

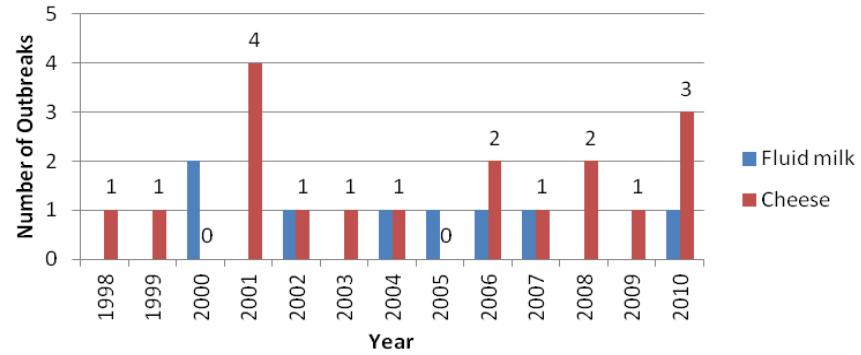
Outbreaks from Foodborne Pathogens in Milk and Cheeses Sold as Pasteurized, United States 1998-present

These tables were compiled by the Real Raw Milk Facts working group through searches of the Centers for Disease Control and Prevention's (CDC) online [foodborne disease outbreak database](#) (1998-2010). Because the CDC database has about a two-year lag period, preliminary data was gathered from government and dairy industry press releases, reports, and newsletters to document recent outbreaks (2011-present). Information on farm type and size was taken from the implicated dairy's website, state reports, and articles when available.

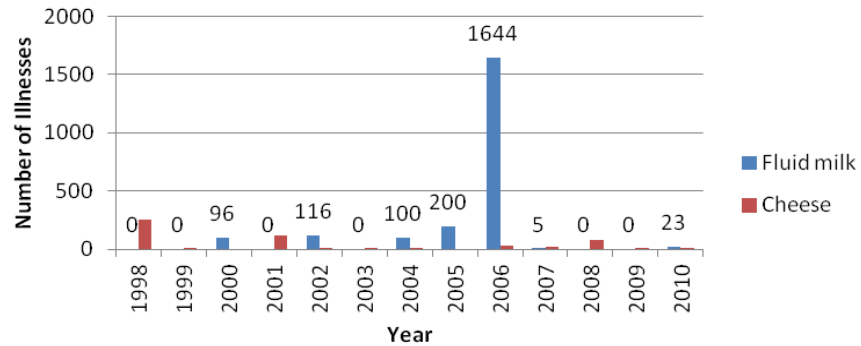
SUMMARY

- 31 total outbreaks
 - 9 fluid milk
 - 21 cheese: 17 non-Mexican style; 4 Mexican style queso fresco
 - 1 powdered milk
- 2,840 total illnesses, 10 deaths
 - 2,200 fluid milk-related illnesses (3 deaths)
 - 604 cheese-related illnesses: 573 non-Mexican style (5 deaths), 31 Mexican style queso fresco (1 death)
 - 36 powdered milk-related illnesses

Pasteurized Milk Outbreaks 1998-2010 (n = 26)



Pasteurized Milk Illnesses 1998 - 2010 (n = 2,747)



Year	Month	State	Etiology	No. Ill	No. hosp.	Source	Comments/references
2013	Aug-Dec	CA, MD	<i>Listeria monocytogenes</i>	8 (5 related to pregnancy)	7 (1 death)	Pasteurized queso fresco and other Mexican-style cheeses; Roos Foods, Kenton, DE	Retail (legal); CDC 2014
2013	Jul	IL, IN, MN, OH, TX.	<i>Listeria monocytogenes</i>	6	6 (1 death)	Pasteurized Les Frères, Petit Frère, and Petit Frère with Truffles cheeses from Crave Brothers Farmstead Cheese Company of Waterloo, Wisconsin	Retail (legal) CDC 2013
2012	Mar-Sep	13 states and DC	<i>Listeria monocytogenes</i>	22	20 (4 deaths, 1 fetal loss)	Pasteurized imported sheep milk cheese from Italy; Frescolina Marte brand ricotta salata cheese, Forever Foods	Retail, imported (legal); CDC 2012

Year	Month	State	Etiology	No. Ill	No. hosp.	Source	Comments/references
2011	Mar-Aug	PA	<i>Yersinia enterocolitica</i>	16	7	Pasteurized cow milk; small dairy; on-farm pasteurization, bottling and home delivery	Retail (legal); CDC 2011
2010	Aug	OR	<i>Salmonella</i> Braenderup	23	2	Pasteurized cow milk; External contamination of sealed containers	Retail (legal); OHA 2010
2010	Mar	NY	<i>Listeria monocytogenes</i>	5	5 (1 death)	Mexican-style cheese; pasteurization status unknown	Retail (legal); CDC NORS 2012
2010	Feb	WA	<i>Listeria monocytogenes</i>	5		Pasteurized Mexican style queso fresco (unspecified milk source)	Retail (legal); FDA 2010
2010	Jan	CO	<i>Campylobacter jejuni</i>	3	0	Pasteurized, whole milk cheese curds	CDC NORS 2012
2009	Nov	WA	<i>Listeria monocytogenes</i>	2	2	Cheese	CDC NORS 2012
2008	Oct	Multistate	<i>Listeria monocytogenes</i>	8	4	Pasteurized Mexican style queso fresco cheese	CDC NORS 2012
2008	Apr	NJ	<i>Salmonella</i> Java	70	0	Pasteurized cheddar cheese	CDC NORS 2012
2007	Aug	Multistate	<i>Salmonella</i> Montevideo	20	9	Pasteurized shredded cheese	CDC NORS 2012

