

**2013 SENATE AGRICULTURE**

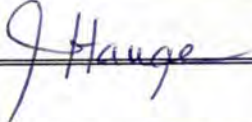
**SB 2072**

# 2013 SENATE STANDING COMMITTEE MINUTES

Senate Agriculture Committee  
Roosevelt Park Room, State Capitol

SB 2072  
January 10, 2013  
17072

Conference Committee



Changes to the state law are important to North Dakota's dairy industry because Grade A milk and milk products will not be able to be shipped to other states if these changes are not adopted.

**Minutes:**



**Chairman Miller** opened the hearing on SB 2072 relating to dairy products regulations. All committee members were present.

**Wayne Carlson**, Livestock development director for the North Dakota Department of Agriculture, introduced SB 2072 and spoke in support. SB 2072 will amend provisions of the North Dakota Century Code to update federal references in the dairy product regulations. Written testimony #1.

**Senator Heckaman** asked why we cannot automatically adopt these updated references.

**Wayne Carlson** replied that the State Attorney General ruled that we can't adopt anything that has not been passed. This protects us from not passing regulations that we don't agree with.

**Senator Miller** asked what would happen if we had an issue with these rules.

**Wayne Carlson** said that he would have to take it up with the board every two years and try to get it passed by the consensus of the Milk Shippers.

Mr. Carlson gave a synopsis of the Dairy Industry in North Dakota explaining that we have 124 producers and two fluid milk plants in ND. In addition to that we have a small producer that processes his own milk and cheese products and ice cream plant in Bottineau. Most of the milk consumed in ND comes from ND. Much of the excess milk is exported to cheese plants in SD.

Discussion was held on unpasteurized milk and at this time all milk for sale must be pasteurized. Goat milk was discussed and this chapter does address goat milk. At this time there are no licensed goat producers in the state.

No opposing testimony.

**Senator Miller** closed the hearing on SB 2072.

**Senator Heckaman** moved a **Do Pass** on SB 2072.

**Senator Klein** seconded the motion.

Motion approved 5-0-0.

Senator Heckaman is the carrier.







**REPORT OF STANDING COMMITTEE**

**SB 2072: Agriculture Committee (Sen. Miller, Chairman) recommends DO PASS**  
(5 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2072 was placed on the  
Eleventh order on the calendar.

**2013 HOUSE AGRICULTURE**

**SB 2072**

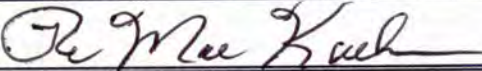
# 2013 HOUSE STANDING COMMITTEE MINUTES

House Agriculture Committee  
Peace Garden Room, State Capitol

SB 2072  
March 14, 2013  
Job #19937

Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

Relating to dairy products regulations

## Minutes:

Attachments #1a,b,c, 2, 3a,3b, and 4

**Wayne Carlson, Livestock Development Director and Dairy Director, North Dakota Department of Agriculture:** (See attached #1a)

Offered an amendment that would make cow shares illegal. (See attached #1b)  
Asking for clarity.

(6:29)

**Representative M. Nelson:** How come cow share and not goat share?

**Wayne Carlson:** In the definition it does say any hooved animal.

**Representative M. Nelson:** It is only if the animal lives in state. If the animal is in Minnesota that it is legal?

**Wayne Carlson:** Then the federal government steps in. It is illegal to transport any milk interstate that isn't pasteurized for consumption.

**Representative Boschee:** We buy halves of cows for meat? Is there any regulation for how that meat is sold from an independent farmer?

**Wayne Carlson:** There is a requirement if you are buying a share of an animal. You have to buy it alive before you can get it slaughtered at a custom-exempt plant. Otherwise, you cannot buy the meat after it is processed.

**Representative Boschee:** A concern is public health. Have there been any cases in North Dakota of people becoming ill or dying from consumption of raw milk?

**Wayne Carlson:** I do not have those facts. The Health Department keeps records on outbreaks. There have been outbreaks all over the U.S. Recently there was one in Minnesota.



**Representative Kiefert:** It is not illegal to drink raw milk. It looks like this bill will force us to milk our own cows.

**Wayne Carlson:** State law doesn't prevent you from using your own milk. That is why I am coming to you to clarify--is a cow share a legitimate ownership of a cow? I say it is not.

