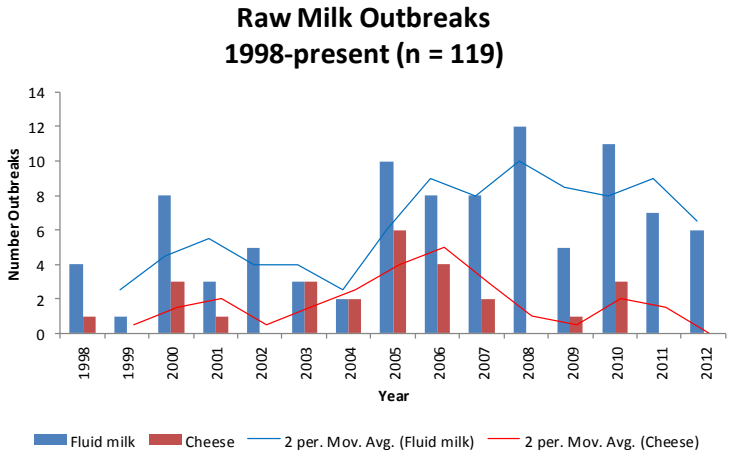
Outbreaks from Foodborne Pathogens in Unpasteurized (Raw) Milk and Raw Milk Cheeses, United States 1998-present

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 (1998-2009). 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 (2010-present). Information on farm type and size was taken from the implicated dairy's website, when available.

SUMMARY

- 119 total outbreaks
  - 86 fluid milk: 18 cow, 4 goat, 64 unspecified milk type
  - 27 cheese: 2 aged, 3 homemade, 17 Mexican-style queso fresco, 1 goat chevre, 1 curds, 3 unspecified
  - 6 multiple raw dairy products (fluid milk, cheese, and/or colostrum)
- 2,147 total illnesses, 2 deaths
  - 1,514 fluid milk-related illnesses, no deaths: 249 cow, 63 goat, 1,202 unspecified
  - 576 cheese-related illnesses: 46 aged, 80 homemade, 324 Mexican-style queso fresco (2 deaths), 5 goat chevre, 63 curds, 58 unspecified cheese type
  - 57 multiple raw dairy products-related illnesses (fluid milk, cheese, and/or colostrum)



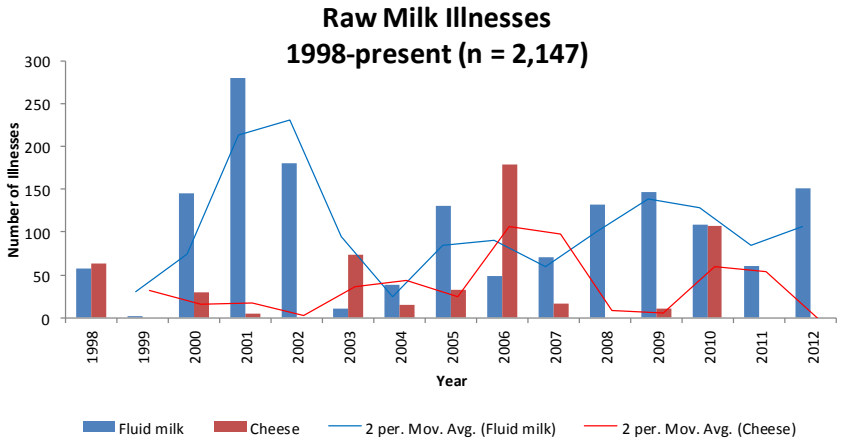


Table 1. 2010-2012 Data Extracted from Online News Releases and Reports.

