

NTRODUCTION

Dear Humboldt County Supervisors:

We ask that you repeal, without replacement, Humboldt County's raw milk ordinance - Title V, Division 1, Chapter 2, Sections 512.1 through 512.5. We have put together this packet of information to help you make an informed decision.

Back in 2010, a diverse group of Humboldt County citizens brought to the Humboldt County Board of Supervisors their desire for the ban on the sale and production of certified raw milk to be lifted. Unfortunately, the timing of that request may not have been the best and the issue was essentially kicked down the road.

Seven years later, with the persistent urging of citizens, the board has agreed to put this important issue back on the agenda January 23, 2018. We thank you for doing so and we hope you will honor the will of the people with a vote to lift the ban on the sell and production of legal raw milk.

We believe the crux of this issue boils down to reasonable freedom of choice! We simply want the same freedom to choose what type of milk we drink that 39 million other Californians already have under state law. Why should we be denied what 99% of the state population already has under state law. We hope you will agree that the archaic Humboldt ban on raw milk is an overreach by local government that needs to be corrected.

We are very fortunate in Humboldt to have several independent grocers who care enough to keep their finger on the pulse of our community. In our packet, you will find letters from five of these grocers, representing 11 stores, each strongly advocating on behalf of their customers, and all standing in solidarity to request you lift the ban on raw milk. We want to express our gratitude to Chautauqua Natural Foods, Eureka Natural Foods, Murphy's Markets, North Coast Co-op, and Wildberries Marketplace for their strong support and the quality of products and services they continually bring us.

You will also find notarized affidavits from Mark McAfee, CEO of Organic Pastures, the primary licensed raw milk that will be sold in Humboldt County if the ban is lifted. Mark attests to their impressive safety record, especially when you consider the enormous volume they do. They are the largest licensed raw milk dairy in the country and we feel lucky to have them in our state. Their safety data is based on official data from federal agencies going back 18 years when they first started Organic Pastures. We have talked with them extensively, researched their record, and feel very comfortable drinking and recommending their milk.

We are providing a graph entitled, "National CDC Data on Pasteurized Milk vs Raw Milk (1966-2017)," which includes all of the official CDC data points on pasteurized milk and Organic Pastures' milk. Organic Pastures' raw milk safety record is even more impressive when you view it in this way. Since 2016, their raw milk got even safer when they instituted a voluntary "Test

and Hold" procedure on top of the already strict regulations required by the state. None of their milk is bottled or leaves the farm before a pathogen test by a third party lab comes back clean.

We have also provided a response to the information sent to you by Dr. Donald Baird, Public Health Officer for the Humboldt County Public Health Department. We're sure Dr. Baird means well, and we mean him no disrespect, but the data provided by him is highly misleading and we explain why.

In making your decision, we would like you to consider the fact that many categories of foods can become contaminated with pathogenic bacteria, not just raw milk. This includes foods that everyone considers exceptionally healthy and no one would ever think of banning. According to the "Outbreaks Attributed To Fresh Leafy Vegetables, United States, 1973–2012" paper we have included, published by the CDC in the Epidemiology and Infection Journal in 2015, from 1973 to 2012 there were 606 verified pathogenic bacterial outbreaks associated with green leafy vegetables. These resulted in 20,003 associated illnesses, 1030 hospitalizations, and 19 deaths.

We seriously doubt that any Humboldt County supervisor would ever consider banning salad greens. No one would ever say to a Humboldt farmer, "You can't grow raw salad greens to sell to Humboldt stores, restaurants, and consumers. They may be contaminated with pathogenic bacteria!" No one would ever say to a Humboldt grocer, "You can't sell salad greens here. That's too risky for our citizens!"

We ask for the same sane decision making process with regards to raw milk. Our grocers want to sell legal and safely produced raw milk and we want to buy it! In fact, there's a very high demand for it! Please rescind Ordinance 512 without replacement!

Humboldt Citizens For Right To Choose Raw Milk



North Coast Co-op 811 I Street Arcata, CA 95521

December 16, 2016

Humboldt County Board of Supervisors:

On behalf of our more than 16,000 members and 32,000 customers, we urge you to rescind Title V, Division 1, Chapter 2, Section 512 of the Humboldt County Code and lift the ban on the sale and production of certified raw milk and certified raw milk products in Humboldt County. Further, we ask that you place this issue on the board's agenda the last week in January 2017, or as soon after that time frame as possible.

This issue is twofold: First, it is a freedom of choice issue; second, it is an economic issue.

California state law allows the sale and production of certified raw milk and certified raw milk products. Humboldt County is one of only three out of fifty-eight California counties to override this state law and locally ban the sale and production of certified raw milk and certified raw milk products. The vast majority of our members and customers are demanding to have the same freedom of choice to purchase certified raw milk as other Californians.

It is the spirit of Humboldt County to support local producers of food and North Coast Co-op is proud to be an integral part of that. We are aware that local community members have expressed an interest in producing certified raw milk and certified raw milk products if the ban were lifted. This would be an excellent economic opportunity for our county. Moreover, our members and customers vote strongly for locally produced food every day with their pocketbooks in both of our stores!

Sincerely,

North Coast Co-op Board of Directors



Mr. Ryan Sundberg Chairman Humboldt County Board of Supervisors 525 Fifth Street Eureka, CA 95501

December 12, 2017

Dear Ryan,

I would like to take this opportunity to express our support for repealing the outdated ban on the sale and distribution of safe raw milk in Humboldt county. We believe that we should have the right to choose safe raw milk products as allowed and regulated by the Ca State FDA as do more than 39 million Californians.

At Eureka Natural Foods, it is our mission to provide the full range of natural foods, wellness products and advice that our customers expect. It is also our mission to encourage customers to take responsibility for their own health and wellness and protect their right to do so. We like to quote Hippocrates, the ancient Greek Father of Western Medicine who said "...Physician. Heal Thy Self". This admonition requires us to follow our own counsel in making choices about the care of our bodies.

I can say that we have significant demand for these products at our two Humboldt county locations in Eureka and McKinleyville where we have a combined 3000 customers per day. As you may know, we do sell raw milk products at our Del Norte store called Wild Rivers market in Crescent City. We regularly sell out there and often have Humboldt shoppers make the trip up for these products. Also, it is not uncommon for travelers coming thru town to express bewilderment that they can't get their raw mil;k in Humboldt county.

Thanks you for the consideration of your board in repealing this outdated local ordinance. Please feel free to contact me with any questions you may have.

Sincerely.

Rick Littlefield, President Eureka Natural foods Wild Rivers Market





Mr. Ryan Sundberg, Chairman Humboldt County Board of Supervisors

Dear Mr. Sundberg,

We understand that the issue of repealing the ban on the sale and distribution of raw milk in Humboldt County is on your agenda for January 23, 2018. I would like to take a moment to express our support for this action.

Wildberries Marketplace is all about CHOICE, which is our well known hallmark. (Your Supermarket of Choice). One of our most cherished values is that we do not determine what our customers have the ability to purchase at our store. We provide that opportunity to our customers through their purchasing habits. If it's a product they want to purchase then we will stock it on our shelves. We understand that 39 million Californians enjoy this opportunity to purchase raw milk throughout much of the State. How fortunate these certain areas and retailers are to be able to provide what their customers want to purchase.

At this point the retailers in our area are unable to provide that opportunity and choice. From what I have heard our customers would highly value being able to purchase raw milk in our establishment.

Not a day goes by that our Dairy Department Head passes on to me the frustration some of our customers express due to this restriction. Whether it's due to their medical situation or simply their taste preference, this gap in being able to provide what our customers want in terms of raw milk is real and growing.

We hope that the Humboldt County Board of Supervisors does the right thing and repeals this ban. We find ourselves among the many in terms of customers and retailers that support this repeal. We appreciate your attention to our input and the input you have received from others.

Thank you.

Sincerely,

Aaron Gottschalk General Manager

CHAUTAUQUA NATURAL FOODS

Mr. Ryan Sundberg, Chairman Humboldt County Board of Supervisors 525 Fifth Street Eureka, CA 95501

Ryan,

Chautauqua Natural Foods supports a repeal of the ban on raw milk sales in Humboldt County. There is a demand in our area and many of our customers are forced to drive to Mendocino county to purchase raw milk. As you're most likely aware, raw milk is already regulated by the state of California and is legal in over 90% of the counties. We here at Chautauqua support the right of citizens to be able to make choices for themselves such as which type of milk to consume.

Thank you.

Sincerely,

James McDermott

General Manager



785 Bayside Road Arcata, California 95521 707-822-7665 Fax 707-822-7017

Mr. Ryan Sundberg, Chairman Humboldt County Board of Supervisors

Dear Mr. Sundberg,

We understand that the issue of repealing the ban on the sale and distribution of raw milk in Humboldt County is on your agenda for January 23, 2018. I would like to take a moment to express our support for this action.

Here at Murphy's Markets we take pride in offering a full selection of natural and organic products for our diverse customer base. Currently, we are unable to offer the sale of raw milk products in our stores. We understand that nearly all of the counties in the state allow the sale and consumption of safe raw milk products and that 39 million Californians enjoy this right.

We also support the many and varied local producers of agricultural products. We feel that there is an economic opportunity for many of these producers if they were allowed to sell raw milk to retailers such as ourselves. Hopefully you are aware of the fledgling Humboldt Made program which supports local producers. This type of local "cottage industry" has proven to be effective in diversifying our economy.

We urge you and the Board of Supervisors to repeal the ordinance that bans the sale and production of safe raw milk products in Humboldt county. Please feel free to contact me with any questions or concerns you may have.

Sincerely,

Carlos Avelar General Buyer

Murphy's Markets, Inc.

y los avelor

National CDC Data on Pasteurized Milk vs OPDC Raw Milk (1966-2017)

			VS OF DC Raw IMI	
	Illnesses Related to	Illnesses Related to OP	Deaths Related to	Deaths Related to OP
Year	Pasteurized Milk	Raw Milk	Pasteurized Milk	Raw Milk
1966	97			
1967				
1968				
1969				
1970				
1971				
1972				
1973				
1974 1975	40			
1976	49 38			
1977	30			
1978	66			
1979	, ,			
1980				
1981				
1982	172			
1983	49		14	
1984	16		2.1	
1985	150,142		46	
1986	33			
1987				
1988				
1989				
1990				
. 1991				
1992				
1993				
1994	45			
1995	10			
1996				
1997				
1998	339			
1999 2000	452			
2000	256 159			
2002	200			
2003	104			
2004	397			
2005	307			
2006	95	2		
2007	269		6	
2008	247			
2009	15			
2010	58		7	
2011	29	1	1	
2012	37			
2013	32		3	
2014	121		1	
2015	43		4	
2016		1		
2017				
TOTAL	153,877	4	82	ZERO

Our Response To Dr. Baird's Report

Dr. Baird is the public health officer for Humboldt Department of Health & Human Services' Report

Please note: we have included a copy of Dr. Baird's report to the Humboldt County Supervisors at the end of our packet for reference.

We believe your decision to lift the ban on raw milk in Humboldt County should be based primarily on giving Humboldt citizens the same freedom to choose for themselves whether or not to drink raw milk as more than 39 million Californians already have. We also hope you will agree that the ban on legal and safe raw milk in Humboldt County, when more than 99% of other Californians have access to it, is an overreach by local government that should be corrected.

Having said the above, we still want to respond to the five page report submitted to you by Dr. Donald Baird, the Health Officer for the Humboldt Department of Health & Human Services.

It's important that you understand right up front that reports on foodborne pathogens are often highly misleading, sometimes even flat out wrong at times. This includes information you find online, press reports, and even official governmental reports. In order to understand why this is so, and get to the bottom of particular incidents, you need to know a bit of biology. You also need to know the general process the state takes when a foodborne pathogen is discovered,

Here's a bit of biology you need to know:

- There are three levels of pathogen identification and this causes confusion in reporting. First, there is the species of a pathogen. E. coli (Escherichia coli) is an example of a species name. Second, a pathogenic species has many "strains." Within the same species, some strains have varying degrees of virulence (ability to hurt you) while other strains are relatively benign. For example, E. coli O157:H4 is a specific strain of this species, virulent but not the most virulent. Third, a pathogen also has a "fingerprint," usually identified these days by Pulsed-field gel electrophoresis. This is known as PFGE fingerprinting.
- PFGE fingerprinting is what is used to determine if two identified pathogens of the same species and same strain originated from the same source, i.e. if they're related. As much as scientists and agencies rely on this method, and it used to be considered the "gold standard," it is not fool proof: This is why laboratories and health agencies are moving toward a more accurate method of identifying the source of a pathogen using the entire genome, but for the immediate future, we're stuck with PFGE fingerprinting.

Okay, now let's talk about the process:

- Many people who are initially listed as being "associated" with a particular foodborne pathogen are NOT actually found to be linked to that particular pathogen and or the original food source when the case is fully investigated. This is caused by how the state goes about its investigation (see below).
- The point above is very important to keep in mind when reading about any incidents of suspected food pathogen sources because these reports very often falsely include people that don't end up linked at all. They may also give a false impression by omitting an explanation of what "associated" means. IT DOES NOT MEAN NECESSARILY THAT ASSOCIATED PEOPLE GOT THE PATHOGEN FROM THE SAME SOURCE!
- This is also why any report published before the investigation is fully completed, be it official or derivative (like a news story or a website report), should be taken with a huge grain of salt, i.e. skepticism. This "association" is also why derivative reports, and unfortunately even some official reports, often give misinformation which is never corrected or removed.
- Here's the reason: When one person tests positive for a particular strain of pathogen, the state epidemiologist will use PulseNet and other sources to identify other people in the state who have tested positive for that strain of that pathogen. This is BEFORE the PFGE fingerprinting is initiated or completed. Anyone in any county in the state that pops up as having tested positive for that strain of pathogen is said to be "associated" or some similar word. This makes it sound like they are linked to the first person, but in reality, the epidemiologist doesn't know if they are at that point. A PFGE fingerprint must be completed first, and an interview must be conducted with the person to determine if they are the same thing as the first person, before that can be determined.