**Representative Kiefert:** If they had a bill of sale on the cow, would that satisfy your question?

**Wayne Carlson:** Most of the cow shares do have a contract. It is for 1/20<sup>th</sup> or 1/30<sup>th</sup> or 1/10<sup>th</sup>. That is not full ownership. They do not pay for all the expenses? Are they taking the milk from that cow or does it go into a container with other milk?

**Representative Kiefert:** I have received emails from doctors that raw milk is better than pasteurized milk. What is next? Well water? Carrots?

**Wayne Carlson:** As far as the regulatory, you passed the law that a raw milk sale to the general public is illegal. I enforce that. I am here to get clarity. In other states with the law, it is regulated. Right now we don't regulate.

**Representative Kiefert:** We don't have documentation of anyone getting sick from drinking raw milk.

**Wayne Carlson:** I don't have it here today. I can get it if you would like. I have a file full of cases in different states.

**Representative Rust:** I am assuming there are people in other states that want to consume raw milk. What do other states do to accommodate.

**Wayne Carlson:** That is why I passed out the NASDA Study. (See attached #1c) It shows all 50 states on the way they regulate milk. Some states do allow cow shares. There are 20 states that do not allow any sale of raw milk whether it is cow shares or anything. Some states don't allow cow shares but they allow the sale of raw milk. In most cases they are regulated with some kind of requirements for the general public.

**Representative Rust:** Is this amendment a law to protect people from themselves. We are taking a right away from them.

**Wayne Carlson:** If it is for family, I see it. Everyone expects their food to be safe whether they are a guest or a potluck.

**Representative Rust:** People are aware they are drinking raw milk? When would they not be aware of it?

**Wayne Carlson:** Are they telling guests. Is it of a grade for fluid milk? The bacteria count on a Grade A farm is 100,000. For a Grade B farm it is 500,000. Those Grade B farms



can have bacteria up to one million to two million. Is that person aware that those bacteria counts are so high?

**Representative Headland:** How long has this practice of cow share been going on?

**Wayne Carlson:** It has been going on since the federal government banned the sale of raw milk. Other issues are pet food sales. If there is a law, there are ways around it.

**Representative Headland:** How long have you been the division director of livestock?

**Wayne Carlson:** I have been there for 20 years in different capacities. I have been director for the last 8 years.

**Representative Headland:** There is no example of harm. What directed your attention to this issue between when this bill passed the Senate and now?

**Wayne Carlson:** I have only been aware of one farm in the last eight years that has done it. It was one or two cows. The issue came when one of my permitted dairies was doing it. It is a recent episode.

**Representative Headland:** I understand your position. I'm just trying to understand why the issue is before us. I think you've clarified why. A major dairy doesn't like a hobby farmer selling raw milk.

**Wayne Carlson:** I represent all dairies. My job is food safety. If anyone gets sick from raw milk, I take it personally.

**Representative Headland:** I wasn't inferring that you did.

**Wayne Carlson:** I had a conversation with the one individual that is doing it. One of my dairy inspectors said she sold the cows.

**Representative Headland:** In your opinion is it possible to craft language to allow for the sharing and provide you the ability to allow for those that choose?

**Wayne Carlson:** Yes. It has to be crafted with certain procedures. You have to have a rule making process. There are 50 states that deal with it in 50 ways. There has to be some requirements on inspections and bacteria counts.

**Representative Headland:** I don't want to make a law that they break because of a choice they want.

**Representative Larson:** In your testimony you said that "changes to the state law are important to the dairy industry because our Grade A milk products will not be able to be shipped to other states if these changes are not adopted." Without the amendment, this won't change?



**Wayne Carlson:** The main bill won't change anything. The present law adopts the old PMO which says raw milk is illegal. This one is updating procedures from last session. Most of it is the procedures we use in the lab and other procedures. Next session we may have a bill in the IMS that will affect the producers and that is the sematic cell regulations going down to 400,000. We need the regulations passed to ship interstate.

**Representative Larson:** If people continue to own a share of a cow so they can drink milk, that won't interfere with what you need to do for the safety.