Year	Month	State	Etiology	No. Ill	Source	Type of Farm	Comments/References
2012	Jan-Apr	CA	*Campylobacter* sp.	10	Raw cow milk, other raw dairy products	Organic Pastures Dairy; grassfed, pastured (~400 milking cows)	Retail (legal); CDFAa 2012
2012	Apr	OR	*E. coli* O157:H7 (19 cases) *Campylobacter* (1 case) *Cryptosporidium* (1 case)	21	Raw cow milk	Foundation Farm, small 4 cow herdshare	Cowshare (OR law does not specify legality of herdshares); 4 children hospitalized with HUS; 4 children from the farm family sick; OHA 2012
2012	Mar-Apr	MO	*E. coli* O157:H7	14	Raw cow milk	Stroupe Farm in Howard County, central Missouri	Farm sales legal; 1 child hospitalized with HUS; MDHSS, 2012
2012	Mar	CA	*Campylobacter jejuni*	9	Raw cow milk, other dairy products	Claravale Farm, San Benito County; Jersey herd	Retail (legal); CDFAb 2012
2012	Jan-Feb	PA/MD/NJ/WV	*Campylobacter jejuni*	80	Raw cow milk	The Family Cow dairy in Chambersburg; ~200 milking cows	Retail (legal in PA); customers brought milk to other states; MDHMH 2012
2012	Jan	KS	*Campylobacter jejuni*	18	Raw goat milk	Unnamed dairy in South Central Kansas	Farm sales (legal); KDA 2012
2011	Aug-Nov	WA	*E. coli* O157:H7	3	Raw cow milk	Cozy Vale Creamery and Farm, Tenino; pasture-based micro dairy	Retail sale (legal); WDOH 2011
2011	Aug-Oct	CA	*E. coli* O157:H7	5	Raw cow milk	Organic Pastures Dairy; grassfed, pastured (~400 milking cows)	Retail sale (legal); CDFA 2011

Year	Month	State	Etiology	No. Ill	Source	Type of Farm	Comments/References
2011	Sep	NY	*Campylobacter* sp.	5	Raw cow milk	Willow Marsh Farm; all natural grassfed milk with no feed additives or horomones	Farm sale (legal); NYDOH 2011
2011	Jul	NC	*Campylobacter* sp.	8	Raw cow milk	Tucker Adkins in York County, SC; ~60 milking cows	Retail sale (legal in SC), customers brought milk from SC to NC; FDA 2011
2011	May-Jul	AK	*Campylobacter jejuni*	18	Raw cow milk	Byers Farm in Matnusk-Susitna (Mat-Su) Valley; ~150 cows	Herdshare (legal, unregulated); AKDOH 2011
2011	Jun	WI	*Campylobacter jejuni*	18	Raw cow milk	Unnamed Racine County farm; ~250 cows; sells to processor	Parent brought milk to school; DATCP/DHS 2011
2011	Jun	MI	*Coxiella burnetii*	3	Raw cow milk	Dairy Delight, Livingstone County, MI	Cowshare (legal, unregulated); FSN 2011
2010-2011		UT	*Salmonella* Newport	62	Raw milk Mexican style queso fresco cheese	Unnamed Wasatch County dairy	Illegal production and distribution of raw milk cheese by a West Valley man; as many as 2,100 may have been infected since 2009; FDA 2011
2010	Dec	MN/OR/VT/WA	*E. coli* O157:H7	8	Aged raw milk cheese	Sally Jackson Cheeses; small, raw dairy with cows, sheep and goats	Retail sale (legal); FDA 2010
2010	Nov	AZ/CA CO/NM/NV	*E. coli* O157:H7 *Listeria monocytogenes* also found in the cheeses	38	Aged raw milk cheese	Bravo Farms Cheese Factory; medium-sized, hormone and antibiotic free dairy	Retail sale (legal); 15 hospitalized with 1 child with HUS; CDC 2010a
2010	Nov	TX	*Salmonella* sp.	4	Raw cow milk	Lavon Farms; medium sized (~200 cows) Guernsey and Jersey raw milk dairy	Farm store (legal); DCDOH 2010