- Meanwhile, several days may go by since the "associated" people were identified and that gets into news stories and even official reports. Later if they're found NOT to be linked to the original person who contacted the pathogen or the food source suspected of causing it, the news stories and the official reports are seldom corrected. Sometimes there are ego involved in not wanting to admit they were wrong. It's like telling a big false rumor about someone but later the truth is found. For most practical purposes, it doesn't matter at that point. The damage is done.
- A very good example of the point above is the "2016 E. coli O517 outbreak" associated with Organic Pastures listed under #1 in Dr. Baird's report to you. Here, there were supposed to have been 10 people "associated" with this "outbreak," including one 18 year old male in Humboldt County. He was called "associated" because he tested positive for E. coli O517 during that time period. However, when they interviewed him, he had not drunk Organic Pastures milk, or any raw milk for that matter, nor did a PFGE fingerprint link him to Organic Pastures milk or the first person who tested positive. However, most people would assume he had gotten sick by Organic Pastures raw milk after reading what Dr. Baird wrote in #1 but it simply isn't true.
- When epidemiologists work, they are like detectives. First, they look for potential sources and clues. For the state epidemiologist, these potential sources are data on strain matches entered into the PulseNet database. However, not all of these sources pan out. In fact, usually many of them are eliminated as the PFGE fingerprint data comes in and people are interviewed. However, that's usually not in time for the press and other sources to erroneously report, or give the impression, that all of the "associated" sources the epidemiologist digs up are definitely linked and they all got the pathogen from the same source.
- Here's another very important point you need to now. JUST BECAUSE A PERSON TESTS POSITIVE FOR A PATHOGEN DOES NOT MEAN THEY ACTUALLY GET "SICK" OR "ILL," although this is very often how it is reported. A report may say, "6 people got sick from xyz pathogen" when they only tested positive for xyz pathogen. Many people test positive for a pathogen but never become ill. This includes virulent strains of pathogens. For a person to actually get sick by foodborne pathogens, they have to get enough of it in their system to overload their immune system.
- The above point was true for the "2016 E. coli O517 outbreak" listed in Dr. Baird's #1. Only one person actually got sick enough to be in a hospital. Unfortunately too, this is a good example where the final official report from the California Department of Public Health (CDPH) did not fully update their files before they published the report. For example, the supposed "sick" child in Fresno County, unknown until the very end of their investigation by CDPH, was Mark McAfee's own grandson! His mother had taken him to be tested since she knew there was an investigation and he tested positive. However, during the time that CDPH claimed he was a "sick" child in Fresno County, he was running around jumping and playing and showing no signs of illness. Unfortunately, this fact was not updated in the final report on this matter, nor were others.
- While we don't want to spend a lot of time talking about the health benefits of raw milk, we simply must point out in the context of what we're explaining that the dozens of species and strains of friendly bacteria found in raw milk help build the gut immune system. If one has a healthy diverse gut flora, when a virulent strain enters the system, the immune system kicks in and knocks it out. When people take broad spectrum antibiotics, these often destroy this gut immunity and this leaves people more susceptible to infections. This is why so many people get urinary tract infections after taking broad spectrum antibiotics. Raw milk, on the other hand, helps build that much needed gut immunity back up!
- We will also point out at this point that human breast milk and raw cow milk are very similar in beneficial bacteria composition. This helps build a baby's gut immunity.
- If a state inspector goes to a dairy farm and finds evidence of a pathogen, such as Campylobacter, in the milk, they may issue a recall. However, that does NOT mean that anyone actually got sick, or even drank the milk. In some cases, the state may work with the dairy to conduct a temporary quarantine. Again, this does NOT mean anyone actually drank the milk or got sick from the milk. Unfortunately, however, it often gets reported in a way that distorts and embellishes what's actually happening. It's sensationalistic to hear there's a Campylobacter "outbreak" at xyz farm. It makes it sound like lots of people are going to get sick. However, in many cases, no one has consumed any Campylobacter because they caught it before it happened.
- When someone tests positive in California for a pathogen, this information is entered into a state database. At this point, it does not mean the person who tested positive is actually sick as MANY people have pathogens in their

system that have no symptoms and never get sick from it. To become actually sick from a pathogen, there has to be enough of it in a person's system to overcome their natural immune defenses.

- The pathogen also has to be virulent enough to cause sickness. There are also varying degrees of virulence associated with foodborne pathogens. Take Campylobacter for example. While this is a pathogen, most people, in fact the vast majority of people, never actually get sick from it. Of the people who do get sick from it, they usually only get a mild case of diarrhea and then fully recover in a day or two without ever going to the doctor.
- Unfortunately, people who test positive for a pathogen, are often referred to as "sick" or "ill" in the press, on websites, and even by official governmental entities or the people who work for them. This causes a great deal of confusion about what is actually happening. Once it's in print, there is almost never a retraction or any explanation that the person(s) that was referred to as being "sick" never actually was.
- Officially, the word "outbreak" is defined as two or more people from different families who test positive for the same strain of the same pathogen AND who are sick AND who have pathogen strains that match with a fingerprint test. Unfortunately, this word is often used much more loosely, even before the relavant data comes in, and this causes a great deal of confusion about what is actually going on.

We Need To Compare Apples To Apples, Not Apples To Oranges

Much of what's presented in Dr. Baird's report is based on incidents that happened in other states where the standards for producing and selling raw milk to consumers without pasteurization are not as strict as we have here in California. Furthermore, much of the data in his report is based on unregulated untested "black market" raw milk. While some black market raw milk is relatively safe, not all of it is. At any rate, we are only asking that the ban on LEGAL and fully regulated licensed raw milk be lifted in Humboldt, i.e. what is legal under California state law. Finally, some of the data presented in Dr. Baird's report is really old. The standards for legal raw milk in California got much stricter in 2008 with the passage of AB-1735. Among other stipulations, this law requires that licensed (legal) California raw milk dairies have a coliform count of 10 or less at the final container when tested. Therefore, the data after the passage of this bill is really the most important.

Addressing Other Specifics in Dr. Baird's Report

We've already discussed the 2016 event (#1) above as an example to the general points we were making.

Vulto Soft Cheese From New York Listeria (#4 on Dr. Baird's Report)

It should be noted first that raw milk cheeses, that follow all federal regulations, can already be legally sold in Humboldt County. Further, a variety of raw milk cheeses are being sold in our stores and have been for a long time. If there was any sort of serious health issue with raw milk cheeses in Humboldt County, we'd already know about it.

Since 1949, the FDA has allowed raw milk to be used to make cheese as long as it is aged at least 60 days. Although it is not a completely settled issue, the Listeria in the tainted Vulto soft cheese most likely came from the factory, NOT from the milk itself. Furthermore, Listeria doesn't grow well in raw milk because the other bacteria, the good bacteria, outcompete it. However, if you heat the raw milk, including to temperatures below pasteurization (161 degrees Fahrenheit), it kills off some of the friendly bacteria. This makes it more susceptible to Listeria found in the environment.

This is why Listeria is actually a much bigger problem in pasteurized milk than raw liquid milk because there are often secondary introductions of Listeria in pasteurized milk that has essentially been sterilized and has not bacterial defenses! There is one caveat. If you look through CDC data, or data from other agencies, some of the rare cases of Listeria in so called "raw milk" are actually in milk where there was a problem with pasteurization and it didn't get to 161 degrees Fahrenheit or held long enough, making it more susceptible to Listeria. However, the agency in these cases will sometimes list this milk as "raw milk" since it did not get pasteurized properly.

Brucella RB51 In Udder Milk (#5 on Dr. Baird's Report)

First, selling raw milk from any source in New Jersey is illegal. In nearby New York, consumers can only buy it direct from the farm, which is really hard to do if you live in the New York City metro area. So, in this area, people are really desperate to get raw milk and "black market" totally unregulated milk is rampant.

Udder Milk is a "middleman." They buy from several black market farms and sell to people in New Jersey and New York City mostly. They use nondescript white vans and they do not disclose their farms, which is one of the reasons this case has been so hard to track. Thus, Udder Milk is completely unregulated and untested. However, it should also be noted that officials now believe that the Brucella RB51 outbreak in this case came from an under-attenuated Brucella vaccination. Thus, it may very well have been caused by a pharmaceutical problem, not actually a problem from the cow.

This type of business has NOTHING to do with what we are asking for when we ask the ban on licensed legal raw milk be lifted in Humboldt. Look at Organic Pastures as a prime example. They are the EXACT opposite from Udder Milk. There is FULL TRANSPARENCY with everything they do and they are fully regulated and constantly tested. They follow all safety regulations closely and even go above and beyond required regulations with their new voluntary self-initiated Test & Hold program. The state tests for Brucella on their farm often so they'd know if they had it.

Instead of hiding where their farm is like Udder Milk, they invite lots of people to the farm, including children and their families for sleepovers. They give bicycle tours on their farm and let people meet their cows. They answer all their customers' questions in detail in as timely a way as possible and we can vouch for the fact they are extremely patient with people coming back to ask follow up questions. We're quite sure they'd receive Dr. Baird with open arms if he wanted to go for a tour on their farm. They're very open about their process so we're certain they'd be happy to discuss with him any concerns he may have. The same would go for any Humboldt citizen or any Humboldt store that wants to sell their milk.

Salmonella Dublin (#2a on Dr. Baird's Report)

We don't know all the details on this one but we do know this ancient incident involved military vets who were cancer patients at VA Hospitals. Several were already on death watch before they drank raw milk. Of those who died, it would be completely unfair to automatically blame raw milk.

The Past Decade At Organic Pastures (#3 on Dr. Baird's Report)

We want to share more insight on these incidents that are pulled from a highly questionable source (see below for more on the source). This information was obtained directly from Mark McAfee, the CEO of Organic Pastures:

Oct 2015

Campylobacter was found by state officials on the farm but no one ever tested positive and no one got sick,

Sept 2012

Campylobacter was found by state officials on the farm but no one ever tested positive and no one got sick.

Jan - April 2012

These Campylobacter infections were never fingerprinted. No one got that sick, maybe a little diarrhea. Campylobacter very rarely causes much more than diarrhea in humans. You also build immunity to it the first time you get it.

Aug - Oct 2011

Two children (twins) were hospitalized with E. coli 0517 and they made a full recovery. However, they did not get sick from drinking Organic Pastures milk directly. The family made homemade kefir with it and the kids got sick from the kefir.

Sept 2008

Campylobacter was found by state officials on the farm but no one ever tested positive and no one got sick.

Sept 2007

While the cream that tested positive for Listeria was on the Organic Pastures farm, it was from another creamery, Clover Stornetta in Petaluma CA. This is a creamery where the milk is normally pasteurized. Listeria is more common on farms that produce milk for pasteurization than on raw milk farms. Organic Pastures had planned to make butter with the Clover Stornetta cream but tested if first to be safe. It was all destroyed with no one ever having consumed any of it. This was the first and last time they've ever brought another creamery's milk on their farm.

Nov - Dec 2007

The reasons they found 50 strains of Campylobacter is they were testing the cow poop, not just the milk. No one was hospitalized so there were no serious illnesses.

Sept 2006

This was a complicated case. They never actually fingerprinted E. coli 0157 found in the children back to the Organic Pastures farm. Two children were hospitalized, not six. They did NOT have HUS, or any kind of kidney failure, so that is simply FALSE and what a whopper of falsehood it is! They were sick but recovered fully. This was all happening during the time of the big E. coli 0157 spinach scare so some of these cases cold have been linked to that.

More Information Regarding Organic Pastures Raw Milk Specifically

We want to point out some important facts regarding Organic Pastures milk, since Dr. Baird specifically addressed this company's raw milk.

- Organic Pastures is the largest producer of legal licensed raw milk in the state of California by far so this is the brand that will no doubt be sold in Humboldt County stores first if you lift the ban. In fact, Organic Pastures already has a delivery truck that passes right by many of our stores who want to sell legal raw milk on the way to deliver in Del Norte County.
- Organic Pastures has been in business since 1999. They currently produce about 21,000 gallons of raw milk per week, which are distributed to 700 stores and 22 farmers markets in California. That's about 1.1 million gallons of raw milk per year!
- If you refer to the "National CDC Data on Pasteurized Milk vs Raw Milk (1966-2017)" chart we have provided for you, based on published data that you can verify yourself, you will see that Organic Pastures has had only four illnesses traced to their milk. Further, these four individuals fully recovered with no permanent repercussions. This is an outstanding safety record given the volume of raw milk they distribute and the fact they've been in business 18 years.
- In fact, Organic Pastures' safety record for raw milk is far better than what's documented for the pasteurized milk industry, both in terms of verified illnesses and verified deaths due to the consumption of milk. We refer you again to the "National CDC Data on Pasteurized Milk vs Raw Milk (1966-2017)" chart to see a direct comparison.
- Since 1966, there have been 153,877 verified illnesses due to pasteurized milk and 82 DEATHS. Please note that none of the four verified sick people traced to Organic Pastures' milk, over the span of eighteen years, came anywhere near dying! In fact, the official CDC death rate nationwide attributed to raw milk overall, including for illegal "black market" raw milk, not tested or regulated, and including milk that was not pasteurized properly so it was reclassified by the CDC as "raw," is either zero deaths or one death. There was a questionable death in 2014 that is still pending further investigation and that was a case of black market unregulated raw milk.
- Bottom line, raw milk is one of the safer food products when real data is used and information is reserved until full investigations are completed. Even unregulated untested raw milk has a better safety record than other food categories, like greens, especially when it comes to deaths or serious sickness causing permanent damage.
- Please see the research paper, "Outbreaks Attributed To Fresh Leafy Vegetables, United States, 1973–2012" we have included in our packet for a comparison. This paper was published by the CDC in the Epidemiology and Infection Journal in 2015, from 1973 to 2012. Compared to ZERO to one death for raw milk (and the one death, if true, would be due to black market raw milk), there were 19 verified deaths due to pathogens found on leafy green vegetables.

