



Invasive Cronobacter Infection in Infants Case Report Form

NOTE: Enter all dates as MM/DD/YYYY

ADMINISTRATIVE

Case state ID: _____ NNDSS ID: _____
Reporting state: _____ PulseNet ID: _____ Date form completed: _____

Was the case associated with an outbreak? Was the patient's parent or guardian interviewed?
Yes No Unknown Yes No Unknown

ILLNESS HISTORY

Date of onset of illness (MM/DD/YYYY): _____ Age at onset of illness (If <60 days, please describe age in number of days): _____ Days Months

Sex: Male Female Other Unknown	Ethnicity: Hispanic or Latino Not Hispanic or Latino Unknown	Race (select all that apply): White Black or African American Asian Native Hawaiian or Other Pacific Islander American Indian or Alaskan Native Middle Eastern or North African Unknown Other Race, specify: _____
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State of Residence: _____ State where illness occurred: _____

Was the patient hospitalized at the time of illness onset? Was the patient hospitalized as a result of this infection?
Yes No Unknown Yes No Unknown

Type of hospital setting: Hospital intensive care unit NICU	PICU (select one): Special care nursery Newborn nursery	Regular ward Unknown	Admission date: _____ Discharge date: _____
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Clinical syndrome (select all that apply):
Sepsis (bacteremia) Necrotizing Enterocolitis (NEC) Urinary tract infection Other (specify): _____
Meningitis Skin or soft tissue infection Diarrhea Unknown

Complications (select all that apply): Seizures Ventricular shunt Brain abscess Unknown Brain infarct Other (specify): _____ Hydrocephalus	Death: Yes, (MM/DD/YYYY): _____ No
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MEDICAL HISTORY

Birth history: Cesarean delivery Vaginal delivery Unknown	Was the infant a: Singleton Multiple Unknown	Gestational age (weeks) at birth: _____	Birth weight: _____ grams
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Did mother receive antibiotics during labor or delivery?
Yes (reason: _____ ; drug(s): _____)
No
Unknown

Previous diagnoses or treatments (select all that apply):
None Non-GI surgery (specify): _____)
Mechanical ventilation Unknown
Immunocompromising condition (e.g. Primary immunodeficiency) Other (specify): _____
Gastrointestinal (GI) surgery

Did the patient receive any medications by mouth or feeding tube in the 10 days prior to illness onset?
Yes No Unknown
If yes, please list oral medications given: _____

Has the infant ever been treated with steroids? Yes No Unknown	Did the infant receive gastric acid suppressing medications in the 10 days prior to illness onset? Yes No Unknown
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FEEDING HISTORY

How was the infant fed 10 days prior to illness onset? <i>(Select all that apply)</i> Bottle Feeding Tube Breast Unknown		If infant was fed via feeding tube, specify tube type: Nasogastric (NG) or Orogastic (OG) tube Other Gastrostomy tube (G-tube) Unknown Jejunostomy tube (J-tube)		
In the 10 days before illness began was the infant ever fed breast milk?		Yes	No	Unknown
If yes, what source(s) of breast milk?		Mother's milk	Donor milk	Informally shared breast milk
Was the infant exclusively breast fed?		Yes	No	Unknown
Was expressed breast milk consumed (i.e., pumped and fed through bottle or tube)?		Yes	No	Unknown
If yes, was pumped milk from multiple pumping sessions ever combined and then stored for later use?		Yes	No	Unknown
Was powdered infant formula or powdered breast milk fortifier used in the 10 days before illness began, including in the preparation of infant cereal?		Yes	No	Unknown
Did the infant consume liquid formula in the 10 days before illness began?		Yes	No	Unknown
Did the infant consume any solid foods, including cereal, in the 10 days before illness began?		Yes	No	Unknown
If yes, specify types of solid food:		Infant cereal	Purees	Solid table food
If infant cereal was consumed, type of liquid used for preparing infant cereal (select all that apply)				
Ready-to-feed Liquid formula		Powdered formula (mixed with water)		Water
Unknown				
Was water used to prepare infant formula?		Yes	No	Unknown
Type of water used for preparing infant formula (select all that apply) Public water system (e.g. tap water from a municipal system) Individual water system (e.g. private well, cistern) Nursery water (specify brand and lot number): _____ Commercially bottled or distilled water (specify brand and lot number): _____ Unknown Other (specify): _____				
Was the water boiled and cooled before adding to formula?		Yes	No	Unknown
How were formula and water mixed? (select all that apply) Shaken or swirled in bottle Prepared in a formula-preparation machine Stirred with a utensil Unknown Mixed in a blender Other (specify): _____				
Was anything ever added to breast milk or formula (besides water) during the 10 days before illness?		Yes	No	Unknown
If yes, please select all that apply: Powdered fortifier (e.g., powdered formula or fortifier to boost nutrition) Commercial infant milk thickener Juice Liquid fortifier Infant cereal Unknown Vitamins or iron Other (specify): _____				
Please provide infant formula preparation details (regardless of type)				
What frequency was formula prepared? Bottle/individual feed Batch Unknown		Where was prepared formula stored? (select all that apply) Refrigerator Outside of refrigerator/cooler Cooler with ice or ice packs Unknown		
Maximum storage time of prepared, refrigerated formula 0-24 hours >48 hours 24-48 hours Unknown		Maximum storage time of prepared, room temperature formula 0-2 hours >6 hours 2-6 hours Unknown		What temperature was formula at time of feeding? Warmed Cold Room temperature Unknown

