raw meat, frozen pizza). These products should be labeled as not ready to eat.
- Pre-packaged — Packaged at the processor level and received at the point of use in a sealed bag or container (e.g., bagged lettuce or other produce).
- Pre-washed — The pre-washed food product when received at the point of use is considered a washed product (typically labeled as “pre-washed”) and may or may not specify on its label whether subsequent washing prior to use is necessary.
- Other (specify) — Method of processing was not identified above.

- None — Food was not processed.
- Unknown — Method of processing is unknown.

10.1. LEVEL OF PREPARATION

List values for fields in the food vehicle section are displayed below.

- Ready to eat (RTE) food: No additional kill step necessary for safe consumption
- Raw, intended for raw service (no kill step performed)
- Intentionally undercooked — Product was intentionally prepared with lack of adherence to food safety temperature recommendations (e.g., raw/rare steak intentionally cooked below the recommended internal temperature of 145 degrees Fahrenheit).
- Unintentionally undercooked — Product was unintentionally prepared with lack of adherence to food safety temperature recommendations (e.g., raw/rare steak unintentionally cooked below the recommended internal temperature of 145 degrees Fahrenheit).
- Undercooked, intention unknown — Product was prepared with lack of adherence to food safety temperature recommendations, but unknown if it was intentional or unintentional.
- Fully cooked, according to packaging or food safety recommendations
- Other (specify)
- Unknown

10.2. METHOD OF PREPARATION & SERVICE

List values for fields in the food vehicle section are displayed below.

- Cooked and served or hot hold served (same day service) — Food preparation for same day service wherein food is received, stored, prepared, cooked, held hot, and served. For example, hot dogs, fried chicken, soups, hot vegetables, and mashed potatoes.
- Cooked, chilled, and served — Complex food preparation wherein food is received, stored, prepared, cooked, cooled during an extended period of time (several hours or a day or more), and then served. For example, sliced roast beef from a whole cooked roast.
- Cooked, chilled, and cold hold served — Complex food preparation wherein food is received, stored, prepared, cooked, held cold, and served. For example, hard boiled eggs, cooked shrimp, and pre-made salads with cooked meat on them.
- Cooked, chilled, reheated, and served — Complex food preparation wherein food is received, stored, prepared, cooked, cooled over several hours or a day or more in advance of service, then reheated immediately prior to service. For example: lasagna, casseroles, soups, gravies, sauces, and chili.
- Cooked, chilled, reheated, and hot hold served — Complex food preparation wherein food is received, stored, prepared, cooked, cooled over several hours or a day or more in advance of service, then reheated and held hot prior to service. For example: chili and refried beans.
- Cooked with a microwave oven before serving — Select this option if a microwave was used, whether or not it was recommended. For example: pot pies, frozen breakfast sandwiches, and leftovers.

- Cooked with an oven before serving — Select this option if an oven was used, whether or not it was recommended. For example: baked chicken, casseroles, and frozen pizza.
- Cooked with a toaster oven before serving — Select this option if a toaster oven was used, whether or not it was recommended. For example: frozen pastries, pot pies, and chicken nuggets.
- Cooked with an air fryer before serving — Select this option if an air fryer was used, whether or not it was recommended. For example: chicken wings and pizza rolls.
- Cooked with a crock pot before serving — Select this option if a crock pot was used, whether or not it was recommended. For example: pot roast and chili.
- Other (specify) — Select if the method of preparation was not provided on the list. Specify details about the method.
- Unknown — Method of preparation is unknown.

10.3. TYPE OF PACKAGING

List values for fields in the food vehicle section are displayed below.