- It should also be pointed out that several doctors in California have recommended Organic Pastures milk, or raw milk in general, to people who are supposedly "lactose intolerant." Many of these so called "lactose intolerant" people not only tolerate raw milk well but actually thrive on it. The same is true for many people suffering from illnesses like asthma, allergies, and gastrointestinal problems. When they drink pasteurized milk, they have these symptoms, but they go away when they switch to raw milk.

Additionally, if you review the public testimonies of the 2010 and 2011 Humboldt County Supervisor meetings, where citizens were asking, some were pleading, for the raw milk ban in Humboldt County to be lifted, you'll see that several Humboldt County citizens shared their personal health stories with the board. Several citizens reported dramatic improvements in their health when they switched from pasteurized milk to raw milk. Some also reported their ailments returned when they moved to Humboldt County and were forced to drink pasteurized milk or no milk at all.

We ask you to keep these 2010/2011 public testimonies by citizens in mind, many of whom are still your constituents, when you vote on whether or not to lift the ban on raw milk January 23, 2018. We believe these brave testimonies should not only count, but should count for a lot. It took a great deal of courage for those citizens to stand in a crowded room, with cameras recording them, and share something so personal. You can review these public testimonies in the public video archives of those meetings online:

August 24, 2010 Humboldt County Board of Supervisors Meeting http://humboldt.granicus.com/MediaPlayer.php?view_id=2&clip_id=157

January 11, 2011 Humboldt County Board of Supervisors Meeting http://humboldt.granicus.com/MediaPlayer.php?view_id=2&clip_id=276n

Information on the Unreliable "Food Safety News" Website

We're a little surprised that Dr. Baird used this questionable website as a reference for so much of his report. He himself described them as "ambulance chasers," and on this point, we agree. Food Safety News is not a website that we believe is a reliable source and should not be trusted on food safety and health matters.

The publisher of this site is Bill Marler. He is a personal injury attorney who became famous back in the 1990s suing Jack in the Box on behalf of multiple clients for the E. coli outbreak. He boasts about winning \$600 million dollars in settlements for his clients, suing many well known restaurants and food processors and distributors. His law firm is billed as the "Food Poisoning Lawyers and Attorneys."

A Google search of his business address turned up at least a dozen other websites he runs, mostly blogs, that are very keyword enhanced for one particular pathogen name. He has these structured to serve as a "net" to catch people searching for these terms and then he funnels them back to his law firm site to see if he can represent them.

Obviously, Food Safety News, and all Bill Marler's other sites, have an agenda.

In looking through the Food Safety News site, and other sites Bill Marler runs, it became obvious that sensationalism was the name of game. There were many reports that made serious omissions that caused a story to be exaggerated or just plain false. As more details on raw milk investigations come out, these sites do not seem to make corrections.

In our opinion, this is totally unreliable website and has no business being used as a top source for health related or food related issues.

Risk Factor

Relative to eating leafy green vegetables, the risk entailed in consuming regulated licensed raw milk in the state of California, is quite low. There have never been any deaths due to licensed raw milk in the state of California, or elsewhere in the nation, yet we know from the CDC paper that at least 19 people have actually DIED in the United States from eating leafy green vegetables.

Does this mean we advocate for people not eating leafy green vegetables? Absolutely not!

We are simply pointing out that eating ANYTHING carries with it some degree of risk. People make decisions everyday about what to eat or not eat and what to feed their families or not feed them. Different people have different

"taboos" in their eating preferences just as we all have different personal views about religion and ethics.

We believe in the fundamental human right to have the reasonable freedom to choose which foods we consume, without local government intruding on those rights.

Kay Schaser, a resident of Eureka, publicly expressed to the Humboldt County Board of Supervisors back in 2011; "I asked you in a previous statement if you would stop trying to protect me from myself. I'm a big girl and I can make my own decisions."

We wholeheartedly concur!!!

Sworn Affidavit

- I, Mark McAfee, swear and attest, to the following facts under penalty of perjury:
 - The state of California tests OPDC milk every month for a full panel of pathogens and other bacterial measures of sanitation to assure compliance with all state laws for raw milk. Fresno County Health Department also tests OPDC milk for coliforms and compliance.
 - 2. There is no additional requirement for OPDC to perform any additional testing.
 - OPDC separately and at its own expense, tests every batch of milk for pathogens and coliform counts. New technology allows for 10 hour test results using AOAC FDA BAX PCR RT technologies.
 - 4. FSNS labs in Fresno California performs these third party tests.
 - 5. No raw milk leaves a dedicated holding silo tank until results are received and confirmed. There are 3 Test & Hold silo tanks at the OPDC dairy facility.
 - 6. This allows for Test & Hold prior to production of any of the OPDC products and reduces risk of raw milk pathogens to near zero.
 - 7. There have been zero pathogens detected by FSNS labs on OPDC bulk tank milk Test & Hold during the three years that this technology has been available for use on raw milk.
 - 8. Because of rapid accurate Test & Hold, OPDC is able to make timely preemptive operational decisions on a daily basis to assure safety and quality.
 - 9. OPDC performs approximately 120 tests per month at FSNS under the Test & Hold procedures at a cost of about \$10,000 per month.
 - 10. As an additional precaution, OPDC performs additional individual culture and pathogen tests on each cow as they come fresh to assure that they do not carry a pathogen into the milking herd. Fresh cows are kept separately from the milking herd for 30 days to assure pathogen free milk.
 - 11. Our 18 years of experience has shown that the highest risk for a cow and pathogens is at freshening time.
 - 12. OPDC food safety program is audited by UC Davis PhD epidemiologic experts and veterinarians. Test data is published for public review to the Raw Milk Institute. Org website.
 - 13. The OPDC herd is TB free and Brucellosis free as tested by the state of California.

Sworn and attested this day, November 21, 2017

Mark McΔfee

CEO founder OPDC

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.	
State of California County of FYCSMO	•
On November 21, 2017 before me, Male	gan nazoroff, notery public et name and title of the officer)
personally appeared	me that ne/she/they executed the same in
I certify under PENALTY OF PERJURY under the laws or paragraph is true and correct.	
WITNESS my hand and official seal.	MAEGAH NAZAROFF COMM. #2069875 Notary Public - California 8
Signature (Seal	My Cemin, Expires May 31, 2018

Sworn Affidavit

I Mark McAfee, swear and attest, that I am the founder and owner of Organic Pastures Dairy. I swear to the following facts under penalty of perjury:

- 1. OPDC is the largest USDA certified organic raw milk producer in the USA with more than 1.2 million gallons of raw milk produced each year. That amounts to about 17 million servings of raw milk per year being consumed by Californians.
- 2. OPDC produces: raw milk, raw cream, raw Kefir, raw cheese and raw butter at its on-farm creamery south west of Fresno California.
- 3. OPDC products are sold in approximately 600 California retail stores and 25 farmers markets each week including all 100 Sprouts Stores.
- 4. OPDC products are sold from the Oregon border to the border of Mexico.
- 5. It is estimated that about 80,000 households in California buy and consume OPDC raw milk or other raw dairy products.
- 6. OPDC raw cheese is sold in an additional 300 stores across America.
- 7. According to State of California Department of Health Services and official FDA NIH CDC data, there have been no deaths or long term illness associated with OPDC products since its founding in 1999, this would include 240 million servings of raw milk or other raw dairy products spanning 18 years.
- 8. Every week, a truck from OPDC travels through Humboldt County on its way to Del Norte County where stores sell OPDC products. Due to the very old ban on raw milk sales in Humboldt, our trucks cannot stop and provide our products to many stores would like to sell them.

Sworn and attested this day, November 21, 2017

CEO founder OPDC

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

validity of that document.
State of California County of Fresno
On November 21, 2017 before me, Macgan Nozaroff, Notary Public (insert name and title of the officer)
personally appeared MCV MCVICE who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal. MAEGAN NAZAROFF COMM. #2069876 Notary Public - California Fresno County
Signature (Seal)



HHS Public Access

Author manuscript

Epidemiol Infect. Author manuscript; available in PMC 2016 October 01.

Published in final edited form as:

Epidemiol Infect. 2015 October; 143(14): 3011–3021. doi:10.1017/S0950268815000047.

Outbreaks attributed to fresh leafy vegetables, United States, 1973–2012

K. M. HERMAN, A. J. HALL, and L. H. GOULD*

Centers for Disease Control and Prevention, Atlanta, GA, USA

SUMMARY

Leafy vegetables are an essential component of a healthy diet; however, they have been associated with high-profile outbreaks causing severe illnesses. We reviewed leafy vegetable-associated outbreaks reported to the Centers for Disease Control and Prevention between 1973 and 2012. During the study period, 606 leafy vegetable-associated outbreaks, with 20 003 associated illnesses, 1030 hospitalizations, and 19 deaths were reported. On average, leafy vegetable-associated outbreaks were larger than those attributed to other food types. The pathogens that most often caused leafy vegetable-associated outbreaks were norovirus (55% of outbreaks with confirmed aetiology), Shiga toxin-producing *Escherichia coli* (STEC) (18%), and *Salmonella* (11%). Most outbreaks were attributed to food prepared in a restaurant or catering facility (85%). An ill food worker was implicated as the source of contamination in 31% of outbreaks. Efforts by local, state, and federal agencies to control leafy vegetable contamination and outbreaks should span from the point of harvest to the point of preparation.

Keywords

Escherichia coli; food poisoning; food safety; foodborne infections; Norwalk agent and related viruses; Salmonella

INTRODUCTION

Leafy vegetables are frequently implicated in foodborne disease outbreaks [1], and an analysis based on data from outbreaks estimated them to be the most common cause of foodborne illness in the United States [2]. Outbreaks attributed to leafy vegetables can result in severe health outcomes and be widespread, affecting residents of multiple states. In 2006, an outbreak of Shiga toxin-producing *Escherichia coli* (STEC) O157 infections associated with spinach was the deadliest US foodborne disease outbreak attributed to leafy vegetables ever reported, causing nearly 200 laboratory-confirmed illnesses, 100 hospitalizations, and five deaths [3].

The annual number of produce-associated outbreaks reported has increased since surveillance for foodborne disease outbreaks began in 1973, and the consumption of produce

Author for correspondence: Dr L. H. Gould, 1600 Clifton Rd, NE MS-C09, Atlanta, GA 30333, USA. (Igould@cdc.gov).

DECLARATION OF INTEREST

None.

has steadily increased as well [4-6]. While leafy vegetables are an important part of a healthy diet, contamination is particularly concerning because they are usually consumed raw with no cooking to kill any pathogens that might be present [7].

We describe characteristics of outbreaks attributed to leafy vegetables during 1973–2012 and explore possible reasons for changes in the number of outbreaks over time.

METHODS

Surveillance data

The Centers for Disease Control and Prevention's (CDC) Foodborne Disease Outbreak Surveillance System (FDOSS) has collected data on foodborne disease outbreaks voluntarily reported by local, state, and territorial health departments since 1973. The surveillance system underwent major enhancements in 1998 with the collection of additional information and transition to electronic reporting [8]. In 2009, FDOSS transitioned to a new reporting form and electronic reporting system, which receives reports of both foodborne and non-foodborne enteric disease outbreaks [9].

Leafy vegetable outbreaks

We defined a leafy vegetable-associated outbreak as an event in which two or more persons became ill due to the ingestion of a common leafy vegetable food item. We defined a leafy vegetable food item as any vegetable composed of edible leaves, including cabbage, chard, collard greens, ferns, green onions, kale, leeks, lettuce, mustard greens, spinach, and turnip greens. We defined two types of leafy vegetable outbreaks: simple leafy vegetable outbreaks were defined as those in which one or more types of leafy vegetable were implicated. Leafy vegetable-based salad outbreaks were defined as those in which a salad (e.g. house salad or garden salad) was implicated but the specific leafy vegetable causing the outbreak was not reported, and neither beef, eggs, poultry, nor seafood were listed as ingredients. The leafy vegetables were assumed to be uncooked unless otherwise indicated. Reports that indicated that the food was cooked (e.g. boiled spinach) and reports of outbreaks caused by botulinum toxin were excluded from the analysis.

Consumption data

As a proxy for leafy vegetable consumption, we reviewed the leafy vegetable loss-adjusted per capita availability data for 1973–2011 from the US Department of Agriculture (USDA) Economic Research Service [10]. The loss-adjusted per capita availability represents the edible amount of food, post-harvest, that is available for human consumption but is not consumed, and is calculated as the annual farm production and import of leafy vegetables minus spoilage and waste. The following vegetables were included in the calculation for leafy vegetable loss-adjusted per capita availability: cabbage, head lettuce, romaine or leaf lettuce, and spinach. Only data on fresh vegetables that were not canned or frozen and only those leafy vegetable types that were implicated in an outbreak in this analysis were used.

Page 3

Analysis

We reviewed characteristics of foodborne disease outbreaks reported during 1973-2012 where a leafy vegetable was reported as the implicated food. To account for changes in the surveillance system, some measures were analysed separately for the pre-electronic (1973-1997) and electronic (1998-2012) reporting periods. The outbreak reports included aggregate information on the outbreak, including the number of illnesses, hospitalizations, and deaths, implicated food, location of food preparation, and aetiological agent. Outbreak seasonality was defined as spring (March-May), summer (June-August), autumn (September-November), and winter (December-February). Population-based rates of reported leafy vegetable-associated outbreaks were calculated for each state and year using the US Census estimates of state populations [11].

An outbreak was considered to have a confirmed aetiology if specific confirmation criteria were met [12]; outbreaks that did not meet the confirmation criteria but with sufficient evidence to suspect an aetiology were considered to have a suspected aetiology. Otherwise, the aetiology was reported as unknown. Locations of food preparation were analysed in the following categories: restaurant or catering facility (reported as 'restaurant or deli', 'banquet facility', 'wedding reception', 'caterer'); institution ('camp', 'day care centre', 'hospital', 'nursing home', 'prison or jail', 'school', 'workplace cafeteria'); private home or setting ('church or temple', 'office setting', 'picnic', 'private home', 'workplace other than cafeteria'); retail establishment ('commercial products served without further preparation', 'contaminated food imported into the US', 'grocery store'); and other (all other settings). Outbreaks associated with multiple food preparation locations were not included in the analysis by location. Information on whether an ill foodworker was implicated, the level of evidence implicating a food, the types of specimens the pathogen was isolated from, and patients' age and sex distributions were collected during 1998-2012. Age groups were collected as proportions of outbreak-associated illnesses and categorized as 'child' (<1, 1-4, 5-19 years) and 'adult' (20-49, ≥50 years).