Year	Month	State	Etiology	No. Ill	Source	Type of Farm	Comments/References
2010	Oct	MN	*Campylobacter; Cryptosporidium*	7	Raw cow milk, dairy products	Hartmann Dairy Farm; no pesticides, herbicides, antibiotics or genetically modified grains fed to raw milk dairy cows	Farm sale (legal), farmer also sold through off-farm buyer's club (illegal); MDA/MDH 2010a
2010	Jun	CO	*Campylobacter jejuni; E.coli* O157:H7	30	Raw goat milk	Billy Goat Dairy; small farm (~54 goats)	Hershare (legal); BCPH 2010
2010	May	WA	*E. coli* O157:H7	2	Raw cow milk	Jackie's Jerseys; small, local grassfed	Retail sale (legal); WDOH 2010a
2010	May	MN	*E. coli* O157:H7	8	Raw cow milk, dairy products	Hartmann Dairy Farm; no pesticides, herbicides, antibiotics or genetically modified grains fed to raw milk dairy cows	Farm sale (legal), farmer also sold through off-farm buyer's club (illegal); MDA/MDH 2010b
2010	Apr	UT	*Salmonella* Newport	10	Raw cow milk	Redmond Heritage Farms; small pasture fed (no grain)	Farm and retail sale (legal); CDC 2010b
2010	Apr	UT	*Campylobacter* sp.	15	Raw cow milk	Ropelato Dairy; medium (~160 cows) raw milk dairy	Retail sale (legal); FSN 2010
2010	Mar	PA	*Campylobacter*	10	Raw cow milk	Pasture Maid; small, local raw milk dairy	Retail sale (legal); PDA 2010
2010	Feb	WA	Shiga toxin-producing *E. coli*	6	Raw cow Milk	Jackie's Jerseys; small, local grassfed	Farm and retail sale (legal); WDOH 2010b
2010	Feb	MI/IL/IN	*Campylobacter* sp.	12	Raw cow milk	Forest Grove Dairy; small (~75 Jerseys), grassfed raw milk dairy	Cowshare (legal, unregulated) and multi-state buyer's club (illegal interstate shipment); FDA 2010
2010	Jan	NY	*Campylobacter* sp.	5	Raw milk	Willow Marsh Farm; small, local pasture based raw milk dairy	Farm store; NYDOH 2010

Table 2. 1998-2009 data extracted from CDC's Foodborne Outbreak Online Database (FOOD).

Year	Month	State	Etiology	No. Ill	No. hospit-alized	Source	Comments/references
2009	Sep	WA	*E. coli* O157:H7; O121	3	0	Raw whole milk	
2009	Aug	WI	*Campylobacter jejuni*	52	1	Raw whole milk	
2009	May	PA	*Campylobacter jejuni*	2	0	Raw whole milk	
2009	Mar	UT	*Campylobacter jejuni*	10	0	Raw milk Mexican-style queso fresco cheese	
2009	Mar	CO	*Campylobacter jejuni*	81	1	Raw whole milk	Cowshare; CDPHE 2009
2009	Jan	PA	*Campylobacter jejuni*	9	1	Raw whole milk	
2008	Nov	ND	*Campylobacter jejuni*	3	0	Raw milk	
2008	Aug	MN	*Campylobacter jejuni*	2	2	Raw milk	
2008	Aug	PA	*Campylobacter jejuni*	65	1	Raw milk	
2008	Aug	MN	*Campylobacter* sp.	2	0	Raw milk	
2008	Aug	VT	*E. coli* O157:H7	6	3	Raw milk	
2008	Jun	CT	*E. coli* O157:NM (H-)	14	5	Raw milk	CTDPH 2008; Guh 2010
2008	May	CA	*Campylobacter jejuni*	16	1	Raw milk	Cowshare
2008	Apr	MO	*E. coli* O157:H7	4	2	Raw goat milk	MDHSS 2008
2008	Apr	MA	*Campylobacter jejuni*	8	0	Raw milk	
2008	Apr	OH	*Campylobacter jejuni*	3	1	Raw milk	
2008	Apr	UT	*Campylobacter jejuni*	4	0	Raw milk	
2008	Mar	ID	*Campylobacter coli*	5		Raw milk	
2007	Dec	WA	*Campylobacter jejuni*	18	0	Raw milk	
2007	Nov	CA	*Campylobacter jejuni*	11	0	Raw milk/colostrum	Retail sale; CDPH 2008a
2007	Oct	KS	*Campylobacter jejuni*	16	0	Raw milk and cheese	Donation to fair by local dairy; CDC 2009
2007	Sep	PA	*Campylobacter jejuni*	4	0	Raw milk	
2007	Jul	GA	*Campylobacter jejuni*	8	0	Raw milk	