Year	Month	State	Etiology	No. Ill	No. hosp.	Source	Comments/references
2007	Jun	MA	<i>Listeria monocytogenes</i>	5	3 (3 deaths)	Pasteurized milk; local farm and processor; home delivery	CDC 2008; CDC NORS 2012
2006	Dec	CT	Norovirus	11	0	Pasteurized swiss cheese	CDC NORS 2012
2006	Aug	OR	<i>Listeria monocytogenes</i>	3	2 (1 death)	Pasteurized cheese	CDC NORS 2012
2006	May	CA	<i>Campylobacter jejuni</i>	1644	7	Pasteurized milk; Prison/jail; milk not distributed to the public	CDC NORS 2012
2006	May	MI	<i>Staphylococcus aureus</i>	36	0	Powdered milk; Prison/jail; milk not distributed to the public	CDC NORS 2012
2005	Sep	CO	<i>Campylobacter jejuni</i>	200	1	Pasteurized 1% milk; Prison/jail; milk not distributed to the public	CDC NORS 2012
2004	Dec	WA	Norovirus	14	0	Pasteurized cheese; served at a restaurant	CDC NORS 2012
2004	Jun	CA	<i>Salmonella</i> Newport	100	5	Pasteurized milk	CDC NORS 2012
2003	Nov	CA	Norovirus	13	0	Pasteurized cheddar cheese	CDC NORS 2012
2002	Aug	WY	<i>Salmonella</i> Typhimurium	116	4	Pasteurized 2% milk; served at a school	CDC NORS 2012
2002	Apr	IN	Norovirus	25	0	Pasteurized cheese; served at a restaurant	CDC NORS 2012

Year	Month	State	Etiology	No. Ill	No. hosp.	Source	Comments/references
2001	Dec	FL	Norovirus	34	0	Pasteurized cheese; served at a restaurant	CDC NORS 2012
2001	Aug	CT	<i>Salmonella</i> Newport	4	1	Pasteurized cheese	CDC NORS 2012
2001	Apr	FL	<i>Staphylococcus aureus</i>	3	0	Pasteurized cheese; served at a restaurant	CDC NORS 2012
2001	Jan	OH	Norovirus	73	0	Pasteurized swiss cheese	CDC NORS 2012
2000	Aug	PA	<i>Campylobacter jejuni</i>	3	1	Pasteurized milk	CDC NORS 2012
2000	Mar-Apr	PA/NJ	<i>Salmonella</i> Typhimurium	93	6	Pasteurized milk	Olsen 2004
1999	Jul	MN	Norovirus	7	0	Pasteurized cheese	CDC NORS 2012
1998	Sep	MD	Norovirus	258	4	Pasteurized cheese	CDC NORS 2012

REFERENCES

CDC. 2008. Outbreak of *Listeria monocytogenes* infections associated with pasteurized milk from a local dairy--Massachusetts, 2007. MMWR Morb Mortal Wkly Rep 57:1097-100.

CDC. 2011. Notes from the Field: *Yersinia enterocolitica* Infections Associated with Pasteurized Milk --- Southwestern Pennsylvania, March--August, 2011. MMWR Morb Mortal Wkly Rep 60:1428.

CDC. 2012. Multistate Outbreak of Listeriosis Linked to Imported Frescolina Marte Brand Ricotta Salata Cheese (Final Update). Available at: <http://www.cdc.gov/listeria/outbreaks/cheese-09-12/>

CDC NORS. 2012. Centers for Disease Control and Prevention's (CDC) online foodborne disease outbreak database. Available at:

<http://www.cdc.gov/foodborneoutbreaks/>

CDC 2014. Multistate Outbreak of Listeriosis Linked to Roos Foods Dairy Products. Available at: <http://www.cdc.gov/listeria/outbreaks/cheese-02-14/index.html>.

CDC 2013. Multistate Outbreak of Listeriosis Linked to Crave Brothers Farmstead Cheeses (Final Update). Available at: <http://www.cdc.gov/listeria/outbreaks/cheese-07-13/>

FDA. 2010. Queseria Bendita Recalls Queso Fresco, Panela, and Requeson Because of Possible Health Risk
Available at: <http://www.fda.gov/safety/recalls/ucm201350.htm>

FDA. 2012. Forever Cheese Announces an Expanded Recall of Marte brand Ricotta Salata Frescolina for Possible Health Risk.
Available at: <http://www.fda.gov/Safety/Recalls/ucm321245.htm>.

Olsen, S. J., M. Ying, M. F. Davis, M. Deasy, B. Holland, L. Iampietro, C. M. Baysinger, F. Sassano, L. D. Polk, B. Gormley, M. J. Hung, K. Pilot, M. Orsini, S. Van Duyne, S. Rankin, C. Genese, E. A. Bresnitz, J. Smucker, M. Moll, and J. Sobel. 2004. Multidrug-resistant *Salmonella* Typhimurium infection from milk contaminated after pasteurization. *Emerg Infect Dis* 10:932-5.

OHA. 2010. *Salmonella* cases prompt recall of Umpqua Dairy milk, juice and drink products. Available at: <http://www.oregon.gov/DHS/news/2010news/2010-0818a.pdf>

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