Was prepared feed ever left in a crib with infant overnight? Yes No Unknown			Was a partially consumed bottle that was at room temperature for more than 2 hours ever saved and given to the infant later? Yes No Unknown		
Was the lid of the formula container ever placed on the counter, in the sink, or on another surface? Yes No Unknown			Was the formula scoop ever placed on the counter, in the sink, or on another surface? Yes No Unknown		
Please provide equipment cleaning details					
Were bottles, nipples, and rings always completely disassembled before cleaning? Yes Unknown No Not Applicable				Were bottles cleaned after each use? Yes Unknown No Not Applicable	
How were bottles cleaned? <i>(select all that apply)</i> Dishwasher With disposable wipes Other Unknown Hand washed in sink Rinsed with only water Not Applicable					
Were bottles scrubbed using: <i>(select all that apply)</i> Fingers/hands Bottle brush Designated cloth or sponge for infant feeding Cloth or sponge used for cleaning other items Bottles not scrubbed Unknown		Was soap used when cleaning bottles? Always Sometimes Never Unknown		How were bottle parts dried? <i>(select all that apply)</i> Dried with dish towel Dried with paper towel Air dried Unknown Other <i>(specify)</i> : _____	
Were bottles, nipples, and/or rings sanitized? Yes Unknown No Not Applicable					
If yes, how often were they sanitized? Daily Weekly Other <i>(specify)</i> : _____		How were parts sanitized? <i>(select all that apply)</i> Used dishwasher's hot water and heated drying cycles Used steam or microwave bottle sterilizer Boiled bottle parts Used bleach or other chemical disinfection method Unknown			
Please provide breast pump equipment cleaning details					
What type of pump was used <i>(select all that apply)</i> ? Manual pump Unknown Electric pump used by one person Not Applicable Electric pump shared by multiple users			Were flanges, valves, membranes, and connector tubing always completely disassembled before cleaning? Yes No Unknown		
Was the pump kit, not including tubing, cleaned after each use? Yes No Unknown					
If no, how many times was it used before being cleaned? _____		Was kit rinsed between uses? Yes No Unknown		Where was unwashed kit stored between uses? Fridge Room temperature Unknown	
How were pump and parts cleaned? <i>(select all that apply)</i> Dishwasher With disposable wipes Sink Unknown					
Were pump and parts scrubbed using: <i>(select all that apply)</i> Fingers/hands Bottle brush Designated cloth or sponge for infant feeding Cloth or sponge used for cleaning other items Pump parts not scrubbed		Was soap always used when washing pump kit and parts? Yes No Unknown		How were pump parts dried? <i>(select all that apply)</i> Dried with dish towel Dried with paper towel Air dried Unknown Other <i>(specify)</i> : _____	
Was pump kit ever sanitized? Yes No Unknown					
If yes, how often were they sanitized? Daily Weekly Unknown Other <i>(specify)</i> : _____			How were parts sanitized? <i>(select all that apply)</i> Used dishwasher's hot water and heated drying cycles Used steam or microwave bottle sterilizer Boiled pump parts Used bleach or other chemical disinfection method Unknown		

Was clean pump kit ever reassembled while still damp?	Yes	No	Unknown
Please provide environmental details			
<u>Please provide infant formula product details</u>			
Complete product name (including brand, type, and variety): _____			
Product manufacturer:			
Abbott Nutrition	Nestle USA	Unknown	
Mead Johnson Nutrition/Reckitt Benckiser	Perrigo Company	Other, (specify): _____	
Type of product:			Size of container:
Powder	Liquid concentrate	Other, (specify): _____	lbs
Ready-to-feed	Liquid fortifier		oz
			fl. oz
			grams
			ml
Lot number(s), if known: _____ Use by Date: _____			
Dates consumed: _____ to _____ Unknown dates consumed			
Complete product name (including brand, type, and variety): _____			
Product manufacturer:			
Abbott Nutrition	Nestle USA	Unknown	
Mead Johnson Nutrition/Reckitt Benckiser	Perrigo Company	Other, (specify): _____	
Type of product:			Size of container:
Powder	Liquid concentrate	Other, (specify): _____	lbs
Ready-to-feed	Liquid fortifier		oz
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Abbott Nutrition	Nestle USA	Other, (specify): _____	
Mead Johnson Nutrition/Reckitt Benckiser	Perrigo Company	Unknown	
Type of product:			Size of container:
Powder	Liquid concentrate	Other, (specify): _____	lbs
Ready-to-feed	Liquid fortifier		oz
			fl. oz
			grams
			ml
Lot number(s), if known: _____ Use by Date: _____			
Dates consumed: _____ to _____ Unknown dates consumed			