Characteristics of leafy vegetable-associated outbreaks were compared with those of outbreaks attributed to other food vehicles during the same period. A Mann-Whitney Wilcoxon test was used to compare the median outbreak size, and Pearson's η^2 test was used to compare age, sex, and preparation locations. The relationship between the number of leafy vegetable-associated outbreaks and leafy vegetable loss-adjusted per capita availability was examined using regression of least squares. All data analyses were performed using SAS v. 9.3 (SAS Institute Inc., USA).

RESULTS

Of 12 714 foodborne disease outbreaks with at least one food item implicated during 1973-2012, 606 (5%) had a leafy vegetable implicated (162 outbreaks with a simple leafy vegetable as the vehicle and 444 outbreaks with a leafy vegetable-based salad as the vehicle), resulting in 20 003 illnesses, 1030 hospitalizations, and 19 deaths. The median proportion of outbreaks attributed to raw leafy vegetables each year was 3% (range 0-12%). The annual number of outbreaks associated with leafy vegetables increased from a median of 4 (2% of outbreaks with a food implicated) during 1973–1997 (pre-electronic reporting)

(range 0-15 per year) to a median of 37 (5%) during 1998-2012 (electronic reporting) (range 14-49), but the median number of ill persons per outbreak markedly decreased (Fig. 1).

A single confirmed or suspected aetiology was reported for 396 (65%) outbreaks; three had multiple aetiologies, and the remainder had an unknown aetiology (Table 1). Of the 272 (69%) confirmed single actiology outbreaks reported, norovirus was the most common, followed by STEC, and Salmonella. During 1973-1997, 6% of outbreaks were confirmed as caused by norovirus, and 65% had an unknown aetiology. Conversely, during 1998-2012, 29% of outbreaks were confirmed as caused by norovirus and 28% by an unknown aetiology. STEC serogroups that caused outbreaks were O157 (45 outbreaks, 94% of confirmed STEC outbreaks), O145 (two, 4%), and O121 (one, 2%). In outbreaks confirmed as caused by Salmonella, 13 known serotypes were reported; serotypes Enteritidis and Typhimurium were the most frequently reported (seven and six outbreaks, respectively, 45% of total). Outbreaks caused by STEC had the highest proportion of persons hospitalized (46%), followed by those caused by hepatitis A (22%), and Shigella (12%). Nine deaths occurred in outbreaks caused by hepatitis A (transmitted by lettuce to five persons, by green onions to three, by coleslaw to one), nine in outbreaks caused by STEC (transmitted by spinach to six persons, by lettuce to two, and salad to two), and one in an outbreak caused by norovirus (transmitted by salad).

Of the 97 outbreaks caused by simple leafy vegetables with a confirmed single aetiology, STEC was the most common (37 outbreaks, 38%), followed by norovirus (28, 29%), Salmonella (10, 10%), and hepatitis A (eight, 8%) (Table 2). Of the 175 outbreaks caused by leafy-based salads with a confirmed single aetiology, norovirus was the most common (121 outbreaks, 69%), followed by Salmonella (19, 11%), STEC (11, 6%), and Shigella (11, 6%).

Leafy vegetable-associated outbreaks were reported by 44 states and Puerto Rico. For the 580 outbreaks where the exposure occurred in a single state, the average state-specific reporting rate was 0.06/1 000 000 population (range 0.01–0.21). Minnesota had the highest average annual rate of reported leafy vegetable-associated outbreaks (0.21), followed by Washington (0.20), and Oregon (0.17).

Twenty-six (4%) outbreaks (24 associated with simple leafy vegetables, one with multiple simple leafy vegetables, and one with a leafy vegetable-based salad) were multistate (i.e. exposure to the implicated food occurred in more than one state). STEC was the most common actiology (18 outbreaks, 69%), followed by Salmonella (six outbreaks, 23%). Leafy vegetables implicated in multistate outbreaks were lettuce (18 outbreaks, 69%), green onions (three, 12%), spinach (two, 8%), lettuce and spinach (one, 4%), unspecified leafy (one, 4%), and pre-packed leafy vegetable-based salad (one, 4%).

Reported outbreaks occurred most frequently during spring (31%). Outbreaks caused by norovirus were most common in all seasons, and by pathogen seasonality varied. Norovirus outbreaks peaked during winter (35% of norovirus outbreaks), STEC peaked in autumn (51%), and Salmonella in summer (38%) and spring (31%) (Fig. 2).

Of the 162 (27%) outbreaks due to a simple leafy vegetable, most were attributed to lettuce (120, 74%). Other leafy vegetables implicated were cabbage (nine outbreaks, 6%), green onions (eight, 5%), ferns (six, 4%), and spinach (five, 3%). Of the 50 (42%) outbreaks in which a specific type of lettuce was implicated, the types were romaine (15, 30%), iceberg (13 outbreaks, 26%), leaf (12, 24%), mesclun mix (nine, 18%), and arugula (one, 2%). Of the 97 outbreaks with a confirmed aetiology due to a simple food leafy vegetable, the foodaetiology pair implicated most often was lettuce and STEC (29 outbreaks, 30%), followed by lettuce and norovirus (24, 25%). However, when outbreaks with suspected aetiologies were included, the food-aetiology pair implicated most often was lettuce and norovirus.

Of the 444 outbreaks caused by leafy vegetable-based salads, the types were listed as salad (125, 28%), lettuce-based (99, 22%), green or garden (71, 16%), house (41, 9%), coleslaw (41, 9%), Caesar (34, 8%), tossed (17, 4%), multiple (nine, 2%), pre-packaged (three, 1%), spring (three, 1%), and spinach (one, <1%). Of the 175 outbreaks attributed to a leafy vegetable-based salad with a single confirmed aetiology, most were caused by norovirus (121 outbreaks, 69%), followed by Salmonella (19 outbreaks, 11%), Shigella (11, 6%), and STEC (11, 6%).

In the 501 outbreaks reported during 1998–2012, the level of evidence implicating a leafy vegetable was reported for 389 (78%). Epidemiological or laboratory evidence was used to implicate the food for 72 (65%) simple food leafy vegetable outbreaks and 167 (60%) leafy vegetable-based salad outbreaks. In outbreaks where the food was implicated based on other types of evidence (e.g. supportive information) and caused by a single confirmed aetiology, norovirus was reported for 47% of outbreaks caused by a simple food leafy vegetable and 77% caused by a leafy vegetable-based salad. Of the 138 confirmed norovirus outbreaks reported during 1998–2012, norovirus was isolated from a patient specimen in 101 (73%), from patient and foodworker specimens in 36 (26%), and from patient specimens and food in one (1%).

Information on the suspected or confirmed point where the leafy vegetables were contaminated was collected starting in 2009. Of the 52 outbreaks with information, contamination was reported at the point of preparation for 39 (75%) and before preparation for 13 (25%). For three outbreaks with contamination reported before preparation, contamination at harvest was reported; for the remainder the point of contamination was not reported. Information on point of contamination was provided for 19 norovirus outbreaks; in all 19, contamination was reported at the point of preparation.

A preparation location was reported for 579 (96%) leafy vegetable-associated outbreaks, and, of these, 557 (96%) implicated a single location (Table 3). Of outbreaks with a single preparation location, 75% of outbreaks associated with a simple leafy vegetable and 88% of outbreaks associated with a leafy-based salad were attributed to foods prepared in a restaurant or catering facility, compared to $7083/11\ 142\ (64\%)$ outbreaks with another food vehicle implicated (P < 0.001). In addition, in outbreaks attributed to leafy vegetables prepared in a restaurant or catering facility and a single confirmed aetiology, 61% were caused by norovirus. The second most commonly implicated aetiology and preparation location pairing was STEC and a restaurant or catering facility (12%). Although only four

(2%) confirmed aetiology outbreaks implicated a food prepared in a retail setting, three were caused by STEC. An ill foodworker was implicated in 155 (31%) leafy vegetable-associated outbreaks (27 simple leafy vegetable, 128 leafy vegetable-based salads) compared to only 12% of all other outbreaks with an implicated food (P < 0.001). Of the 90 leafy vegetable-associated outbreaks with a single confirmed aetiology that implicated an ill food-worker, 75 (84%; 14 simple leafy vegetable, 61 leafy vegetable-based salads) were caused by norovirus.

Compared to illnesses in outbreaks attributed to other foods, illnesses in leafy vegetable-associated outbreaks were more common in adults (85% vs. 77%, P < 0.001) and in women (59% vs. 50%, P < 0.001). In addition, the median size of leafy vegetable outbreaks was larger than outbreaks attributed to other foods (17 vs. 9, P < 0.001).

We compared the number of outbreaks attributed to a leafy vegetable with the annual leafy vegetable consumption $per\ capita$ during 1973–2011. The annual leafy vegetable consumption was a poor predictor of the number of leafy vegetable-associated outbreaks during 1973–1997 ($R^2=0.37$, P=0.001) and during 1998–2011 ($R^2=0.34$, P=0.029). In particular, lettuce and spinach consumption were poor predictors for lettuce and spinach-associated outbreaks during 1973–2011 ($R^2=0.14$, P<0.017) and ($R^2=0.15$, P=0.016), respectively.

DISCUSSION

Leafy vegetables, an important part of a healthy diet, were implicated in many foodborne disease outbreaks. In outbreaks with a confirmed or suspected aetiology, norovirus caused over half; it was by far the most common confirmed or suspected cause of leafy vegetable-based salad outbreaks and was the second most common cause of simple leafy vegetable outbreaks with a confirmed aetiology. The large percentage of outbreaks in which the leafy vegetable food was prepared in a restaurant and contaminated with norovirus, often by an ill food worker, underscores the need to enforce safe handling practices for leafy vegetables and food containing leafy vegetables, like salads, by food workers. Additionally, contamination of leafy vegetables early in production by bacterial pathogens like STEC and Salmonella caused nearly all multistate outbreaks.

Norovirus, the leading cause of foodborne disease outbreaks [13], caused most of the outbreaks associated with leafy vegetables. In an analysis of data from 2001 to 2008, in all foodborne norovirus outbreaks with a single implicated food vehicle, leafy vegetables were most often implicated [13]. Most leafy vegetable-associated norovirus outbreaks involved preparation in a restaurant or catering facility, and ill food workers were often implicated as a source of contamination; this finding is consistent with the epidemiology of all foodborne norovirus outbreaks. Most of these outbreaks likely resulted from contamination at the point of preparation, due to improper hand hygiene [13]. Therefore, proper food handling guidelines for restaurant workers should emphasize the importance of hand hygiene and not preparing food when ill. Contamination during production might also lead to norovirus contamination of leafy vegetables [13, 14]. Because the outbreak reports contained limited information on the point where contamination occurred, we were unable to determine whether any outbreaks resulted from contamination during production. Results of laboratory

tests for norovirus in the implicated vegetables were infrequently reported; most norovirus outbreaks were attributed to leafy vegetables based on evidence from epidemiological studies or results of testing of ill food workers.

STEC was the leading cause of simple leafy vegetable outbreaks with a confirmed actiology. In all leafy vegetable outbreaks, STEC caused nearly two-thirds of multistate outbreaks, over 45% of hospitalizations, and nearly half of the deaths. The number of STEC outbreaks attributed to leafy vegetables has increased in recent years. Contamination of leafy vegetables with bacterial pathogens like E. coli and Salmonella can happen at many points in production, but the large number of multistate outbreaks caused by these pathogens suggests contamination early in production. Leafy vegetables can become contaminated with pathogens by water used for irrigation, animal manure used for fertilizer, and feral animals that traverse vegetable fields. Contamination can also occur during processing, including during washing, cutting, and storage [15]. E. coli and Salmonella can be internalized into plant tissues, rendering washing ineffective [16]; bacteria can also adhere to cut surfaces so leafy vegetables should be cleaned thoroughly before cutting. Leafy vegetable contamination on the farm or during processing has the potential to result in particularly large, widespread outbreaks, as evidenced by the three largest leafy-vegetable multistate outbreaks [17-19]. Interventions are needed to prevent contamination of leafy vegetables on the farm and to implement improved decontamination methods during processing.

Changes over time in the number of outbreaks attributed to leafy vegetables likely primarily reflect enhancements to foodborne disease outbreak surveillance and investigation. The increased number of leafy vegetable-associated outbreaks caused by norovirus during the second half of this period is consistent with the overall increase in reported foodborne norovirus outbreaks as a result of advancements in laboratory diagnostics for norovirus identification [20] and an associated decrease in the proportion of foodborne disease outbreaks with an unknown aetiology [8]. It is likely that many of the unknown aetiology outbreaks during the earlier years of the study period were undiagnosed norovirus outbreaks. This assumption is supported further by the seasonality of unknown actiology outbreaks. which mirrors that of norovirus leafy vegetable-associated outbreaks seen in this study (Fig. 2). Our finding of a marked increase in leafy vegetable-associated outbreaks beginning in 1998 when the surveillance system became electronic, suggests that the increase was at least partially driven by improvements in outbreak surveillance that facilitated reporting of foodborne disease outbreaks from state and local health departments to CDC [8]. Around the same time, improved outbreak detection for E. coli O157 and Salmonella, through CDC's PulseNet led to an overall increase in the number of bacterial foodborne disease outbreaks reported and increased detection of multistate outbreaks [21].