Year	Month	State	Etiology	No. Ill	No. hospit-alized	Source	Comments/references
2007	Jun	PA	*Salmonella* Typhimurium	13	1	Raw milk cheese	On-farm sale; CDC 2007b
2007	Apr	SC	*Campylobacter jejuni; Salmonella* Give	11	4	Raw milk	
2007	Apr	NY	*Campylobacter* sp.	2	1	Raw milk	
2007	Mar	CA	*Brucella* sp.	3	1	Raw milk Mexican-style queso fresco cheese	
2006	Nov	ID	*E. coli* O157:H7	4	0	Raw whole milk	
2006	Sep	CA	*E. coli* O157:H7	6	3	Raw milk/colostrum	Retail sale; CDC 2008a
2006	Sep	CO	*Campylobacter* sp.	5	4	Raw whole milk	
2006	Sep	WA	*E. coli* O157:H7	2	1	Raw whole milk	Retail sale; WDOH 2006
2006	Aug	PA	*Salmonella* Typhimurium	20	2	Raw milk Mexican-style queso fresco cheese	
2006	Aug	KS	*Brucella* sp	5	3	Raw milk goat/chevre cheese	
2006	May	WI	*Campylobacter jejuni*	58	2	Homemade raw milk cheese	
2006	May	VA	*Campylobacter jejuni*	9	0	Raw milk	
2006	Mar	IL	*Salmonella* Meleagridis; Newport	96	36	Raw milk Mexican-style queso fresco cheese	CDC 2008
2006	Feb	NY	*Campylobacter* sp.	2	0	Raw whole milk	
2006	Jan	IL	*Campylobacter jejuni*	18	0	Raw whole milk	
2006	Jan	OH	*Campylobacter* sp.	3	1	Raw whole milk	
2005	Dec	CO	*Campylobacter jejuni*	22	0	Raw whole milk	
2005	Nov	Multistate	*E. coli* O157:H7	18	5	Raw whole milk	Cowshare; CDC 2007a; Denny 2008
2005	Nov	CA	*Shigella* sp.	2		Raw milk Mexican-style queso fresco cheese	
2005	Nov	CO	*Campylobacter jejuni*	5	0	Raw whole milk	Cowshare
2005	Sep	CA	*Salmonella* Group B	12	2	Raw milk Mexican-style queso fresco cheese	

Year	Month	State	Etiology	No. Ill	No. hospit-alized	Source	Comments/references
2005	Sep	CA	*Salmonella* sp.	2		Raw milk Mexican-style queso fresco cheese	
2005	Sep	CA	*Salmonella* Typhimurium	3		Raw milk Mexican-style queso fresco cheese	
2005	Sep	UT	*Campylobacter jejuni*	11	0	Raw whole milk	
2005	Sep	AZ	*Campylobacter jejuni*	13	1	Raw whole milk	
2005	Jul	WY	*Campylobacter jejuni*	11	2	Raw whole milk	
2005	Jun	TX	*Listeria monocytogenes*	12	12	Raw milk Mexican-style queso fresco cheese	
2005	May	KS	*Campylobacter jejuni*	4	0	Raw whole milk	
2005	May	IA	*Campylobacter jejuni*	33	0	Raw whole milk	
2005	Apr	OK	*Campylobacter jejuni*	11	3	Raw goat milk	
2005	Mar	WY	*Campylobacter jejuni*	3	0	Raw milk	
2005	Feb	TX	*Brucella* sp.	2	2	Raw milk Mexican-style queso fresco cheese	
2004	Nov	CA	*Salmonella* Typhimurium	12	1	Raw milk Mexican-style queso fresco cheese	1 death
2004	Jul	WY	*Campylobacter* sp.	6	1	Raw whole milk	
2004	May	WA	*E. coli* O157:H7	3	2	Raw milk Mexican-style queso fresco cheese	Restaurant
2004	Feb	IA	*Campylobacter jejuni*	32	0	Raw whole milk	
2003	Oct	MI	*Campylobacter jejuni*	6	0	Raw milk	Church/temple
2003	Oct	CA	*Campylobacter jejuni*	11	0	Raw milk Mexican-style queso fresco cheese	
2003	Aug	CA	*Salmonella* Typhimurium	50	7	Raw milk Mexican-style queso fresco cheese	
2003	May	WA	*Campylobacter jejuni; E.coli* O157:H7	3	0	Raw milk	
2003	Apr	VT	*Campylobacter jejuni*	18	0	Raw milk cheese	
2003	Mar	WI	*Campylobacter jejuni*	2	0	Raw milk	