**Wayne Carlson:** The first part, will it affect regulations? No. Different states have different regulations. With intrastate we can make our own regulations. Once it crosses the border, there are no intrastate regulations. It has to be adopted so our fluid milk can go interstate. We need this because Cass Clay ships to Minnesota and South Dakota. Land O'Lakes ships to Montana. Without that we cannot ship our processed fluid milk to those states.

**Vice Chair John Wall:** If this amended bill were to pass and cow sharing continued, is there a penalty?

**Wayne Carlson:** There is a penalty up to \$500 per violation plus we can have a Cease and Desist Order for those breaking the law.

**Representative M. Nelson:** Are sematic cell tests performed on a sample taken at the farm?

**Wayne Carlson:** The sample is taken on the farm by the truck driver and then sent to an approved lab. We take a monthly test on all farms that are permitted. We receive the results from the lab. If that test is high, they receive a notice the first time. The second time they get a warning. The third time they are taken off the market.

**Representative M. Nelson:** These are general tests. I assume a lot of the concern with raw milk has to do with specific diseases. What diseases are we concerned with in raw milk?

**Wayne Carlson:** Brucellosis and TB. Both can be passed through milk if it is not pasteurized.

**Representative Trottier:** Your feelings are for the health of the public. When I grew up, we sold bottled raw milk. Then the city council passed a bill that we could not deliver milk. The people came out and picked it up so we didn't have to deliver any more.

I talked to a milk inspector who got staph infection because he had lunch at a dairy producer and they drank the milk from the tank. If I want to go to someone and they give me the milk, there is no problem with that?

**Wayne Carlson:** It is illegal to sell it or give away. If they give it away, I am not going to go knock on their door.



**Vice Chair John Wall:** I buy a beef from a neighbor and take it to a custom-exempt slaughter house. How does that differ from the herd sharing? It seems it is a buyer-beware issue.

**Wayne Carlson:** That individual has to see it alive before it can be slaughtered. They probably look at it. If the milk is delivered, they don't see where it comes from. Is it sanitary?

**Representative Larson:** Is there a place for them to get their milk tested periodically?

**Wayne Carlson:** Our State Health Department would test that milk. We have a contract with them. I am not sure they would do it for free.

**Representative Kiefert:** I assume most of these farms are also selling Grade A or B milk.

**Wayne Carlson:** I don't know. I am aware of one that is permitted and is selling cow shares.

**Representative Kiefert:** There are probably three to four times more emails on this subject than any other area. We had a bill regarding primary offense of a seat belt. That was voted down because we didn't want to infringe on the rights of the people. If people want it, I have a hard time saying they can't do it.

(40:53)

**Wayne Carlson:** That is why I am here is to get direction on cow shares. Voting it down will open the door for health issues. Milk producers are having a hard time. People are willing to pay extra for raw milk.

**Representative Kiefert:** We had a Grade A dairy farm. Every load was tested. Raw milk should be sold at a higher quality. Could the people buying this milk require their supplier to get tested every day also?

**Wayne Carlson:** Once milk is taken it has to be tested and agitated. It must be tested for antibiotics first. If they find antibiotics they don't test for anything else and dump the load. Then after that they test it for bacteria and sematic cells.

**Representative Haak:** How accessible is goat milk if people don't have a cow share? I went to three stores in Jamestown and found a little five ounce can.

**Wayne Carlson:** It is very rare to get goat milk in North Dakota. People are probably getting it from their neighbor. When it becomes open to the general public, we will regulate goat milk.

**Representative Trottier:** Do we have time to study this bill over the interim?

**Wayne Carlson:** It is up to you. Right now it is illegal and I will enforce it.

We are not the bad regulatory people, but we are here for food safety.



(47:46)

**Gary Hoffman, North Dakota Dairy Coalition:** (See attached #2)

**Representative Haak:** How many members are in the North Dakota Dairy Coalition?

**Gary Hoffman:** We have about 50 and that includes commodity groups and the North Dakota Milk producers which represents the dairy industry in North Dakota.