Changes in leafy vegetable consumption do not fully explain changes in the number of outbreaks over time. Over the past 40 years, leafy vegetable consumption has modestly increased in the United States, from 16 lb per capita in 1973 to 17 lb in 2011, although the types of leafy vegetables available changed. For example, the per capita availability of head lettuce decreased from 20.8 lb per capita in 1973 to 13.2 lb in 2012, while the availability of romaine and leaf lettuce increased from 3 lb per capita in 1985 to 10.7 lb in 2012 [10]. Because some types of lettuce are more likely to be contaminated in the field or during

harvest, these changes could have increased the risk of consumer exposure to contaminated leafy greens. Additionally, the availability of bagged salads and other freshly cut produce has increased exponentially since their introduction to the market in the early 1980s [22], and other changes in packaging, processing, and distribution have extended the shelf life of leafy vegetables to make them more available throughout the year [23]. Our finding that lettuce was implicated in 74% of simple leafy vegetable outbreaks of a known type is consistent with the consumption data showing that 75% of leafy vegetables consumed in the United States during this time period were lettuce [10]; however, because few outbreaks reported the type of lettuce or information on processing and packaging, we could not evaluate the impact of these changes on the number of outbreaks.

Implication of leafy vegetables during outbreak investigations can be challenging, requiring substantial resources and public health capacity at the local, state, and federal levels [24]. For example, leafy vegetables are often consumed with other foods, such as in a green salad or as a garnish on a sandwich, which could also include other vegetables, cheeses, meats, and dressing. Identifying the contaminated ingredient in a food like a salad can be difficult, requiring detailed information on the component ingredients. Collection of these data is complex and time-consuming, requiring extensive resources for investigation and traceback. Seventy-six percent of the outbreaks in this analysis were attributed to lettuce-based salads but the specific implicated leafy vegetable was unknown, so it is possible that we overestimated the number of leafy vegetable-associated outbreaks as we cannot be certain that the leafy vegetable was the contaminated ingredient. Additionally, detailed information on processing and packaging, such as whether lettuce was bagged or pre-packaged, was provided for only 1% of outbreaks included in this analysis.

Prevention of outbreaks attributed to leafy vegetables requires a multifaceted approach to reduce contamination. In early 2013, the Food and Drug Administration proposed new regulations for the produce industry under the Food Safety Modernization Act [25]. These regulations address a number of important issues, including the quality of water used for produce irrigation and processing, and sanitary facilities for workers. These regulations are an important advance to make leafy vegetables and other produce safer. On-farm control efforts are needed to ensure proper handwashing techniques and to minimize crosscontamination. Because most leafy vegetable-associated outbreaks were caused by norovirus and occurred in restaurants because of handling by ill food workers, further efforts are needed to ensure appropriate food handling practices in restaurants and catering settings. From 2001 to 2012, the now discontinued USDA Agricultural Marketing Service Microbiological Data Program routinely tested select produce samples, including leafy vegetables (lettuce, spinach, and green onions) in 11 states; positive test results were provided to PulseNet for correlation with human illness and product recall data. Renewed surveillance for microbial contamination of leafy vegetables could help to assess the effectiveness of prevention measures.

Only a small proportion of the vast amount of leafy vegetables consumed each year causes illness [2]. To decrease the risk of illness, consumers and food workers should wash leafy vegetables when recommended, wash their hands before and after handling leafy vegetables, and avoid preparing food when they have a diarrhocal illness.

ACKNOWLEDGEMENTS

We thank state and local health departments for reporting outbreak surveillance data and Patricia Griffin for helpful comments that strengthened the manuscript.

The findings and conclusions are those of the authors and do not necessarily represent those of the Centers for Disease Control and Prevention.

This research received no specific grant from any funding agency, commercial or non-for-profit sectors.

REFERENCES

- Centers for Disease Control and Prevention. [Accessed 14 June 2014] Surveillance for foodborne disease outbreaks – United States, 2012: Annual Report. http://www.cdc.gov/foodsafety/fdoss/data/ annual-summaries/index.html
- Painter JA, et al. Attribution of foodborne illnesses, hospitalizations, and deaths to food commodities by using outbreak data, United States, 1998–2008. Emerging Infectious Diseases. 2013; 19:407–415. [PubMed: 23622497]
- Wendel AM, et al. Multistate outbreak of Escherichia coli O157:H7 infection associated with consumption of packaged spinach, August-September 2006: the Wisconsin investigation. Clinical Infectious Diseases. 2009; 48:1079–1086. [PubMed: 19265476]
- Sivapalasingam S, et al. Fresh produce: a growing cause of outbreaks of foodborne illness in the United States, 1973 through 1997. Journal of Food Protection. 2004; 67:2342–2353. [PubMed: 15508656]
- Bean NH, et al. Surveillance for foodborne-disease outbreaks United States, 1988–1992.
 Morbidity and Mortality Weekly Report. Surveillance Summaries. 1996; 45:1–66.
- United States Government Accountability Office. Fruits and vegetables: enhanced federal efforts to increase consumption could yield health benefits for Americans. United States Government Accountability Office General Accounting Office; Washington, DC, USA: 2002. http:// www.gao.gov/products/gao-02-657Report No.: GAO-02-657
- Food and Drug Administration. [Accessed 11 December 2013] Commodity specific food safety guidelines for the lettuce and leafy greens supply chain. 1st ednhttp://www.fda.gov/downloads/ Food/FoodSafety/Product-SpecificInformation/FruitsVegetablesJuices/ GuidanceComplianceRegulatoryInformation/UCM169008.pdf
- Gould LH, et al. Surveillance for foodborne disease outbreaks United States, 1998–2008.
 Morbidity and Mortality Weekly Report. Surveillance Summaries. 2013; 62:1–34. [PubMed: 23804024]
- Hall AJ, et al. Acute gastroenteritis surveillance through the National Outbreak Reporting System, United States. Emerging Infectious Diseases. 2013; 19:1305–1309. [PubMed: 23876187]
- United States Department of Agriculture Economic Research Service. [Accessed 18 July 2013]
 Food availability (per capita) data system. http://www.ers.usda.gov/Data/FoodConsumption
- United States Census Bureau. [Accessed 29 May 2013] American community survey data and documentation. http://www2.census.gov/acs2011_5yr/summaryfile/?C=M;O=A
- Centers for Disease Control and Prevention. [Accessed 29 May 2013] Guide to confirming a diagnosis in foodborne disease. http://www.cdc.gov/foodsafety/outbreaks/investigating-outbreaks/ confirming_diagnosis.html
- 13. Hall AJ, et al. Epidemiology of foodborne norovirus outbreaks, United States, 2001–2008. Emerging Infectious Diseases. 2012; 18:1566–1573. [PubMed: 23017158]
- Ethelberg S, et al. Outbreaks of gastroenteritis linked to lettuce, Denmark, January 2010.
 Eurosurveillance. 2010; 15
- 15. Food and Drug Administration Center for Food Safety and Applied Nutrition. [Accessed 11 December 2013] FDA guide to minimize microbial food safety hazards for fresh fruits and vegetables. http://www.fda.gov/downloads/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/UCM169112.pdf

HERMAN et al.

16. United States Department of Health and Human Services. [Accessed 11 December 2013] Analysis and evaluation of preventive control measures for the control and reduction/elimination of microbial hazards on fresh and fresh-cut produce. http://www.fda.gov/Food/FoodScienceResearch/SafePracticesforFoodProcesses/ucm090977.htm

- Wheeler C, et al. An outbreak of hepatitis A associated with green onions. New England Journal of Medicine. 2005; 353:890–897. [PubMed: 16135833]
- Centers for Disease Control and Prevention. Ongoing multistate outbreak of Escherichia coli serotype O157: H7 infections associated with consumption of fresh spinach – United States, September 2006. Morbidity Mortality Weekly Report. 2006; 55:1045–1046. [PubMed: 17008868]
- Centers for Disease Control Prevention. Outbreaks of Shigella sonnei infection associated with eating fresh parsley – United States and Canada, July–August 1998. Morbidity Mortality Weekly Report. 1999; 48:285–289. [PubMed: 10227795]
- Widdowson MA, et al. Norovirus and foodborne disease, United States, 1991–2000. Emerging Infectious Diseases. 2005; 11:95–102. [PubMed: 15705329]
- Swaminathan B, et al. PulseNet: the molecular subtyping network for foodborne bacterial disease surveillance, United States. Emerging Infectious Diseases. 2001; 7:382–389. [PubMed: 11384513]
- Garrett EH, et al. Microbiological safety of fresh and fresh-cut produce: description of the situation. Comprehensive Reviews in Food Science and Food Safety. 2003; 2(Suppl.):13– 37.
- Beuchat LR. Ecological factors influencing survival and growth of human pathogens on raw fruits and vegetables. Microbes and Infection. 2002; 4:413–423. [PubMed: 11932192]
- Hoffman RE, et al. Capacity of state and territorial health agencies to prevent foodborne illness.
 Emerging Infectious Diseases. 2005; 11:11–16. [PubMed: 15705316]
- Food and Drug Administration. [Accessed 29 March 2013] Produce safety standards. Food Safety Modernization Act (FSMA). http://www.fda.gov/Food/GuidanceRegulation/FSMA/ ucm304045.htm

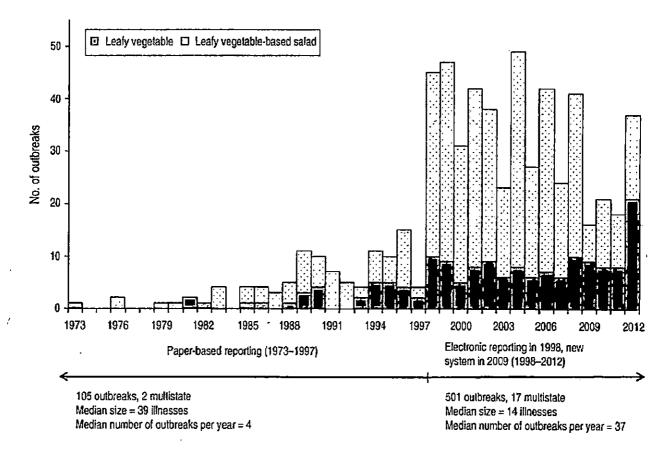


Fig. 1. Number of reported leafy vegetable-associated outbreaks, including simple leafy vegetables and leafy vegetable-based salads, United States, 1973–2012.

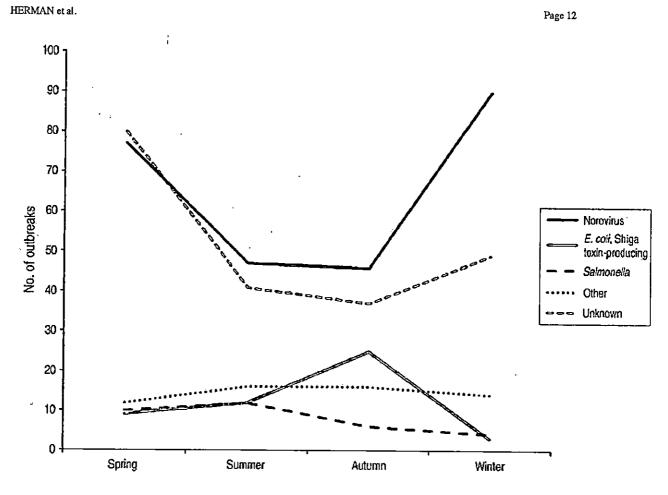


Fig. 2. Number of reported leafy vegetable-associated outbreaks by season when the outbreak began and actiology, United States, 1973–2012. [Season: spring (March-May), summer (June-August), autumn (September-November), winter (December-February).]

Page I

Table 1
Leafy vegetable-associated outbreaks, illnesses, hospitalizations, and deaths associated with a single aetiology, United States, 1973–2012

	Outbreaks			Illnesses			Hospitalizations			
Aetiology*	Confirmed actiology	Suspected actiology	Total (%)	Confirmed actiology	Suspected aetiology	Total (%)	Confirmed actiology	Suspected aetiology	Total (%)	
Norovirus	149	111	260 (66)	5780	2202	7982 (57)	58	26	84 (9)	
E. coli, Shiga toxin-producing	48	1	49 (12)	1627	7	1634 (12)	447	3	450 (46)	
O157	45	1	46 (12)	1577	7	1584 (11)	427	3	430 (44)	
O145	. 2	0	2 (1)	47	0	47 (0)	20	0	20 (2)	
O121	1	0	1 (0)	3	0	3 (0)	Ó	0	0 (0)	
Salmonella	29	3	32 (8)	1436	11	1447 (10)	82	1	83 (8)	
Enteritidis	7	0	7 (2)	205	0	205 (1)	23	0	23 (2)	
Typhimurium	6	0	6 (2)	318	0	318 (2)	14	0	14 (1	
Javiana	3	0	3 (1)	49	0	49 (0)	12	0	12 (1)	
Newport	3	0	3 (1)	119	0	119 (1)	1	0	1 (0	
Heidelberg	2	0	2(1)	43	0	43 (0)	4	0	4 (0)	
Baildon	1	0	1 (0)	264	0	264 (2)	12	0	12 (1	
Braenderup	1	0	1 (0)	19	0	19 (0)	0	0	0 (0	
Hartford	1	0	1 (0)	29	0	29 (0)	3	0	3 (0	
Infantis	1	0	1 (0)	35	0	35 (0)	0	0	0 (0	
Miami	1	0	1 (0)	.9	0	9 (0)	3	0	3 (0	
Montevideo	1	0	1 (0)	320	0	320 (3)	8	0	8 (1)	
Paratyphi B	/ 1	0	1 (0)	10	, 0	10 (0)	0	0	0 (0	
Thompson	1	0	1 (0)	i6	, o	16 (0)	2	0	2 (0	
Unknown	. 0	3	3 (1)	. 0	11	11 (0)	0	1	1 (0	
Hepatitis A	14	0	14 (4)	1328	0	1328 (10)	218	0	218 (25	
Shigella	14	0	14 (4)	814	0	814 (6)	119	0	119 (16	
Campylobacter	8	2	10 (3)	378	22	400 (3)	8	0	8 (1)	
Staphylococcus	0	3	3 (1)	0	<i>5</i> 8	58 (0)	0	0	0 (0)	
Chemical or toxin †	3	0	3 (1)	51	0	. 51 (0)	9	0	9 (1	
Cyclospora	3	1	4(1)	114	8	122 (1)	3	. 0	3 (0	

	Outbreaks			Illnesses			Hospitalizations			
Aetiology*	Confirmed aetiology	Suspected aetiology	Total (%)	Confirmed actiology	Suspected aetiology	Total (%)	Confirmed actiology	Suspected aetiology	Total (%)	
Bacillus cereus	1	2	3 (1)	8	18	26 (0)	. 0	0	0 (0)	
E. coli, enterotoxigenic	0	1	1 (0)	0	76	76 (1)	0	1	1 (0)	
Cryptosporidium	1	0	1 (0)	54	0	54 (0)	2	0	2 (0)	
Clostridium perfringens	1	0	1 (0)	33	0	33 (0)	0	0	0 (0)	
Sapovirus	1	0	1 (0)	21	0	21 (0)	1	0	1 (0)	
Known actiology	272	124	396 (65)	11 644	2402	14 046 (70)	947	31	978 (95)	
Multiple	_	_	3 (0)	_	_	60 (0)	_	_	0 (0)	
Unknown	_	_	207 (34)	_	_	5897 (29)	_	_	52 (5)	
Total	272	124	606 (100)	11 644	2 402	20 003 (100)	947	31	1 030 (100)	

^{*} Laboratory and clinical guidelines for confirming an aetiology of a foodborne disease outbreak are specific for each bacterial, chemical/toxin, parasitic, and viral agent. Suspected aetiologies are those that do not meet the confirmation guidelines (available at http://www.cdc.gov/foodsafety/outbreaks/investigating-outbreaks/confirming_diagnosis.html).