Year	Month	State	Etiology	No. Ill	No. hospit-alized	Source	Comments/references
2003	Feb	TX	*Listeria monocytogenes*	12	12	Raw milk Mexican-style queso fresco cheese	1 death
2002	Nov	OH	*Salmonella* Typhimurium	107	6	Raw milk	Dairy-restaurant; CDC 2003; Mazurek 2004
2002	Sep	CA	*Campylobacter* sp.	12	0	Raw milk	
2002	Apr	KS	*Campylobacter jejuni*	46	1	Raw milk	
2002	Jan	UT	*Campylobacter jejuni*	13	0	Raw whole milk	High school athletic team dinner; Peterson 2003
2002	Jan	WA	*Campylobacter jejuni*	2	0	Raw whole milk	
2001	Nov	NC	*E. coli* O157:H7	202	11	Raw milk	School
2001	Nov	WI	*Campylobacter jejuni*	75	0	Raw whole milk	Cowshare; CDC 2002
2001	Jul	CA	*Brucella* sp	4		Homemade raw milk cheese	
2001	Apr	Multistate	*Salmonella* Newport	27	12	Raw milk cheese	
2001	Mar	MN	*Campylobacter jejuni*	4	0	Raw whole milk	
2000	Sep	NY	*Campylobacter jejuni*	39		Raw whole milk	Fair/festival
2000	Nov	NC	*Listeria monocytogenes*	12		Raw milk Mexican-style queso fresco cheese	CDC 2001; MacDonald 2005
2000	Jun	ID	*Campylobacter jejuni*	42	1	Raw milk	Camp
2000	Jun	OK	*Campylobacter jejuni*	11	1	Raw milk	
2000	Jun	MN	*Campylobacter* sp.	8	1	Raw milk	
2000	May	WI	*Campylobacter jejuni*	19	0	Raw milk	
2000	Apr	Multistate	*Campylobacter jejuni*	18	0	Homemade raw milk cheese	
2000	Feb	OK	*Campylobacter jejuni*	21	2	Raw milk	
2000	Feb	TX	*Campylobacter* sp.	2		Raw milk	
2000	Feb	ID	*Campylobacter jejuni*	4	0	Raw whole milk	
1999	Jun	WA	Campylobacter sp.	2		Raw milk	
1998	Oct	MA	*Salmonella* Typhimurium	47	2	Raw milk	

Year	Month	State	Etiology	No. Ill	No. hospit-alized	Source	Comments/references
1998	Jul	NY	Campylobacter sp.	3		Raw milk	
1998	Jul	SD	*Campylobacter jejuni*	6	1	Raw milk	
1998	Jul	ME	*E. coli* O157:H7	2	2	Raw milk	
1998	Jun	WI	*E. coli* O157:H7	63	24	Raw milk cheese curds	CDC 2000

REFERENCES

AKDOH. 2011. Ongoing Raw Milk *Campylobacter* Outbreak — South-central Alaska, July 2011 Available at: http://www.epi.hss.state.ak.us/bulletins/docs/b2011_22.pdf

BCPH. 2010. Public health investigates raw milk outbreak. Epi Connection, September 2010. Available at: http://www.bouldercounty.org/find/library/help/epiconsep10.pdf

CDC. 2000. Outbreak of *Escherichia coli* O157:H7 Infection Associated With Eating Fresh Cheese Curds — Wisconsin, June 1998. MMWR Morb Mortal Wkly Rep 49:911-3.

CDC. 2001. From the Centers for Disease Control and Prevention. Outbreak of Listeriosis associated with homemade Mexican-style cheese–North Carolina, October 2000-January 2001. Jama 286:664-5.

CDC. 2002. Outbreak of *Campylobacter jejuni* infections associated with drinking unpasteurized milk procured through a cow-leasing program–Wisconsin, 2001. MMWR Morb Mortal Wkly Rep 51:548-9.

CDC. 2003. Multistate outbreak of *Salmonella* serotype typhimurium infections associated with drinking unpasteurized milk–Illinois, Indiana, Ohio, and Tennessee, 2002-2003. MMWR Morb Mortal Wkly Rep 52:613-5.