**Representative Kiefert:** Did you bring any documentation of cases where people got sick from drinking milk?

**Gary Hoffman:** No I didn't bring any. My example was 20 years ago when I was Director of the Dairy Division.

**Representative Kiefert:** That is an assumption, there was no testing? He could have gotten the flu.

**Gary Hoffman:** You could assume that. There was no other explanation for it.

**Opposition:**

(53:40)

**Peter Bartlett, Manager of Bartlett Farm Cow-Share Dairy:** (See attached #3a)  
People will purchase a share in a cow on our farm. We write in the cow's name and designate that cow as theirs. They are entitled to a fraction of that cow's milk production. They are not purchasing milk. When the cow decreases production they get less milk. Customers do judge us as a farm by our reputation. Even if they don't visit the farm before getting milk, they are referred to by another family that has been at the farm.

I have four jersey cows. They each produce about two gallons per milking.

A private cow-share contract between two parties is not under the state's jurisdiction.

This is about more than safety. It is about financial interests.

**Representative Heilman:** If I pay the neighbor, do I own a percentage of the cow and get the same percentage of the milk production?

**Peter Bartlett:** Yes, you are entitled to a fraction of the production.

**Representative Heilman:** If you were to sell the cow, do I get a part of the proceeds?

**Peter Bartlett:** Yes. The owner can sell his share at any time. That share is valid for the life of the cow. If the cow were to die, the share would be terminated and the owners are entitled to a percentage of the meat.

**Representative Heilman:** Does the share price also include operating costs?



**Peter Bartlett:** The share fee is continual and is paid for the maintenance of your share of the cow.

**Representative M. Nelson:** If the executive branch was trying to usurp things here, they could have gone to the rule-making process and not even brought an amendment.

When the milk is produced, do you deliver the milk or do people come to the farm?

**Peter Bartlett:** We deliver if they wish.

**Representative M. Nelson:** Do they buy a share sight unseen?

**Peter Bartlett:** Yes, that is correct. Most of our customers are referrals.

**Representative M. Nelson:** Are you an inspected dairy?

**Peter Bartlett:** We are not inspected.

**Representative Larson:** Can a large family buy two shares?

**Peter Bartlett:** They can buy as many as they want. The more shares they own, the larger percentage of the cow they own. Or they can buy shares in two different cows and receive milk during the other cow's dry period.

**Representative Haak:** If they own that share and someone gets sick, who is liable? Has anyone gotten sick?

**Peter Bartlett:** When they sign our contract, they assume all responsibility for the milk they consume. No one has gotten sick. We have testimonies on the exact opposite.

**Representative Trottier:** If a family goes on vacation for two weeks, what happens to their milk?

**Peter Bartlett:** They find someone to pass it to or we can save their milk for them.

**Representative Trottier:** On the back page of your testimony you say "there are financial interests at stake." Do you not have a financial interest in testifying here today?

**Peter Bartlett:** It is our family's livelihood. The state is also limited and if its jurisdiction is not over this private transaction, then it is not responsible to regulate this area.

**Representative Heilman:** As a shareholder of a company, you want to see the financials. If I own 5 of 50 shares (10% of one cow), how can I guarantee I am getting my share? Or is it based on trust?

**Peter Bartlett:** We generally provide more than people are entitled to so we are not shorting them.



**James Bartlett, Father and Owner of Bartlett Farm:** (See attached #3b)

Pasteurized milk is the most allergenic food on the market. This is about financial and liberty interests. The milk industry today is trying to put aspartame into milk and not label it. What kind of an interest is that in terms of health?

Farm-to-Consumer Legal Defense is aware of the testimony today and put out a bulletin on their website. (Encouraged joining of that organization)

Peter indicated problems with pasteurized milk. The outbreak in Minnesota came from an inspected dairy.

Studies show the good bacteria living in milk kills the bad bacteria. Raw milk is more safe than pasteurized milk. Mayo clinic used the raw milk diet to treat a lot of conditions. People have been healed. It is a very good food.

(1:21)

**Representative Larson:** I have been reading about 50 emails. Some are stories of families. Others have called us tyrants and are blaming in their approach. We legislators are trying to make good laws. We are hearing about this today for the first time. We are here to determine what is in the best interest of everybody. We are trying to do the right thing.

**Representative Rust:** You are here to provide testimony and not have a commercial to join an organization.

**Representative M. Nelson:** On your website you have a list of the products and the cost. It looks like you are selling the milk and not the share. Plus you are offering dairy processing and not just milk.

**James Bartlett:** People have an ownership in the cow. If you go to the products page, you will find the legal agreement toward the bottom. Yes, we are offering other services.