 $^{^{\}dagger}$ Jimson weed (one outbreak, six illnesses), methomyl (one outbreak, 31 illnesses), aldicarb (one outbreak, 14 illnesses).

 $\label{eq:table 2} \textbf{Leafy vegetable-associated outbreaks by food type and actiology (n=606), United States, \\ 1973-2012$

	Outbreaks,	n (%)												
	Simple leafy	vegetable*		Leafy-based salad										
Aetiology	Confirmed aetiology [†]	Confirmed Suspected aetiology		(%)	Confirmed actiology	Suspected aetiology	Total	(%)						
Norovirus	28	26	54	(33)	121	85	206	(46)						
E. coli, Shiga toxin-producing	37	0	37	(23)	11	1	12	(3)						
Salmonella	10	0	10	(6)	19	3	22	(5)						
Shigella	3	0	3	(2)	11	0	11	(2)						
Hepatitis A	8	0	8	(5)	6	0	6	(1)						
All other	11	2	13	(8)	7	7	14	(3)						
Multiple	-	_	1	(1)	-	_	2	(0)						
Unknown	_	-	36	(22)	_	_	171	(39)						
Total	97	28	162	(100)	175	96	444	(100)						

^{*}Includes lettuce (120 outbreaks), unspecified leafy (14 outbreaks), cabbage (nine outbreaks), green onions (eight outbreaks), ferns (six outbreaks), and spinach (five outbreaks).

[†]Laboratory and clinical guidelines for confirming an aetiology of a foodborne disease outbreak are specific for each bacterial, chemical/toxin, parasitic, and viral agent. Suspected aetiologies are those that do not meet the confirmation guidelines (available at http://www.cdc.gov/foodsafety/outbreaks/investigating-outbreaks/confirming_diagnosis.html).

Epidemiol Infect. Author manuscript; available in PMC 2016 October 01.

Table 3 Leafy vegetable-associated outbreaks by food type and single location of food preparation location (n = 557), United States, 1973–2012

	Outbreaks, n (%)											
	Simple leafy	vegetable*		Leafy-based salad								
Location	Confirmed netiology	Suspected actiology	Multiple/ unknown aetiology	Total	(%)	Confirmed aetiology	Suspected actiology	Multiple/ unknown aetiology	Total	(%)		
Restaurant or catering facility	57	21	29	107	(75)	145	82	137	364	(88)		
Institution	9	1	1	11	(8)	7	2	4	13	(3)		
Private home	10	2	3	15	(10)	4	2	5	11	(3)		
Retail establishment	4	1	0	5	(3)	0	0	2	2	(0)		
Other	3	1	1	5	(3)	9	3	12	24	(6)		
Total	83	26	34	143	(100)	165	89	160	414	(100)		

^{*} Includes lettuce (120 outbreaks), unspecified leafy (14 outbreaks), cabbage (nine outbreaks), green onions (eight outbreaks), ferns (six outbreaks), and spinach (five outbreaks).

the Laboratory and clinical guidelines for confirming an actiology of a foodborne disease outbreak are specific for each bacterial, chemical/toxin, parasitic, and viral agent. Suspected actiologies are those that do not meet the confirmation guidelines (available at http://www.cdc.gov/foodsafety/outbreaks/investigating-outbreaks/confirming_diagnosis.html).

ATTENTION

The report following this page is NOT our report. It is the report Dr. Donald Baird, Public Health Officer for the Humboldt County Public Health Department, submitted to the clerk and asked to be distributed to all Humboldt County Supervisors January 9, 2018, thus becoming part of the public record. This is the report to which we respond.

We have also read the full final report from the California Department of Public Health (CDPH) on the 2016 E. coli O157 incident that we believe Dr. Baird refers to in his #1 point. It was supposed to have been submitted to the supervisors as well as his own report. However, after repeated written requests to Kathy Hayes, the Clerk for the Humboldt County Board of Supervisors, and phone requests, for ALL materials submitted by Dr. Baird (and others) concerning the January 23 raw milk agenda item, we have thus far received none from her (she did offer old materials from 2010 and 2011) and seems to be attempting to block us from those materials. Therefore, we are unable at this time to verify that the CDPH document that we have, and referred to briefly in our response, was the same document Dr. Baird sent to the supervisors.

Also, for the record, the materials submitted by the raw milk advocates in 2010 and 2011 are missing from the public record, although the Humboldt County department documents remain. This has now been verified again by the old 2010 ad 2011 documents Kathy Hayes provided recently when a request was made for all documents related to raw milk. We intend to make absolutely sure that our current packet is submitted into the public record and remains there permanently. We will be checking and re-checking because maintaining the integrity of the public record is VERY serious business and it's the law.

We also want to take the opportunity to thank all the citizens who brought this issue to the board in 2010 and 2011, many of whom spent a great deal of time producing and submitting written materials into the public record, only to have them somehow mysteriously disappear from the public record. 1. The attached document is from CDPH and summarizes the 2016 E. coli O157 outbreak associated with the consumption of unpasteurized milk associated with Organic Pastures Diary Company. Patients associated with this outbreak were residents of Humboldt, Alameda, Fresno, Kern, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, and Sonoma counties.

2. From CDPH below:

https://archive.cdph.ca.gov/HealthInfo/discond/Pages/RawMilk.aspx

California outbreaks due to raw milk or raw dairy products included:

- a. Cases of Salmonella Dublin infections in the 1970s into early 1980s that were associated with raw milk consumption. One published investigation in 1979 documented 113 patients with 89 hospitalizations and 22 deaths. Several patients had a serious underlying disease such as leukemia or lymphoma that might have predisposed them to a more severe outcome.
- b. Two outbreaks of *Campylobacter* infection, one in 1984 where several children and adults were ill after drinking raw milk while on a tour of a dairy, and another in 1985 where several people became infected after drinking raw milk on a tour of a bottling plant.
- c. Two outbreaks of multidrug-resistant *Salmonella* infection associated with eating unpasteurized Mexican-style cheese in 1997 resulting in over 10 culture-confirmed cases.
- d. An outbreak of *E. coli* O157 infection in September 2006 that affected six children, three of whom were hospitalized including two with kidney failure.
 - e. A cluster of diarrheal illness and *Campylobacter* infections in May-June 2008 that affected some members of a cow-share program who consumed raw milk; one of those affected developed a form of Guillain-Barré syndrome that required prolonged hospitalization.

3. Article from foodsafetynew.com -I don't know how reputable these folks are — they come as ambulance chasers to me. This list is from their article located here: http://www.foodsafetynews.com/2016/02/six-kids-sickened-in-outbreak-linked-to-organic-pastures-raw-milk/

The past decade at Organic Pastures

Previous recalls and foodborne illness outbreaks linked to Organic Pastures in the past decade include:

October 2015 – Organic Pastures raw milk recall and quarantine after CDFA inspectors found Campylobacter as a result of product testing conducted as part of routine inspection and sample collection at the facility.

<u>September 2012</u> – Organic Pastures raw milk recall and quarantine after CDFA inspectors found Campylobacter bacteria as a result of product testing conducted as part of routine inspection and sample collection at the facility.

<u>January-April 2012</u> – Organic Pastures products linked to campylobacter outbreak. Raw milk, raw skim milk, raw cream and raw butter were recalled and the dairy quarantined after the confirmed detection of campylobacter bacteria in raw cream.

State officials identified at least 10 people with campylobacter infections throughout California. They reported consuming Organic Pastures raw milk prior to illness onset. Their median age was 11.5 years, with six younger than 18. The age range was nine months to 38 years.

<u>August-October 2011</u> — Organic Pastures products linked to E. coli outbreak.

A cluster of five young children with E. coli O157:H7 infections with matching pulse-field gel electrophoresis (PFGE) patterns was identified. Illness onsets were from Aug. 25 to Oct. 25. All five children reported drinking commercially available raw milk from a single dairy, Organic Pastures, and had no other common exposures.

Investigations by the CDPH's Food and Drug Branch and the California Department of Food and Agriculture showed environmental samples collected at Organic Pastures yielded E. coli O157:H7 isolates that had PFGE patterns indistinguishable from the patient isolates.

<u>September 2008</u> — Organic Pastures Grade A raw cream recall and quarantine after state testing and confirmation testing detected campylobacter bacteria in the cream.

<u>September 2007</u> — Organic Pastures Grade A raw cream recall and quarantine following laboratory confirmation of the presence of Listeria monocytogenes bacteria. CDFA inspectors found the bacteria as a result of product testing conducted as part of routine inspection and sample collection at the facility.

<u>November-December 2007</u> — Organic Pastures cows linked to Campylobacter outbreak. State officials found 50 strains of Campylobacter jejuni plus Campylobacter coli, Campylobacter fetus, Campylobacter hyointetinalis and Campylobacter lari when they cultured feces from Organic Pastures dairy cow feces.

There was only one patient isolate available for DNA fingerprinting, but it was identical to isolates from four cattle fecal samples collected at Organic Pastures.

September 2006 — Organic Pastures linked to E. coli O157:H7 outbreak.

Six sick children were identified by state officials. Four had culture-confirmed infections, one had a culture-confirmed infection and HUS (hemolytic uremic syndrome, which can result in kidney failure and stroke), and one had HUS only. The median age of patients was 8 years, with a range of 6 to 18 years.

Organic Pastures' operators claimed the illnesses were linked to consumption of fresh spinach that was linked to a separate E. coli outbreak in 2006.

However, the five children who consumed Organic Pastures' products who had culture confirmation were laboratory matches to each other and the CDC reported their specific E. coli isolates "differed markedly from the patterns of the concurrent E. coli O157:H7 outbreak strain associated with spinach consumption."

All information above from Hava and Eric

4. Six ill, 2 dead in Listeria outbreak tied to Vulto soft cheese

<u>Jim Wappes | Editorial Director | CIDRAP News</u> Mar 09, 2017 <u>http://www.cidrap.umn.edu/news-perspective/2017/03/six-ill-2-dead-listeria-outbreak-tied-vulto-soft-cheese</u>

5. People in Four States May Be Drinking Contaminated Raw Milk

CDC and partners urge families at risk to see their doctor for antibiotics

For Immediate Release: Tuesday, November 21, 2017

https://www.cdc.gov/media/releases/2017/p1121-contaminated-raw-milk.html

In late September, a New Jersey woman became ill after drinking raw milk from the company. CDC confirmed her illness was Brucella RB51 in late October. Because Udder Milk has not provided information about the farms that supply their milk, it has not been possible to trace the source of the woman's infection. CDC scientists have been collaborating with state health officials on the investigation. The U.S. Department of Agriculture and the <u>U.S. Food and Drug Administration</u> are working with state health and agriculture officials to trace the source of the contaminated raw milk and raw milk products.

6. CDC and Texas Health Officials Warn About Illness Linked to Raw Milk from Texas Dairy

Raw milk contained rare but dangerous germ, consumers should get antibiotics

For Immediate Release: Friday, September 15, 2017

CDC advises that people who consumed raw milk or milk products from the K-Bar Dairy between June 1 and Aug. 7, 2017, should get antibiotic treatment to avoid the risk of lifelong, chronic infections. Initially, people with brucellosis experience fever, sweats, aches and fatigue. If not treated, Brucella RB51 infection can result in long-term complications, like arthritis; heart problems; enlargement of the spleen or liver; and, in rare cases, nervous system problems, like meningitis RB51 can cause severe illness in people with weakened immune systems and miscarriages in pregnant women.

7. Volume 23, Number 6—June 2017 Research

Outbreak-Related Disease Burden Associated with Consumption of Unpasteurized Cow's Milk and Cheese, United States, 2009–2014

https://wwwnc.cdc.gov/eid/article/23/6/15-1603_article Abstract

The growing popularity of unpasteurized milk in the United States raises public health concerns. We estimated outbreak-related illnesses and hospitalizations caused by the consumption of cow's milk and cheese contaminated with Shiga toxin-producing *Escherichia coli*, *Salmonella* spp., *Listeria monocytogenes*, and *Campylobacter* spp. using a model relying on publicly available outbreak data. In the United States, outbreaks associated with dairy consumption cause, on average, 760 illnesses/year and 22 hospitalizations/year, mostly from *Salmonella* spp. and *Campylobacter* spp. Unpasteurized milk, consumed by only 3.2% of the population, and cheese, consumed by only 1.6% of the population, caused 96% of illnesses caused by contaminated dairy products. Unpasteurized dairy products thus cause 840 (95% CrI 611–1,158) times more illnesses and 45 (95% CrI 34–59) times more hospitalizations than pasteurized products. As consumption of unpasteurized dairy products grows, illnesses will increase steadily; a doubling in the consumption of unpasteurized milk or cheese could increase outbreak-related illnesses by 96%.

