

Table 1. Examples of bacterial foodborne disease outbreaks linked to contaminated raw (unpasteurized) dairy products in the United States, 2000-2007.

Year	Pathogen	No. Ill	State	Location	Suspected Vehicle	Reference*
2000	Campylobacter sp.	2	TX	Convention	Raw milk	
2000	Campylobacter sp.	8	MN	Dairy farm	Raw milk	
2000	Campylobacter jejuni	4	ID	Private home	Raw milk	
2000	Campylobacter jejuni	19	WI	Farm visit	Raw milk	
2000	Campylobacter jejuni	42	ID	Camp	Raw milk	
2000	Campylobacter jejuni	11	OK	Camp	Raw milk	
2000	Campylobacter jejuni	39	NY	Fair	Raw milk	
2000	Campylobacter jejuni	21	OK	Private home	Raw milk	
2000-2001	Listeria monocytogenes	12	NC	Private home	Mexican-style raw cheese	CDC 2001; MacDonald 2005
2001	Brucella	4	CA	Raw cheese	Private home	
2001-2004	Mycobacterium bovis	35	NY	Queso fresco	Private home	CDC 2005
2001	Campylobacter jejuni	4	MN	Raw milk	Private home	
2001	Campylobacter jejuni	75	WI	Raw milk	Private home	CDC 2002
2001	E. coli O157:H7	202	NC	Raw milk	School	
2001	Salmonella Newport – MDR**	27	Multistate	Raw cheese	Picnic	Oliver et al, 2009
2002	Campylobacter jejuni	13	UT	Raw milk	Sporting event	Peterson 2003
2002	Salmonella Typhimurium	107	Multi-state	Raw milk; raw milk shakes	Private home	CDC 2003; Mazurek 2004
2003	Campylobacter jejuni	9	WA	Raw cheese	Private home	
2003	Campylobacter jejuni	6	MI	Raw milk	Church	

Year	Pathogen	No. Ill	State	Location	Suspected Vehicle	Reference*
2003	E. coli O157:H7 and C. jejuni	3	WA	Raw milk	Private home	
2003	Listeria monocytogenes	12	TX	Queso fresco	Private home	
2004	Campylobacter jejuni	32	IA	Raw milk	Lodge dinner	
2004	Campylobacter sp.	6	WY	Raw milk	Private home	
2004	E. coli O157:H7	3	WA	Queso fresco	Restaurant	
2005	Brucella	2	TX	Queso fresco	Imported raw cheese	
2005	Campylobacter jejuni	13	AZ	Raw milk	Private home	
2005	Campylobacter jejuni	5	CO	Raw milk	Private home	
2005	Campylobacter jejuni	22	CO	Raw milk	Private home	
2005	Campylobacter jejuni	33	IA	Raw milk	Church	
2005	Campylobacter jejuni	4	KS	Raw milk	Private home	
2005	Campylobacter jejuni	11	OK	Raw goat milk	Dairy farm	
2005	Campylobacter jejuni	3	WY	Raw milk	Private home	
2005	Campylobacter jejuni	11	WY	Raw milk	Private home	
2005	E. coli O157:H7	18	Multistate	Raw milk	Private home	CDC 2007
2005	Listeria monocytogenes	12	TX	Queso fresco	Imported raw cheese	
2006	Brucella	5	KS	Raw goat cheese	Private home	
2006	Campylobacter jejuni	18	IL	Raw milk	Private home	
2006	Campylobacter jejuni	58	WI	Homemade raw cheese	Private home/workplace	
2006	Campylobacter jejuni	5	CO	Raw milk	Unspecified	
2006	Campylobacter sp.	2	NY	Raw milk	Private home	