**Representative M. Nelson:** Are your pork cuts federally inspected?

**James Bartlett:** We use the Langdon USDA inspected plant.

**Robert Disney:** What is the motivation behind the amendment? (Directed to Wayne Carlson)

In view of Measure 4 in November, what role does the Farm Bureau play in this amendment?

Why did you select to choose notification of a few?

**Representative Trottier:** The testimony should be directed to the committee.

**Chairman Dennis Johnson:** Direct your opposition to the bill. This is the bill before us.



(1:27:31)

**Robert Disney:** There was an attempt to sneak an amendment without input from those affected. This should not happen with technology. We found out by accident.

I propose an amendment to legalize the sale of raw dairy products by way of a contract between the parties. There are contracts already in place.

**Representative Boschee:** I understand there is some mistrust. It did surprise me that someone did notify producers from an agency. I commend Mr. Carlson for doing that. You should be giving testimony to this bill and how it impacts your livelihood.

If we move to allow the sale of raw milk, regulation comes with it. There is give and take.

**Robert Disney:** My issue with the notification is that it was one day prior. It was by accident.

**Representative Heilman:** Your amendment would be to legalize the sale of raw milk. It is your opinion that the producers of raw milk would be willing to deal with regulations of the state department? We would then subject all producers of raw milk to all the testing requirements? Would they accept that?

**Robert Disney:** Yes, it would be appropriate if the producers are allowed to maintain a raw product.

(1:34)

**Mary Graner, Mandan:** (See attached #4)

When we milked, my mother would strain the milk. That is what I grew up on. I think the kids today are sicker than the kids 50 years ago.

(1:37:25)

**Terrill Epps, Mandan:** I don't expect the government to check things out for me. Freedom means my government doesn't tell me what to do. Goodness has to come from inside.

**Representative Trottier:** We do need laws. If I spray my pasture and sell that milk, how do we protect the consumer?

**Terrill Epps:** Most of the things at the store aren't good. We can't expect our government to take care of us.

**Representative M. Nelson:** Where do you draw the line?

**Terrill Epps:** We draw the line right here at the legislature. The federal government is supposed to regulate which means to promote commerce.



(1:49:08)

**Myra Olson, Jamestown:** Owned dairy goats for ten years. Daughter has allergy to cow's milk. We have the land and barn to house the animals. Not all families are so lucky. That is why herd share programs are important.

Small producers make sure procedures are as clean as possible. If something is wrong, it is more easily traced back to that specific animal. Small dairies are more sanitary and pay close attention to the details.

The government should not tell us what to eat.

**Chairman Dennis Johnson:** Are there herd shares in your goats?

**Myra Olson:** I have done herd shares but not currently. A young mom breast feeding was trying to wean baby to cow's milk. It developed diarrhea, etc. The doctor told her to seek goat's milk. I helped her through the herd share and the little boy thrived on it.

**Representative Kiefert:** The emails I received said that kids can't digest pasteurized milk. Do you have a percentage of those affected?

**Myra Olson:** I don't have a number. When I realized my daughter's allergy, I went to the grocery store and couldn't find goat's milk.

**Robert Disney:** The benefits of raw milk--it is a live product that allows it to be digested by us.

**Brian McGinness, Organic Vegetable Farmer:** Some regulation is necessary. I read the book Jim Bartlett referred to about the story of milk. The line is between direct marketing and wholesale marketing. If I take my products and sell them through a middle man, the customer is detached from me and doesn't know where it came from. Some assurance is needed. The processors have most of the power.

If I am selling directly, my customers can look to me for cleanliness.

**Representative Rust:** How do you get raw milk from Bottineau to Mandan?

**Brian McGinness:** They bring it down for us in coolers and I pick it up in coolers.

(2:02:30)

**Todd Fear (sp.?), Mandan:** I have three daughters. One had a problem with pasteurized milk. In Arizona it is legal to buy goat's milk from a farm. It is naturally homogenized. It doesn't separate.

Had health problems with other daughters who didn't like goat's milk. They found a cow share and daughter's asthma and skin problems cleared up.



Do some research into human tuberculosis vs. bovine tuberculosis. There is a big difference.

