

**Outbreaks, Illnesses and Recalls Linked to Raw (Unpasteurized) and Pasteurized Dairy Products, United States
January 2010 – November 2011**

Outbreaks

- 21 raw dairy outbreaks with 201 illnesses, no deaths (19 fluid raw milk, 2 aged raw milk cheese)
- 2 pasteurized dairy outbreak with 39 illnesses, no deaths
- 2 queso fresco Mexican-style cheese outbreak with 67 illnesses, no deaths
- 3 sporadic illnesses and hospitalizations from illegal Mexican-style cheese, no deaths

Recalls (no illnesses reported)

- 13 raw dairy (6 fluid raw milk, 7 aged raw milk cheese)
- 7 queso fresco Mexican-style cheese
- 5 pasteurized (non-queso fresco) cheese
- 4 dairy product recalls due to inadequate pasteurization

Year	Month	Location	Pathogen	Number ill	Vehicle*	Type/size of dairy**	Sales (legal/illegal)	Ref
2010	Jan	NY	<i>Campylobacter</i>	5	Outbreak from raw cow milk	Willow Marsh - small, local, pasture-based raw milk dairy	Farm Store (legal)	1
2010	Feb	WA	Shiga-toxin producing <i>E. coli</i>	6	Outbreak from raw cow milk	Jackie's Jerseys - small, local grassfed raw milk dairy	Farm and Retail (legal)	2, 3

2010	Feb	WA	<i>Listeria monocytogenes</i>	5	Outbreak from pasteurized Queso fresco cheese	Queseria Bendita – unspecified milk source	Retail (legal)	4, 5
2010	Feb - Mar	WA	<i>Listeria monocytogenes</i>	0	Recall of 60-day aged raw milk cheeses	Estrella Family Creamery – small, grassfed cow and goat raw milk dairy	Farm and Retail (legal)	6, 7
2010	Mar	MI/IL/IN	<i>Campylobacter</i> Shiga toxin-producing <i>E. coli</i> also found in raw milk cheeses during the investigation	12	Outbreak from raw cow milk	Forest Grove Dairy – small (~75 jerseys), grassfed raw milk dairy	Cow-share (legal, unregulated) and multi-state Buyer's Club (illegal interstate shipment)	8
2010	Mar	PA	<i>Campylobacter</i> 1 adult hospitalized with GBS paralysis	10	Outbreak from raw cow milk	Pasture Maid – small, local raw milk dairy	Farm and Retail (legal)	9
2010	Apr	UT	<i>Salmonella</i> Newport 1 hospitalization	10	Outbreak from raw cow milk	Redmond Heritage Farms – small, pasture fed (no grain) raw dairy	Farm and Retail (legal)	10, 11

2010	Apr	UT	<i>Campylobacter</i>	15	Outbreak from raw cow milk	Ropelato Dairy – medium sized (~160 cow) raw milk dairy	Retail (legal)	10
2010	Apr	WA	<i>Listeria monocytogenes</i>	0	Recall of Pasteurized Queso fresco cheese	Del Bueno – unspecified milk source	Retail (legal)	12
2010	May	WA	<i>E. coli</i> O157:H7	2	Outbreak from raw cow milk	Jackie’s Jerseys - small, local grassfed raw milk dairy	Farm and Retail (legal)	3
2010	May	MN	<i>E. coli</i> O157:H7 1 child hospitalized with HUS Outbreak strain found in farm samples Pathogenic <i>E. coli</i> isolated from raw milk cheese	8	Outbreak from raw cow milk	Hartmann Dairy Farm – no pesticides, herbicides, antibiotics or genetically modified grains fed to raw milk dairy cows	Farm (legal, unregulated) and Buyer’s Club (illegal off-farm sales)	13
2010	May	NV	<i>Campylobacter</i> 1 child hospitalized	1	Illness from Mexican-style raw milk cheese	Unknown	Door-to-door sale (illegal)	14
2010	Jun	PA	<i>Listeria monocytogenes</i>	0	Recall of raw cow milk	Alvin J. Stoltzfus Raw Dairy Farm, small, local raw milk dairy	Farm and Retail (legal)	15