CDC. 2007a. *Escherichia coli* O157:H7 infection associated with drinking raw milk – Washington and Oregon. November – December

2005. MMWR Morb Mortal Wkly Rep 56:165-7.

CDC. 2007b. *Salmonella* typhimurium infection associated with raw milk and cheese consumption–Pennsylvania, 2007. MMWR Morb Mortal Wkly Rep 56:1161-4.

CDC. 2008a. *Escherichia coli* O157:H7 infections in children associated with raw milk and raw colostrum from cows–California, 2006. MMWR Morb Mortal Wkly Rep 57:625-8.

CDC. 2008b. Outbreak of multidrug-resistant *Salmonella enterica* serotype Newport infections associated with consumption of unpasteurized Mexican-style aged cheese–Illinois, March 2006-April 2007. MMWR Morb Mortal Wkly Rep 57:432-5.

CDC. 2009. *Campylobacter jejuni* Infection Associated with Unpasteurized Milk and Cheese — Kansas, 2007. MMWR Morb Mortal Wkly Rep 57:1377-9.

CDC 2010a. Investigation Update: Multistate Outbreak of *E. coli* O157:H7 Infections Associated with Cheese. Available at: http://www.cdc.gov/ecoli/2010/cheese0157/

CDC. 2010b. Notes from the field: *Salmonella* Newport Infections Associated with Consumption of Unpasteurized Milk --- Utah, April--June 2010. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5926a6.htm

CDC 2011. Foodborne Outbreak Online Database (FOOD). Available at: http://wwwn.cdc.gov/foodborneoutbreaks/Default.aspx#

CDFA. 2011. Organic Pastures raw milk recall announced by CDFA. Available at: http://www.cdfa.ca.gov/egov/press_releases/Press_Release.asp?PRnum=11-064

CDFA. 2012a. CDFA announces recall of raw milk products at Organic Pastures of Fresno County. Available at: http://www.cdfa.ca.gov/egov/press_releases/Press_Release.asp?PRnum=12-018.

CDFA. 2012b. CDFA announces recall of raw milk products at Claravale Farm of San Benito County. Available at: http://www.cdfa.ca.gov/egov/Press_Releases/Press_Release.asp?PRnum=12-008

CDPH. 2008a. Cluster of *Campylobacter* infections possibly associated with raw dairy products. Available at: http://www.marlerblog.com/Cluster%20of%20Campylobacter%20infections.pdf

CDPH. 2008b. Campylobacteriosis among persons consuming unpasteurized milk from a cow leasing program, Del Norte County, May-June 2008. Available at: http://www.marlerblog.com/uploads/file/CDPH%20Report%20%28Tardiff%29.pdf

CDPHE. 2009. *Campylobacter* Outbreak Associated with Consumption of Unpasteurized Milk from a Cow Share Operation, Montrose County 2009. Available at: http://www.marlerblog.com/uploads/file/Montrose%20raw%20dairy%20report%20Final.pdf

CTDPH. 2008. Town Farm Dairy July 2008 Milkborne Illness Investigation. Final Report. Available at: http://www.marlerblog.com/uploads/file/Standish%20-%20Connecticut%20Dept%20of%20Ag%20Final%20Report.pdf

DATCP/DHS. 2011. Racine County outbreak tied to raw milk consumption; 16 people sickened. Available at: http://wisbusiness.com/index.iml?Article=239824

DCDOH. 2010. Dallas County salmonella case tied to consumption of raw milk. Available at: http://www.dallascounty.org/department/hhs/press/documents/041911RawMilk.pdf

Denny, J., M. Bhat, and K. Eckmann. 2008. Outbreak of *Escherichia coli* O157:H7 associated with raw milk consumption in the Pacific Northwest. Foodborne Pathog Dis 5:321-8.

FDA. 2010a. Public health agencies warn of outbreaks related to drinking raw milk. Available at: http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm206311.htm

FDA. 2010b. Consumers should not eat Sally Jackson cheese due to risk of *Escherichia coli* O157:H7. Available at: http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm237381.htm

FDA 2011a. Foodborne Outbreak Associated With Raw Milk From Tucker Adkins Dairy of York S.C. Available at: http://www.prnewswire.com/news-releases/foodborne-outbreak-associated-with-raw-milk-from-tucker-adkins-dairy-of-york-sc-125693908.html

FDA. 2011. Queso Fresco Cheese Investigation. Available at: http://ag.utah.gov/news/QuesoFrescostatement.html

FSN. 2011. Raw milk in Michigan linked to Q fever. Available at: http://www.foodsafetynews.com/2011/06/raw-milk-in-michigan-causes-q-fever-outbreak/

Guh, A., Q. Phan, R. Nelson, K. Purviance, E. Milardo, S. Kinney, P. Mshar, W. Kasacek, and M. Cartter. 2010. Outbreak of *Escherichia coli* O157 associated with raw milk, Connecticut, 2008. Clin Infect Dis 51:1411-7.