8. Diseases from Raw Milk Consumption Neal Chamberlain, PhD, A.T. Still University of Health Sciences/Kirksville College of Osteopathic Medicine

https://www.atsu.edu/faculty/chamberlain/rawmilk.htm

Milk is an important part of a person's diet. Unfortunately, it can also carry certain organisms that can cause severe disease in humans (1). One way to prevent this is by pasteurizing the milk. Pasteurization kills the organisms that cause disease without destroying the milk. It also increases the shelf life of milk by destroying proteins and bacteria in the milk that cause it to spoil. Click on the links below to read a few reports of human illness caused by the consumption of raw milk or raw milk products:

1. Real life videos of infections from drinking raw milk.

- 2. 2017 Multi-state outbreak of *Listeria* infections from raw milk soft cheese consumption.
- 3. Salmonella Typhimurium Infection Associated with Raw Milk and Cheese Consumption --- Pennsylvania, 2007
- 4. Outbreak of Escherichia coli O157:H7 in children in California (2006)

Below are some diseases associated with drinking raw milk.

10 Diseases	Organism	Symptoms and Complications
Campylobacteriosis	Campylobacter sp.	bloody diarrhea
Salmonellosis	Salmonella sp.	bloody diarrhea
Hemolytic Uremic Syndrome	E. coli O157:H7	diarrhea, kidney failure, death
Yersiniosis	Yersinsia enterocolitica	diarrhea
Listeriosis	Listeria monocytogenes	meningitis, blood infections
Tuberculosis	Mycobacterium tuberculosis	tuberculosis; pneumonia
Brucellosis	Brucella sp.	blood infections, heart infections
Cryptosporidiosis	Cryptosporidium parvum	diarrhea
Staphylococcal enterotoxin poisoning	Staphylococcus aureus	vomiting
Q fever	Coxiella burnetti	high fever, severe headache, muscle aches (can infect the liver and/or heart)

For more information on how milk is pasteurized click on the University of Guelph's <u>Dairy</u> <u>Science and Technology page</u>.

1.Potter ME, Kaufmann AF, Blake PA, Feldman RA. Unpasteurized milk: the hazards of a health fetish. JAMA 1984;252:2048--52.

2. Hazards of raw milk product consumption.

9. Consumption of Raw or Unpasteurized Milk and Milk Products by Pregnant Women and Children http://pediatrics.aappublications.org/content/pediatrics/133/1/175.full.pdf

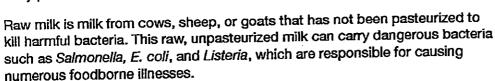
The Dangers of Raw Milk: Unpasteurized Milk Can Pose a Serious Health Risk

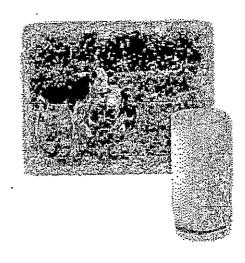
Print & Share (PDF) 419KB (/downloads/Food/FoodbornellInessContaminants/UCM239493.pdf)

En Español (Spanish) (/Food/FoodbornellInessContaminants/BuyStoreServeSafeFood/ucm210577.htm)

WATCH a video on The Dangers of Unpasteurized Milk

Milk and milk products provide a wealth of nutrition benefits. But raw milk can harbor dangerous microorganisms that can pose serious health risks to you and your family. According to an analysis by the Centers for Disease Control and Prevention (CDC), between 1993 and 2006 more than 1500 people in the United States became sick from drinking raw milk or eating cheese made from raw milk. In addition, CDC reported that unpasteurized milk is 150 times more likely to cause foodborne illness and results in 13 times more hospitalizations than illnesses involving pasteurized dairy products.





These harmful bacteria can seriously affect the health of anyone who drinks raw milk, or eats foods made from raw milk. However, the bacteria in raw milk can be especially dangerous to **people with weakened immune systems**, **older adults, pregnant women, and children**. In fact, the CDC analysis found that foodborne illness from raw milk especially affected children and teenagers.

"Pasteurized Milk" Explained

Pasteurization is a process that kills harmful bacteria by heating milk to a specific temperature for a set period of time. First developed by Louis Pasteur in 1864, pasteurization kills harmful organisms responsible for such diseases as listeriosis, typhoid fever, tuberculosis, diphtheria, and brucellosis.

Research shows no meaningful difference in the nutritional values of pasteurized and unpasteurized milk. Pasteurized milk contains low levels of the type of nonpathogenic bacteria that can cause food spoilage, so storing your pasteurized milk in the refrigerator is still important.

Raw Milk & Pasteurization: Debunking Milk Myths

While pasteurization has helped provide safe, nutrient-rich milk and cheese for over 120 years, some people continue to believe that pasteurization harms milk and that raw milk is a safe healthier alternative.

Here are some common myths and proven facts about milk and pasteurization:

- Pasteurizing milk DOES NOT cause lactose intolerance and allergic reactions. Both raw milk and pasteurized milk can cause allergic reactions in people sensitive to milk proteins.
- Raw milk DOES NOT kill dangerous pathogens by itself.
- Pasteurization DOES NOT reduce milk's nutritional value.
- Pasteurization DOES NOT mean that it is safe to leave milk out of the refrigerator for extended time, particularly after it has been opened.
- Pasteurization DOES kill harmful bacteria.
- Pasteurization DOES save lives.

Raw Milk and Serious Illness

Symptoms and Advice

Symptoms of foodborne illness include:

- Vomiting, diarrhea, and abdominal pain
- Flulike symptoms such as fever, headache, and body ache

While most healthy people will recover from an illness caused by harmful bacteria in raw milk - or in foods made with raw milk - within a short period of time, some can develop symptoms that are chronic, severe, or even life-threatening.

If you or someone you know becomes ill after consuming raw milk or products made from raw milk - or, if you are pregnant and think you could have consumed contaminated raw milk or cheese - see a doctor or healthcare provider immediately.

The Dangers of Listeria and Pregnancy

Pregnant women run a serious risk of becoming ill from the bacteria *Listeria* which can cause miscarriage, fetal death or illness or death of a newborn. If you are pregnant, consuming raw milk - or foods made from raw milk, such as Mexican-style cheese like Queso Blanco or Queso Fresco - can harm your baby even if you don't feel sick.

Protect Your Family with Wise Food Choices

Most milk and milk products sold commercially in the United States contain pasteurized milk or cream, or the products have been produced in a manner that kills any dangerous bacteria that may be present. But unpasteurized milk and products made from unpasteurized milk are sold and may be harmful to your health. To avoid getting sick from the dangerous bacteria found in raw milk, you should choose your milk and milk products carefully. Consider these guidelines:/p>



Okay to Eat

Pasteurized milk or cream

- Hard cheeses such as cheddar, and extra hard grating cheeses such as Parmesan
- Soft cheeses, such as Brie, Camembert, blue-veined cheeses, and Mexican-style soft cheeses such as Queso Fresco, Panela, Asadero, and Queso Blanco made from pasteurized milk
- Processed cheeses
- Cream, cottage, and Ricotta cheese made from pasteurized milk
- Yogurt made from pasteurized milk
- Pudding made from pasteurized milk
- Ice cream or frozen yogurt made from pasteurized milk

Unsafe to Eat

- Unpasteurized milk or cream
- Soft cheeses, such as Brie and Camembert, and Mexican-style soft cheeses such as Queso Fresco, Panela, Asadero, and Queso Blanco made from unpasteurized milk
- Yogurt made from unpasteurized milk
- Pudding made from unpasteurized milk
- Ice cream or frozen yogurt made from unpasteurized milk

When in Doubt - Ask!

Taking a few moments to make sure milk is pasteurized - or that a product isn't made from raw milk - can protect you or your loved ones from serious illness.

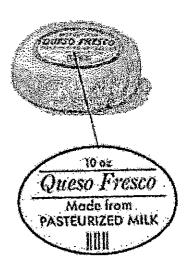
- Read the label. Safe milk will have the word "pasteurized" on the label. If the word "pasteurized" does not appear
 on a product's label, it may contain raw milk.
- Don't hesitate to ask your grocer or store clerk whether milk or cream has been pasteurized, especially milk or milk products sold in refrigerated cases at grocery or health food stores.
- Don't buy milk or milk products at farm stands or farmers' markets unless you can confirm that it has been pasteurized.

Is Your Homemade Ice Cream Safe?

Each year, homemade ice cream causes serious outbreaks of infection from Salmonella. The ingredient responsible? Raw or undercooked eggs. If you choose to make ice cream at home, use a pasteurized egg product, egg substitute, or pasteurized shell eggs in place of the raw eggs in your favorite recipe. There are also numerous egg-free ice cream recipes available.

The Dangers of Unpasteurized Milk

Embedded Video



Everyone can practice safe food handling by following these four simple steps:



Additional Information

- Questions and Answers on Raw Milk
 (/Food/FoodbornellInessContaminants/BuyStoreServeSafeFood/ucm122062.htm)
- Consumer Update: Raw Milk Pose Health Risk (/ForConsumers/ConsumerUpdates/ucm232980.htm)
- Raw Milk Misconceptions and the Danger of Raw Milk Consumption (/Food/FoodbornellinessContaminants/BuyStoreServeSafeFood/ucm247991.htm)
- From FoodSafety.gov: Myths About Raw Milk (http://www.foodsafety.gov/keep/types/milk/index.html)
- From CDC: Food Safety and Raw Milk (http://www.cdc.gov/foodsafety/rawmilk/raw-milk-index.html)

Food Safety News

Breaking news for everyone's consumption

Salmonella in Organic Pastures raw cream spurs another recall

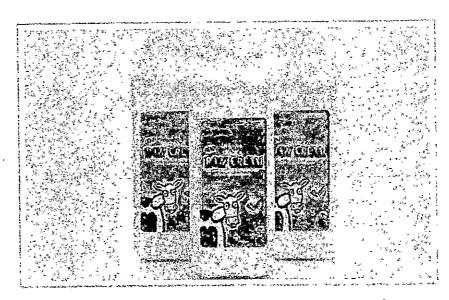
By Coral Beach | May 9; 2016

Organic Pastures Dairy Co. of Fresno, CA, is again recalling its raw milk products because of contamination with pathogens. This time California inspectors found Salmonella bacteria in the company's raw cream.

No illnesses had been linked to the unpasteurized, raw cream as of the posting of the May 9 recall notice by the California Department of Public Health.

However, health officials are concerned consumers could become ill because they may have the contaminated raw milk product in their homes. The recalled raw cream has a "code date" of May 18, according to the recall and quarantine order from California State Veterinarian Annette Jones.

In addition to unpasteurized, raw cream, also under recall and quarantine are Organic Pastures Dairy Co. raw milk and raw skim milk. All of the recalled products have a May 18 date code.



"Consumers are strongly urged to dispose of any product remaining in their refrigerators," according to the state's notice.

"CDFA (California Department of Food and Agriculture) inspectors found the bacteria as a result of product testing conducted as part of routine inspection and sample collection at the facility.

According to the California Department of Public Health, symptoms of Salmonella infection include fever, abdominal cramps and diarrhea which may be bloody. Most persons infected with Salmonella develop symptoms 12 to 72 hours after exposure.

While most individuals recover in four to seven days without medical intervention, some may develop complications that require hospitalization. Infants, the elderly and people with weakened immune systems are at highest risk for more severe illness.

Dairy owner blames fellow farmer's eggs

Mark McAfee, owner of Organic Pastures, told the Fresno Bee newspaper that the dairy never has tested positive for salmonella. He theorized the Salmonella contamination came from eggs he was distributing for a fellow farmer.

"We have discontinued distributing the eggs, and we are confident the problem has been taken care of," McAfee told the Fresno Bee.

In January this year at least 10 people in California were infected with E. coli O157 that was confirmed to match E. coli at Organic Pastures Dairy Co. (OPDC). As of March 3 when the state last reported on that outbreak, four people had been hospitalized and two children developed hemolytic uremic syndrome (HUS) a serious condition that attacks the kidneys.

"Of these 10 case-patients, nine were interviewed and one patient was lost to follow-up and never interviewed," according to the March 3 report. "Of the nine that were interviewed, six reported consuming OPDC brand raw milk prior to illness onset and three denied known raw milk exposure."

The past decade at Organic Pastures Previous recalls and foodborne illness outbreaks linked to Organic Pastures in the past decade include:

October 2015 – Organic Pastures raw milk recall and quarantine after CDFA inspectors found Campylobacter as a result of product testing conducted as part of routine inspection and sample collection at the facility.

September 2012 – Organic Pastures raw milk recall and quarantine after CDFA inspectors found Campylobacter bacteria as

a result of product testing conducted as part of routine inspection and sample collection at the facility.

January-April 2012 – Organic Pastures products linked to campylobacter outbreak. Raw milk, raw skim milk, raw cream and raw butter were recalled and the dairy quarantined after the confirmed detection of campylobacter bacteria in raw cream.

State officials identified at least 10 people with campylobacter infections throughout California. They reported consuming Organic Pastures raw milk prior to illness onset. Their median age was 11.5 years, with six younger than 18. The age range was nine months to 38 years.

August-October 2011 — Organic Pastures products linked to E. coli outbreak.

A cluster of five young children with E. coli O157:H7 infections with matching pulse-field gel electrophoresis (PFGE) patterns was identified. Illness onsets were from Aug. 25 to Oct. 25. All five children reported drinking commercially available raw milk from a single dairy, Organic Pastures, and had no other common exposures.