2010	Jun	DE	<i>Brucella</i> and <i>Listeria monocytogenes</i> 2 adults hospitalized	2	Illnesses from raw dairy products	Unknown	Unknown (illegal)	16
2010	Jun-Jul	CO	<i>Campylobacter</i> and <i>E. coli</i> O157:H7 2 children hospitalized with HUS Outbreak strain found on the dairy	30	Outbreak from raw goat milk	Billy Goat Dairy – small (~54 goats) raw milk dairy	Farm, Goat-share (legal)	17
2010	Jul	NY	<i>Listeria monocytogenes</i> and <i>Campylobacter</i>	0	Recall of raw cow milk	Breese Hollow Dairy – small, local grassfed jersey cow raw dairy	Farm and retail (legal)	18
2010	Jul	PA	<i>Staphylococcus aureus</i>	0	Recall of 60-day aged raw cow milk hard cheddar cheese	Milky Way Dairy – small (~30 cows) Holstein-Friesian raw milk dairy	Farm Store and Retail (legal)	19
2010	Jul	NY	<i>Listeria monocytogenes</i>	0	Recall of pasteurized Queso fresco cheese	Azteca Linda Corp. – unspecified milk source	Retail (legal)	20

2010	Aug	PA	<i>Salmonella enterica</i>	0	Recall of raw cow milk	Jersey Hollow Farm – small, local raw milk dairy	Retail (legal)	21
2010	Aug	CA/OR/WA	<i>Salmonella enterica</i> Serotype Braenderup 2 hospitalizations	23	Outbreak from pasteurized cow milk and cream Pasteurized juices from same farm also recalled	Sources and pasteurizes milk from certified rBST-free independent dairy farms in southern Oregon	Retail (legal)	22
2010	Aug	RI	<i>Listeria monocytogenes</i>	0	Recall of Queso fresco cheese (pasteurized)	Azteca Linda Corp. – unspecified milk source	Retail (legal)	23
2010	Aug	MO	<i>Listeria monocytogenes</i> and <i>Staphylococcus aureus</i>	0	Recall of 60-day aged raw cow milk Cheese	Morningland Dairy – medium sized, pasture-based raw milk cheese dairy	Retail (legal)	24, 25
2010	Sep-Oct	WA	<i>Listeria monocytogenes</i>	0	Recall of 60-day aged raw cow milk cheeses	Estrella Family Creamery – small, grassfed cow and goat raw milk dairy	Farm and Retail (legal)	6, 7, 26, 27

2010	Oct	MN	<i>Campylobacter</i> and <i>Cryptosporidium</i> <i>parvum</i>	7	Outbreak from raw dairy products	Hartmann Dairy Farm – no pesticides, herbicides, antibiotics or genetically modified grains fed to raw milk dairy cows	Farm (legal) and Buyer’s Club (illegal off-farm sales)	13, 28
2010	Nov	AZ, CA, CO, NM, NV	<i>E. coli</i> O157:H7 15 hospitalizations 1 child with HUS Outbreak strain found in cheese Linked to Costco “Cheese Road Show;” recall expanded to all company cheeses on 11/17/10; no <i>Listeria</i> illnesses reported; <i>Listeria</i> <i>monocytogenes</i> also found in cheese	38	Outbreak from 60-day aged cheese raw gouda cheese; other cheeses	Bravo Farms Cheese Factory – medium-sized, hormone and antibiotic free dairy	Retail (legal)	29, 30

2010	Nov	CO	<i>E. coli</i> O157:H7	0	Recall of imported pasteurized Gorgonzola cheese	Imported from Italy	Retail/Imported (legal)	31
2010	Nov	WA	<i>Listeria monocytogenes</i>	0	Recall of pasteurized Queso and ricotta Mexican-style cheeses	Del Bueno – unspecified milk source	Retail (legal)	32
2010	Nov	TX	<i>Salmonella</i> 1 adult hospitalization (septicemia) Outbreak strain found in milk	4	Outbreak from raw cow milk	Lavon Farms – medium sized (~200 cows) Guernsey and Jersey raw milk dairy	Farm Store (legal)	33
2010	Dec	MN/OR/VT/WA	<i>E. coli</i> O157:H7 1 hospitalization Outbreak strain found in cheeses	8	Outbreak from sheep, goat, and cow 60-day aged raw milk cheeses	Sally Jackson Cheeses – small, raw dairy with cows, sheep and goats	Retail (legal)	34
2010-2011	Ongoing	UT	<i>Salmonella</i> Newport	62 As many as 2100 may have been infected since 2009	Outbreak from raw milk queso fresco cheese	Unknown source of raw milk	Illegal distribution of raw milk cheese	35