KDA. 2012. Raw Milk Poses Risk. Available at: http://www.ksda.gov/news/id/446

MacDonald, P. D., R. E. Whitwam, J. D. Boggs, J. N. MacCormack, K. L. Anderson, J. W. Reardon, J. R. Saah, L. M. Graves, S. B. Hunter, and J. Sobel. 2005. Outbreak of listeriosis among Mexican immigrants as a result of consumption of illicitly produced Mexican-style cheese. Clin Infect Dis 40:677-82.

Mazurek, J., E. Salehi, D. Propes, J. Holt, T. Bannerman, L. M. Nicholson, M. Bundesen, R. Duffy, and R. L. Moolenaar. 2004. A multistate outbreak of *Salmonella* enterica serotype typhimurium infection linked to raw milk consumption–Ohio, 2003. J Food Prot 67:2165-70.

MDA/MDP. 2010a. Minnesota health officials identify more illnesses linked to raw milk. Available at: http://www.health.state.mn.us/news/pressrel/2010/milk102810.html

MDA/MDH. 2010b. Investigation into E. coli O157:H7 illnesses and Raw Milk Consumption from Hartmann farm. Available at: http://www.health.state.mn.us/foodsafety/alert/ecoli0610.html

MDHMH. 2012. DHMD Confirm Presence of Campylobacter in Raw Milk from Pennsylvania Farm. Available at: http://www.dhmh.maryland.gov/publicrelations/pr/Lists/Posts/Post.aspx?ID=188

MDHHS. 2008. FOIA request. Available at: http://www.marlerblog.com/uploads/file/Missouri%20HD%20Report%20(Herb%20Depot).pdf

MDHSS. 2012. Update: Shiga Toxin-Producing *Escherichia coli* (STEC) Cases in Central Missouri. Available at: http://health.mo.gov/emergencies/ert/alertsadvisories/pdf/update41312.pdf

NYDOH. 2010. Campylobacter Contamination Found in Raw Milk. Available at: http://www.health.ny.gov/press/releases/2010/2010-01-29_campylobactor_contamination_in_raw_milk.htm

NYDOH. 2011. *Campylobacter* Contamination Found in Raw Milk. Available at: http://www.health.ny.gov/press/releases/2010/2010-01-29_campylobactor_contamination_in_raw_milk.htm

OHA. 2012. Summary of the Foundation Farm raw milk-associated *E. coli* O157:H7 outbreak. Available at: http://public.health.oregon.gov/DiseasesConditions/DiseasesAZ/ecoli/Documents/foundationfarm2012_outbreak.pdf

PDA. 2010. Pennsylvania Agriculture Department Suspends Raw Milk Sales Permit of Pasture Maid Creamery in Lawrence County. Available at: http://www.prnewswire.com/news-releases/pennsylvania-agriculture-department-suspends-raw-milk-sales-permit-of-pasture-maid-creamery-in-lawrence-county-90216057.html

Peterson, M. C. 2003. *Campylobacter jejuni* enteritis associated with consumption of raw milk. J Environ Health 65:20-1.

WDOH. 2006. *E. coli* outbreak connected to raw milk dairy in Whatcom County (press release). Available at: http://www.doh.wa.gov/Publicat/2006_news/06-154.htm

WDOH 2010a. Food Recalls and Safety Alerts (Jackie's Jerseys Dairy). Available at: http://www.doh.wa.gov/ehp/food/recall.htm

WDOH. 2010b. *E. coli* update: new illnesses point out potential raw milk hazards. Available at: http://www.doh.wa.gov/Publicat/2010_news/10-087.htm

WDOH. 2011. Cozy Vale Creamery recalls raw milk products because of possible health risk. Available at: http://www.doh.wa.gov/ehp/food/rawmilk-cozyvale.pdf