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2006	Campylobacter sp.	3	OH	Raw milk	Private home	
2006	Campylobacter jejuni	9	VA	Raw milk	Unspecified	
2006	E. coli O157:H7	4	ID	Raw milk	Private home	
2006	E. coli O157:H7	2	WA	Raw milk	Private home	
2006	E. coli O157:H7	6	CA	Raw milk/raw colostrum	Private home	CDC 2008
2006	Salmonella Newport – MDR**	96	IL	Mexican-style raw cheese	Private home	CDC 2008
2007	Brucella	3	CA	Queso fresco	Private home	
2007	Campylobacter jejuni	68	KS	Homemade raw cheese	Fair	CDC 2009
2007	Campylobacter jejuni	18	WA	Raw milk	Private home	
2007	Campylobacter jejuni	8	CA	Raw milk; raw colostrum	Private home	CDPH 2008
2007	Campylobacter jejuni	62	UT	Raw goat cheese, raw milk, raw butter	Unspecified	
2007	Campylobacter jejuni	16	KS	Raw milk, raw cheese	Private home	
2007	Salmonella Typhimurium	29	PA	Raw milk; raw milk cheese	Private home	CDC 2007

*Unpublished data was acquired after 2000 from the CDC annual surveillance reports at http://www.cdc.gov/foodborneoutbreaks/outbreak_data.htm or the CSPI Outbreak Alert! database at <http://www.cspinet.org/foodsafety/outbreak/pathogen.php>

**MDR = multidrug resistant

Information on raw milk-related outbreaks prior to 2000 can be found at:

Raw Milk Cons: A Review of the Peer Reviewed Literature:

<http://www.marlerblog.com/2008/06/articles/lawyer-oped/raw-milk-cons-review-of-the-peerreviewed-literature/>

Kansas State University:

<http://www.foodsafety.ksu.edu/articles/384/RawMilkOutbreakTable.pdf>

Cornell University: <http://www.milkfacts.info/Milk%20Microbiology/Disease%20Outbreaks.htm>

Table 2. Examples of bacterial foodborne disease outbreaks linked to contaminated pasteurized dairy products in the United States, 1966-2007.

Year	Pathogen	No. Ill	State	Location	Suspected Vehicle	Reference*
1966	Shigella flexneri	97	Florida	Community	Milk, post-pasteurization	CDC, 1966
1975	Salmonella Newport	49	Louisiana	Military base/community	Milk, unknown	CDC, 1975
1976	Yersinia enterocolitica	38	New York	School	Milk, post-pasteurization	Black et al, 1978
1978	Salmonella Typhimurium	23	Arizona	Community	Milk, post-pasteurization	CDC, 1979
1982	Yersinia enterocolitica	172	Multiple	Community	Milk, unknown	Tacket et al, 1984
1983	Listeria monocytogenes	49	Massachusetts	Community	Milk, unknown	Fleming et al, 1985
1984	Salmonella Typhimurium	16	Kentucky	Convent	Milk, inadequate pasteurization	CDC, 1984
1985	Salmonella Typhimurium-MDR**	>150,000	Illinois	Community	Milk, post-pasteurization	Ryan et al, 1987
1986	Campylobacter jejuni	33	Vermont	School	Milk, inadequate pasteurization	Birkhead et al, 1988
1994	Listeria monocytogenes	45	Illinois	Picnic	Milk, post-pasteurization	Dalton et al, 1997
1994	Salmonella Enteritidis	224,000	Multiple	Community	Ice cream, cross-contamination (raw eggs)	Hennessy et al, 1996
1995	Yersinia enterocolitica	10	Multiple	Community	Milk, post-pasteurization	Ackers et al, 2000
2000	Salmonella Typhimurium-MDR**	93	Multiple	Community	Milk, post-pasteurization	Olsen et al, 2004
2002	Salmonella Typhimurium	116	Wyoming	School	Milk, unspecified	
2004	Salmonella Newport-MDR**	100	California	Unspecified	Milk, unspecified	
2005	Campylobacter jejuni	200	Colorado	Correctional facility	Milk, post-pasteurization	

Year	Pathogen	No. Ill	State	Location	Suspected Vehicle	Reference*
2006	Staphylococcus aureus enterotoxin	36	Michigan	Correctional facility	Powdered milk, unspecified	
2006	Campylobacter jejuni	1,644	California	Correctional facilities (multiple)	Milk, post-pasteurization	Jay et al, 2007
2006	Listeria monocytogenes	3	Oregon	Private home	Cheese, unspecified	
2007	Listeria monocytogenes	5 (3 deaths)	Massachusetts	Private home	Milk, post-pasteurization	CDC, 2008
2007	Salmonella Montevideo	20	Multiple	Private home	Shredded cheese, unspecified	

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**MDR = multidrug resistant