- Fabric Containers — Textile or fabric bag, stocking or casing, burlap, etc.
- Ceramic, Earthenware — Ceramic jar, earthenware bottle, crock, jar, etc.
- Glass — Glass containers with coated or uncoated aluminum lids; cork stoppers; lined or unlined plastic lids; coated, lined or bare steel-based plate lids; coated or uncoated tin lids, lined or unlined tin lids
- Laminated (flexible or rigid) — Laminated containers are a variety of different materials BONDED together, such as layered containers comprised of paper and foil, paper and plastic, etc. This includes laminated pouches and bags, and laminated tubes with plastic, cork-lined, foil-lined, laminated and aluminum lids.
- Metal — Containers comprised of aluminum, tin or tin-less steel-based material. Includes aluminum cans, trays, tubes and foil; and foil lines, loose or unbonded, within a paper bag, sack, pouch, etc.
- Paper — Fiber (board) barrels, drums, pouches, sacks, bags, boxes, cartons, etc. Also includes tubes with aluminum ends. Note — includes wax paper, etc.
- Plastic, Synth (flexible) — Plastic bags, pouches, wrappers, boil-in-bags, shrink packs, squeeze bottles or tubes with line/unlined tops, etc. Also includes plastic lines, loose or unbonded within a paper bag, sack, pouch, etc.
- Nonflex Plastic (rigid or semi-rigid) — Rigid or semi-rigid plastic containers with plastic aluminum, steel-based, or tin lids. Also includes plastic trays or pans with foil, cellophane, paper or cardboard covers.
- Wood — Wood barrel, cask, wheel, box, drum, etc.
- Multiple — Use only when there is more than one type of food contact container of different materials. Examples — pizza mix kits, noodle and cheese dinners, etc.
- Vacuum or Modified Atmosphere Packaging — Either gases have been removed (vacuum) or the air in the package or container is replaced by one or more gases, in various concentrations (modified atmosphere-packaging), before the package is commercially sterile but may be hermetically sealed. Product **is not** shelf stable (e.g., requires refrigeration or freezing).

- Wax — Products with a wax covering such as cheese, vegetables, etc. (Excludes waxed paper)
- Container Type, Not Elsewhere Classified (N.E.C.) – Container type unknown or no container used — No container, such as fresh vegetable products in open baskets or in display bins and naturally covered products, such as bananas, unshucked corn, eggs, etc.

11. TRACEBACK & RECALL – TRACEBACK FINDINGS

List values for traceback findings in the Traceback Investigation section are displayed below. Select all that apply.

- Source of contamination — The traceback investigation found that the company was the source of contamination. For example, select this option if a foodborne outbreak was traced back to a farm where the implicated food vehicle was grown and contaminated at the farm (e.g., presence of the pathogen was detected on the farm).
- Amplified contamination — The traceback investigation found that the company played a role in amplifying the contamination. For example, select this option if a foodborne outbreak was traced back to a processing plant where the food was held at a temperature that allowed bacteria to survive and replicate.
- Point of service or sale — The traceback investigation found that the company was the point of service or sale for the implicated vehicle where contamination of the food occurred. For example, select this option if an outbreak occurred at a restaurant or fast-food chain.
- Unknown — The traceback investigation was not able to identify the company’s specific role in contamination.
- None — The traceback investigation found that the company did not play a role in contamination.

12. OTHER EXPOSURES TO WATER, INCLUDING OTHER ENVIRONMENTAL EXPOSURES TO WATER

List values for Other Exposure to Water Description in the Implicated Water section are listed below.

- Water was used directly from a freshwater source (e.g., lake/river/stream/roadside spring) for drinking water, sanitation, or hygiene
- Water was piped from a nonpotable freshwater source (e.g., irrigation ditch) for drinking water, sanitation, or hygiene
- Water was used in a heating/cooling unit (e.g., cooling tower, air conditioner)
- Water was used after the tap in a personal care or medical device (e.g., CPAP machine, neti-pot)
- Water was used in an ornamental system/device
- Water was used for factory processes/industrial purposes
- Water was used as part of occupational activities
- Rain water was collected/used for nonpotable purposes
- Grey water was collected/used for nonpotable purposes
- Other (specify)

13. TYPES OF INTERVENTIONS RECOMMENDED OR IMPLEMENTED

- Recommended and implemented — Recommended by public health or investigating agency & implemented
 - This includes if something was implemented, but was later or would have been recommended
- Recommended, not implemented — Recommended by public health or investigating agency, not implemented
- Recommended, unknown if implemented — Recommended by public health or investigating agency, unknown if implemented
- Implemented, not recommended — Implemented but not recommended by public health or investigating agency