2011	Jan	CA	<i>Listeria monocytogenes</i> <i>Staphylococcus aureus</i>	0	Recall of pasteurized Oaxaca string Cheese La Original	Surtex Foods – unspecified milk source	Retail (legal)	36
2011	Feb	WA	Shiga toxin-producing <i>E. coli</i>	0	Recall of raw cow milk	The Country Market – small size, pastured (summer) and fed hay (winter) raw milk dairy	Retail (legal)	37
2011	Mar	TX	Positive alkaline phosphatase test	0	Recall of whole chocolate milk due to inadequate pasteurization	Oak Farms Dairy – processor that sources from rbST hormone free dairies	Retail (legal)	38
2011	Mar-Aug	PA	<i>Yersinia enterocolitica</i>	16	Glass-bottled pasteurized milk and ice cream	Small family farm, Brunton Dairy, ~100 cows	Retail (legal) On-farm pasteurization; home delivery	39
2011	Apr	MA	High coliform counts (15 times allowable level)	0	Cease and desist order of raw cow milk	Eastleigh Farm – medium sized (~200 cows), mostly grassfed and pastured raw milk dairy	Farm Store (legal)	40
2011		NY	<i>Staphylococcus aureus</i>	0	Recall of pasteurized queso fresco cheese	Quesos CentroAmericano Corp.	Retail (legal)	41

2011	Jun	WI	<i>Campylobacter jejuni</i>	18	Outbreak from raw cow milk	Unnamed Racine County farm – 250 cows, sells to processor	Parent brought bulk tank raw milk to school event	42
2011	Jun	MI	<i>Coxiella burnetii</i> (Q fever) One patient hospitalized with meningitis	3	Outbreak from raw cow milk	Dairy Delight, Livingstone County, MI Farm	Herdshare (legal, unregulated)	43
2011	May	NJ	<i>Listeria monocytogenes</i>	0	Recall of Blue Stilton pasteurized cheese	Schratter Foods, Inc.	Retail (legal)	44
2011	May-Jul	AK	<i>Campylobacter jejuni</i> <i>Listeria monocytogenes</i> isolated from milk	18	Outbreak from raw cow milk Outbreak strain isolated from cow manure	Byers Farm – (~150 cows) in Matanuska-Susitna (Mat-Su) Valley	Herdshare (legal, unregulated)	45, 46, 47
2011	May-Jun	NJ	<i>Listeria monocytogenes</i>	0	Recall of pasteurized cheeses	Atlanta Corp.	Retail (legal)	48
2011	Jul	NC	<i>Campylobacter</i>	8	Outbreak from raw cow milk	Tucker Adkins in York County (~60 cows)	Retail sales legal in SC, illegal in NC	49

2011	Aug	VA	<i>Salmonella</i>	0	Recall cheddar cheese spread (pasteurized)	Miss Bonnies Gourmet	Retail (legal)	50
2011	Sep	NY	<i>Campylobacter</i>	5	Outbreak from raw cow milk	Willow Marsh Farm, all natural grassfed milk no feed additives or hormones	Farm sales legal	51
2011	Sep	WA	<i>Listeria monocytogenes</i>	0	Recall queso fresco cheese (pasteurized)	Del Bueno Casera	Retail (legal)	52
2011	Sep	WA	<i>E. coli</i>	0	Recall of raw cows milk	Pride & Joy Creamery grassfed cows	Retail (legal)	53
2011	Sep	GA	Positive alkaline phosphatase test	0	Recall of skim milk due to improper pasteurization	Johnston Family Farm	Retail (legal)	54
2011	Sep	IL	Positive alkaline phosphatase test	0	Recall of all dairy products due to improper pasteurization	Ludwig Dairy	Retail (legal)	55
2011	Oct	IN	<i>Listeria monocytogenes</i>	0	Recall from pasteurized blue cheese	Fair Oaks Dairy Products	Retail (legal)	56
2011	Oct	IA	Positive alkaline phosphatase test	0	Recall of improperly pasteurized milk	All Natural Creamery in Wellman, Iowa	Retail (legal)	57

2011	Nov	WA	<i>Listeria monocytogenes</i>	0	Recall raw milk cheddar cheese	Golden Glen Creamery; small herd of milk cows at the creamery	Retail sales legal for 60 day aged cheese	58
2011	Aug-Oct	CA	<i>E. coli</i> O157:H7	5	Outbreak from raw cow milk	Organic Pastures Dairy, grassfed, pastured (~400 cows)	Retail (legal)	59
2011	Aug-Nov	WA	Shiga toxin-producing <i>E. coli</i>	3	Outbreak from raw cow milk	Cozy Vale Creamery and Farm, Tenino, WA; pasture-based micro dairy	Retail (legal)	60

[GBS = guillain-barre syndrome](#); [HUS = hemolytic uremic syndrome](#)

*Preliminary data; **Descriptions based on farm websites and/or state outbreak reports.

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