Investigations by the CDPH's Food and Drug Branch and the California Department of Food and Agriculture showed environmental samples collected at Organic Pastures yielded E. coli O157:H7 isolates that had PFGE

patterns indistinguishable from the patient isolates.

September 2008 — Organic Pastures Grade A raw cream recall and quarantine after state testing and confirmation testing detected campylobacter bacteria in the cream.

September 2007 — Organic Pastures Grade A raw cream recall and quarantine following laboratory confirmation of the presence of Listeria monocytogenes bacteria. CDFA inspectors found the bacteria as a result of product testing conducted as part of routine inspection and sample collection at the facility.

November-December 2007 — Organic Pastures cows linked to Campylobacter outbreak. State officials found 50 strains of Campylobacter jejuni plus Campylobacter coli, Campylobacter fetus, Campylobacter hyointetinalis and Campylobacter lari when they cultured feces from Organic Pastures dairy cow feces.

There was only one patient isolate available for DNA fingerprinting, but it was identical to isolates from four cattle fecal samples collected at Organic Pastures.

September 2006 — Organic Pastures linked to E. coli O157:H7 outbreak.

Six sick children were identified by state officials. Four had culture-confirmed infections, one had a culture-confirmed infection and HUS (hemolytic uremic syndrome, which can result in kidney failure and stroke), and one had HUS only. The median age of patients was 8 years, with a range of 6 to 18 years.

Organic Pastures' operators claimed the illnesses were linked to consumption of fresh spinach that was linked to a separate E. coli outbreak in 2006.

However, the five children who consumed Organic Pastures' products who had culture confirmation were laboratory matches to each other and the CDC reported their specific E. coli isolates "differed markedly from the patterns of the concurrent E. coli O157:H7 outbreak strain associated with spinach consumption."

(To sign up for a free subscription to Food Safety News, click here.)

© Food Safety News
More Headlines from Food Recalls »



ORGANIC PASTURES

RAW WHOLE MILK- 64 OZ

Nutrition Facts Serving Size 1 cup (240 mL), Servings 8, Amount Per Serving: Calories 150, Calories from Fat 70, Total Fat 8g (12% DV), Saturated Fat 5g (25% DV), Cholesterol 30mg (10% DV), Sodium 105mg (4% DV), Total Carbohydrate 12g (4% DV), Sugars 12g, Protein 8g, Vitamin A (6% DV), Calcium (30% DV), Iron (6% DV). Not a significant source of trans fat, dietary fiber and vitamin C. Percent Daily Values are based on a 2,000 calorie diet.

INGREDIENTS: ORGANIC WHOLE RAW MILK

Best consumed within 7 days of delivery

Bottles made with non toxic plastic:
BPA, BPA, Bisphenol & Phthalates FREE



Plant #06-262

Organic Pastures Dairy Co., LLC
Fresno, CA 93706
www.organicpastures.com
1-877-RAW-MILK
HORMONES
OR ANTIBIOTICS
Organic Pastures Dairy Co., LLC
Fresno, CA 93706
www.organicpastures.com
1-877-RAW-MILK
Certified Organic by
Organic Certifiers. Inc. Ventura. C

WARNING: RAW (UNPASTEURIZED) MILK AND RAW MILK DAIRY PRODUCTS MAY CONTAIN DISEASE-CAUSING MICRO-ORGANISMS. PERSONS AT HIGHEST RISK OF DISEASE FROM THESE ORGANISMS INCLUDE NEWBORNS AND INFANTS; THE ELDERLY; PREGNANT WOMEN; THOSE TAKING CORTICOSTEROIDS, ANTIBIOTICS OR ANTACIDS; AND THOSE HAVING CHRONIC ILLNESS OR OTHER CONDITIONS THAT WEAKEN THEIR IMMUNITY.

Hayes, Kathy



From: Wilson, Mike

Sent: Monday, January 22, 2018 11:28 PM

To: Hayes, Kathy

Subject: Fwd: Lift the Raw Milk Ban

Is this the only pro raw milk communication we have received?

Mike Wilson P.E. Humboldt County Supervisor, District 3 707.476.2393

Sent from my iPad

Begin forwarded message:

From: Beverly Filip <<u>nwlfe55@yahoo.com</u>>
Date: January 22, 2018 at 1:59:26 PM PST

To: "mike.wilson@co.humboldt.ca.us" <mike.wilson@co.humboldt.ca.us>

Cc: Rex Bohn < rbohn@co.humboldt.ca.us >, Virginia Bass < vbass@co.humboldt.ca.us >, Ryan Sundberg < rsundberg@co.humboldt.ca.us >, Estelle Fennell < efennell@co.humboldt.ca.us >

Subject: Lift the Raw Milk Ban

Reply-To: Beverly Filip < nwlfe55@yahoo.com>

Dear Supervisor Wilson,

I live in your district and will be unable to attend tomorrow's meeting to voice my opinion about the raw milk ban. I urge you (and all the supervisors) to vote to lift this ridiculous ban. I moved here from Santa Cruz some years ago, only to find out that, despite living in a more rural area with lots of dairy cows, I am unable to buy raw milk. The health benefits of raw milk are important to me, so I have traveled some distance to buy raw milk, for a time I got some from a friend's cow, and I have tried buying it from local farmers. Humboldt County needs to catch up with (most of) the rest of California in this regard.

Please do what ever you can to lift this ban.

Sincerely, Beverly Filip Eureka 95503

Bohn, Rex

H-7

From:

Sent:

Monday, January 22, 2018 7:53 PM

To:

Bohn, Rex; Sundberg, Ryan

Subject:

Fwd: Vote YES for legal raw milk in Humboldt TOMORROW

Attachments:

2018-1-22 District 1 Rex Bohn.JPG; 2018-1-22 Humboldt Agenda.pdf

----- Forwarded message -----

From: Kristina Radelfinger

Date: Mon, Jan 22, 2018 at 6:35 PM

Subject: Fwd: Vote YES for legal raw milk in Humboldt TOMORROW

To: Denver Nelson < dennel@suddenlink.net>

Wow,

This guy got my email address and the majority of his email contradicts how I feel as a dairywoman. Interesting.

-KR

----- Forwarded message -----

From: Aaron McAfee <aaron.m@organicpastures.com>

Date: Mon, Jan 22, 2018 at 6:27 PM

Subject: Vote YES for legal raw milk in Humboldt TOMORROW

To: "rjerseys@frontiernet.net" <rjerseys@frontiernet.net>, "blake@ecodairyfarms.com"

< blake@ecodairyfarms.com>, "dkdndairy@gmail.com" < dkdndairy@gmail.com>, "danieldb@frontiernet.net"

<a href="mailto: danieldb@frontiernet.net, "diamondr100@gmail.com" diamondr100@gmail.com,

"lujuferreira@prodigy.net" <lujuferreira@prodigy.net>, "ghiddy@frontiernet.net" <ghiddy@frontiernet.net>,

"cows@frontiernet.net" <cows@frontiernet.net>, "losadairy@gmail.com" <losadairy@gmail.com>,

"jldairy@gmail.com" <jldairy@gmail.com", "ahelzer74@gmail.com" <a helzer74@gmail.com",

"radelfingerdairy@gmail.com" <radelfingerdairy@gmail.com>, "jim.reglijerseys@gmail.com"

<jim.reglijerseys@gmail.com>, "gsarvinski@gmail.com" <gsarvinski@gmail.com>, "shinndairy@gmail.com"

<shinndairy@gmail.com>, "Tomrayl1280@gmx.com" <Tomrayl1280@gmx.com>, "tostefam@gmail.com"

<tostefam@gmail.com>, "jestevo@aol.com" <jestevo@aol.com>, "vevodak@aol.com" <vevodak@aol.com>,

"stephanie@ecodairyfarms.com" < stephanie@ecodairyfarms.com>

Cc: Mark McAfee < mark.m@organicpastures.com >

Humboldt County Dairymen,

My name is Aaron McAfee. I am a fellow pasture-based organic dairyman in Fresno, CA. Over the years I have may have met you. If you don't know me, I got your email off the CCOF Directory. Whether we have met or not, I know we all share our love for organic dairy. I sincerely hope this email finds you well, it is NOT meant to be confrontational or agitating to anyone. Please read this email with that in mind, I want dairymen to be united, not divided. I want nothing but peace and prosperity to every hard working dairyman and dairywoman in California.

Our family owns and operates Organic Pastures Dairy. We are a dairy producer that also has an farmstead (onfarm) creamery. We started as a CROPP Cooperative (Organic Valley) dairy producer in 1999. We decided to start or farmstead creamery and produce Grade A raw milk for human consumption (retail) in 2001. For more information, visit: www.organicpastures.com. We sell milk, cheese, butter and other raw products at Wild Rivers Market in Del Norte County. In Humboldt County we sell our CHEESE ONLY at Eureka Natural Foods and Arcata Co-Op. We would sell our organic milk there too, except that Humboldt County has an ordinance that bans the sale of raw milk. The state of California allows raw milk to be sold in retail packaging under a set of EXTREMELY strict standards. However, Humboldt County supersedes the state and is one of the few counties in the state to do so.

I am writing to you to ask for your support on a YES vote to change the County prohibition that currently restricts the sale of raw milk. The Humboldt County Board of Supervisors is meeting TOMORROW.

January 23rd at 9AM. See attached for the meeting Agenda, page 6. There have been countless hours of work done by consumers, retailers, and other raw milk advocates to promote this. We were told yesterday that there was unanimous 5/5 support from the Board of Supervisors. Today we learned that REX BOHN is going to oppose the motion. See attached for District 1 territory. From the knowledge I have of where the dairies are in Humboldt County and from the addresses on the directory, I would say he represents at least 75% of the people on this email. This is very frustrating because there are literally hundreds of people that have worked hard to get this to a vote. The hearing will be packed with consumers and advocates, and we would like a few dairymen there to support this motion as well. We feel that Rex Bohn will be much less likely to try and block the vote if there are dairymen from his DISTRICT 1 at the meeting/hearing.

I am asking for your support. Here is HOW you can support:

- 1) If you can make time to attend, please attend the hearing tomorrow at 9AM
 - a. 825 5th Street, Room 111, Eureka, CA 95501
- 2) When the hearing is opened for public comment, please SUPPORT freedom for adults to make their own decisions about what foods they want to buy

Here is <u>WHY you should support</u> dropping the prohibition:

- 1) Raw milk sales in Humboldt will NOT lower your milk price by even a penny
 - a. Your farm price has nothing to do with retail raw milk
 - b. Raw Milk consumers are totally different from pasteurized consumers and they will not alter their buying patterns just because they live in Humboldt County
 - c. I would guess that most of you either sell to Organic Valley or Humboldt Creamery

- i. Our sales are a blip on the radar to these Handlers and they could care less if raw milk is sold in Humboldt County
- 2) As a dairyman in one of the greenest, most scenic states in the nation... you may want sell raw milk option some day
 - a. Since you have no financial risk, why not leave yourself options in the future
 - b. If our model of producing safe raw milk continues to be sustainable; there is no reason why good organic, pasture-based dairies like yourself can't start producing raw milk safely
 - c. If you want to learn how to produce safe, legal raw milk, visit www.rawmilkinstitute.org where 12 farmers have signed up to be responsible producers of raw milk
 - d. If this motion doesn't pass, your dairy will always be in the "wrong county" for you to sell your raw milk to consumers
 - e. As I already mentioned in item 1, your milk price won't be effected by a penny, so what's to lose?
- 3) Raw milk consumers are already buying raw milk, the prohibition doesn't stop them from doing what they want, it just makes it more expensive and more of an inconvenience
 - a. I know this because we ship UPS to consumers in District 1 of Humboldt County on weekly "standing orders"
 - b. If consumers want something, they will get it, whether its legal or not\
 - i. Case in point: marijuana has been grown and sold in Humboldt County WAY BEFORE it was legalized and now "mainstream"
 - ii. If anyone should understand that local prohibitions don't work, its Humboldt County
 - c. I would bet that at least half of you drink your bulk tank milk without boiling it
 - i. Below is a picture of my wife and kids
 - ii. 100% of my family, nearly all our employees, and thousands of consumers across CA consume our raw milk every day
 - iii. The health and safety of family is my highest priorities and I would NEVER EVER do anything that would harm my family
 - d. I would go further to bet that at least one of you on this list of 20 dairies already sell your milk raw to consumers that come to your farm
 - i. This is NOT bad, it shouldn't be covered up as a black market activity

- ii. It is OK because you make a product that is amazingly nutritious, assuming you know about a few critical control points in your systems
- e. Why not remove one more layer of beaurocracy that keeps you from doing what the rest of the State says is perfectly legal (assuming you register with the state and follow their very strict guidelines)
- 4) Stores should get the sales, not UPS
 - a. I know for a fact that over a many Humboldt County residents are having us UPS them milk that they can't buy in stores
 - b. Let's get that money to Eureka Natural and Arcata Co-Op... not UPS
- 5) Market restrictions don't help anyone
 - a. Everyone is different, but I personally believe in a limited government
 - b. We need government, and it has a role in ensuring food safety and market fairness
 - c. Manipulating the free market by restricting access to products that consenting adults choose to buy should NOT be one of their roles

Thank you for being hard working dairymen producing a wonderfully nutritious product to consumers everywhere.

If you want to discuss this further, my contact information is listed below.

I sincerely hope this email finds you well. I know very well that raw milk is a sensitive subject. I mean no offense to anyone by sending this email to you. I support and respect all Humboldt Dairymen, whether you agree with this measure or not. You are all good people doing God's work to provide nutrition to everyone who consumes your products every day.



Thank You!

Have a great and healthy day,

Aaron McAfee, MBA
President
Organic Pastures Dairy Company, LLC
1-877-RAW-MILK
organicpastures.com
C-559.977.8564
F-842.8061

STAY CONNECTED!

LIKE US ON FACEBOOK: /Organic-Pastures-Dairy-RAW-DAIRY-PRODUCTS

FOLLOW US ON TWITTER: @OrganicPastures

PIN US ON PINTEREST: /organicpastures WATCH US ON YOUTUBE: /organicpastures