(2:07:08)

**Conrad Suechting, Bismarck:** I am in opposition of this bill if amended.

The issue of the safety of food in regulating existing laws in the production of fluid milk, rather than an amendment that takes a generalized approach, provide clarity that a regulated producer was not permitted to provide cow shares. The regulated would not be permitted to comingle with the raw milk production process.

The financial portion--documentation exists that those who produce for direct sale are very profitable. Those producing it in bulk as a commodity are not so profitable.

**Drazen Samardzic, Bismarck:** The main argument today is that people have gotten sick but no cases were presented. Someone will serve it on the potluck and that is a weak argument.

We are leaning toward chemicals to kill bugs and sterilize everything that can be sterilized. You can sell Round Up to a neighbor but not raw milk. The next thing there will be a law to sterilize spinach. I can sterilize my own raw milk. People know what they are doing. If raw milk is sold in the supermarket, I can see the point. But these people enter into a contract.

**Representative M. Nelson:** It sounds like people should get educated.

**Drazen Samardzic:** People know what they are doing. You don't stop selling antifreeze because somebody will misuse it. You don't blame the spoons that are making people fat. You use accordingly and you know what you are doing.

(2:16:39)

**Julie DeRung:** I grew up on a dairy farm. I don't want to lose the freedom of what kind of milk I drink or eggs, etc. I have done the research. When I grew up there wasn't as many illnesses with children.

My son would say he is not feeling good after drinking milk. There was not one complaint after he started drinking raw milk. I am asking that the amendment not be passed. I appreciate the people growing the food for me.

**Representative M. Nelson:** You used the term "herd share." Did you buy a share of a cow or of a herd?

**Julie DeRung:** I am not sure.

**Representative M. Nelson:** It is a commingling question. Are you getting milk from a particular animal?

**Julie DeRung:** In my case I am because I am buying from a certain kind of cow that has an ATA2 protein.

**Robert Disney:** "Know your farmer." Form a relationship with a producer. A healthy animal produces a healthy product.

**Terrill Epps, Mandan:** Individuals are doing the best thing for their customers.

**Stephanie LeDoux:** Moved here from California. The last year and half, I wanted raw milk. I participate by milking the cows. I can see how clean it is. Please do not take this away.

**Chairman Dennis Johnson:** Closed the hearing.

Appointed a subcommittee.  
Representative Headland, Chair  
Representative Kiefert  
Representative Boschee



# 2013 HOUSE STANDING COMMITTEE MINUTES

House Agriculture Committee  
Peace Garden Room, State Capitol

SB 2072--Subcommittee  
March 28, 2013  
Job #20629

Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

### (Subcommittee)

Relating to dairy products regulations

### Minutes:

Amendment # .01001

Time: 10:35 a.m.

**Members:** Representative Headland, Chair, Representative Kiefert, Representative Boschee

**Others:** Representative Haak, Chairman Dennis Johnson

**Representative Headland:** amendment #.01001

**Wayne Carlson, Livestock Development Director, North Dakota Ag. Dept.:** We have no problem with this amendment. We prefer that it says "to sell Grade B milk may not participate in a shared . . . program." Grade A meets the standards for pasteurized. A Grade B facility does not meet the fluid milk requirements.

**Representative Headland:** Why do we have to exclude any of the dairies from allowing a herd share?

**Wayne Carlson:** If we regulate the Grade A or Grade B facilities and they have a higher bacteria count, it puts us in a regulatory dilemma. In Grade B the limit is 500,000 but sometimes it is higher. How do we notify the individuals drinking the raw milk that it has a higher bacteria count? We have no problem with cow shares. If we start regulating part of it, we need to regulate the whole works. Do you want to regulate cow shares or not. If we are regulating, we want it in sanitary conditions that meet our standards.

**Representative Kiefert:** The purpose of this regulation is you are worried about people getting sick. That is why I had a question about excluding the Grade A. That should be the best quality milk.

**Wayne Carlson:** That is why I disagree with the Grade A.



**Representative Kiefert:** I am amazed on how many people are interested in this. The population drinking raw milk is increasing every year. Nobody has died in 38 years. They tested 2,000 people, 6% were lactose intolerant. When they switched them over to raw milk, 76% of the people had their symptoms disappear.

We are addressing cow shares. People are doing what they want with their property. We should just stay out of it.

**Wayne Carlson:** It is a matter of cow shares. We want clarification. This amendment says any permitted through our agency could not do cow shares. It would be open to the general public to do cow shares.

**Representative Headland:** It would be open to the B dairies. How do you currently notify a dairy that their bacteria count is too high?

**Wayne Carlson:** We take a monthly test and then notify them if it is high. The 2<sup>nd</sup> time it is high, we give them a warning. The 3<sup>rd</sup> time we cut them off the market.

**Representative Headland:** It is your responsibility to notify the dairies. If we made an option available that any dairy that wanted to participate in a herd share program, would be required to notify their herd share partners if there was an issue with bacteria. Would that cover the basis?

**Wayne Carlson:** There is 3 out of 5. We take it once a month. You would satisfy some of that need. You could have three months of high bacteria before we took action. Who is going to regulate that they do that? That puts us into the middle checking to see if they notify. The cow shares are their own business.

**Representative Headland:** Would that language relieve you of responsibility and put it on the herd share participants?

**Wayne Carlson:** I am not a lawyer.

**Representative Boschee:** If we change it to Grade B, are you aware of dairies that you license that are doing herd shares that fall under A or B.

**Wayne Carlson:** I am aware of one. Two other dairies have asked about it.

**Representative Kiefert:** If the herd share is legal, we are trying to regulate something they want to do with their own property. Now we are regulating the product from their animal.

**Wayne Carlson:** That is why you have this amendment. How can you separate what is their product?

**Mary Graner:** In the Billings Gazette the article said that any herd size 15 or under can sell raw milk. It would eliminate the cow shares. Montana passed 98-2 in favor of selling raw milk.



If there was a standardized waiver to consume at own risk, would reduce liability.

**Representative Headland:** That would be quite a change to North Dakota law. It currently is illegal to sell raw milk. Would it be acceptable to put language in this amendment that allowed for a herd share program in any dairy? The notification of problems from the Ag. Dept. would have to be passed on to the participants that they should quit consuming raw milk. Would you agree to that?

**Mary Graner:** A lot of the dairies are large and should be regulated. I can't comment on the smaller dairies that sell raw milk.

**Representative Headland:** Would it be acceptable if we added both Grade A & B dairies?

**Mary Graner:** I am not able to speak to that.

**Representative Kiefert:** Raw milk ban is a federal regulation. I don't know how Montana gets around it.

**Representative Boschee:** These are organizations that he is already regulating. Putting a barrier to protect him and the state around the organizations they are already licensing and leaving anyone else alone is how I would like to see it.

**Representative Kiefert:** Once we put our foot in the door we are in. Once we start regulating where is it going to stop?

**Robert Disney:** The Montana legislation was a Senate bill. There was an additional portion that the liability for drinking raw milk rested with the consumers. The state was out of it for the dairy farms with limited numbers of animals.

The change to the amendment says, "To sell Grade B may not participate." I am against that. Prairie Diamond Ranch where I get my milk is a Grade B dairy. This would make the herd share I participate in illegal. That amendment is worse than the first one.

**Representative Headland:** How many cows on the Prairie Diamond Dairy?

**Robert Disney:** I will defer that question to Wayne Carlson.

Testing once a month is OK for a Grade A dairy because that milk is pasteurized. What would that do for raw milk when I am buying all month? Nothing. I rely on my dairy operator that they monitor their animals.

**Carrie Knutson, Prairie Diamond Ranch:** I believe this amendment is because of my herd share operation. Do you need me to separate the cows that I have and use them for the herd share? I have a lot of people depending on milk from me.

**Representative Headland:** How many cows?



**Carrie Knutson:** I have 55 cows that I milk.

**Representative Kiefert:** We haven't done anything that will affect this system yet.

**Representative Boschee:** You have a Grade B dairy? You have other cows that are part of the herd share?

**Carrie Knutson:** They are the same

**Representative Boschee:** The milk produced is only going to the owner of that share? Are you using it for cheese or to sell elsewhere?

**Carrie Knutson:** It goes to South Dakota to make cheese.

**Representative Headland:** What type of regulations are you subject to as a Grade B dairy as far as bacteria counts?

**Carrie Knutson:** It is whatever Mr. Carlson said. I don't remember the numbers.

**Representative Headland:** Have you ever been notified that you exceed those counts?

**Carrie Knutson:** Yes. They test every so often and every month the state gets a sample. The state samples would be over the limit. My field man came and we ran several tests and then it stopped. There were people on the route that had low butter fats at certain times. The bacteria counts weren't consistently high.

**Representative Headland:** When you have a problem, did you notify your herd share partners?

**Carrie Knutson:** No. It was done and then it was back down again.

**Representative Kiefert:** You have to be Grade A to sell for fluid milk. Our milk was tested every load. We got paid more if there was a lower bacteria count.

**Dorothy Orts from Oriska, Ronnie's Grandma:** When I grew up, we never went to the doctor. Continued to explain the benefits of raw milk for her grandson.

**Representative Kiefert:** I have received hundreds of emails.

**Representative Headland:** Closed the meeting.

**Representative Headland:** I am not sure this amendment will work for us the way it is written. We are not going to take that opportunity away from them.

**Adjourn:** 11:10 a.m.

Meet again this afternoon.



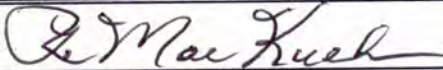
# 2013 HOUSE STANDING COMMITTEE MINUTES

House Agriculture Committee  
Peace Garden Room, State Capitol

SB 2072--Subcommittee  
March 28, 2013--p.m.  
Job #20661

Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

(Subcommittee)  
Relating to dairy products regulations

## Minutes:

Attachment #1

Time: 3:30 p.m.

**Members present:** Representative Headland, Chair, Representative Kiefert,  
Representative Boschee

**Others:** Representative Haak; Dane Braun, Agriculture Department

## Wayne Carlson, Dairy Development Director: (See attached #1)

After the last meeting I did some research. The state of Colorado has a law that is conducive to the producers. It does provide the oversight that we are looking for. Part A and Part B define what cow shares are. It does say you can't transfer the cow share from one dairy to another. Part C is a warning statement that the milk is not pasteurized and a list of potential pathogens that may be present in the milk. We have labels on most of our products.

The dairy has to inform if there is a violation of standards. The other part is a registration so we know which farms are selling raw milk. Also, raw milk can't be sold to someone else.

The last paragraph says "no producer of raw milk shall publish any statement that implies approval, endorsement, or quality standards by the agriculture commissioner."

One of the concerns was a Grade B farm. A Grade B farm can do it if it is permitted with us.

As far as regulations for the sematic cell or bacteria, we do not set any regulations. It is their responsibility for the milk.

**Representative Headland:** Would any dairy be able to do this? Letter C, if we are not selling milk, why do we have to label it?



**Wayne Carlson:** It is a product that is raw for consumption. We feel it is pertinent. Why can't it be labeled?

**Representative Kiefert:** A better way would be to outlaw the cow shares. We are saying they can own their animal and then we are trying to regulate what they do with their milk.

**Wayne Carlson:** The only regulation is letting us know they are selling the raw milk. Even if it is their own cows and someone else is milking those cows, there are a lot of things that can go wrong. Labeling--if it is used by somebody else, they know it is labeled raw milk.

**Representative Kiefert:** I asked for the regulation regarding raw milk sales in North Dakota. If we had it legal to sell raw milk then I can see the standards being put in place.

**Wayne Carlson:** Showed Representative Kiefert the section.

**Representative Headland:** If we were to adopt the Colorado standard and present it to the full committee, would you object to taking out letter C that mandates the warning?

**Wayne Carlson:** The commissioner wanted the warning statement.

**Representative Boschee:** Would you be amicable to an annual notice to the consumer on part C?

**Wayne Carlson:** It could be in the agreement that they sign that this is a raw milk sale. The commissioner would like to say there is a list of pathogens that could be present.

**Robert Disney:** The citizens would like time to digest this. What I see looks good. One comment is that currently cow share contracts have a statement that there could be pathogens in there. That is a contract that you sign. That should satisfy the agriculture department's need for a label on every container. We are ahead of the regulations.

What is the cost to the raw milk producers for the implementation of these regulations?

(11:55)

**Representative Headland:** You just fill out a form and register what the herd share people would be doing.

**Wayne Carlson:** The cost would be just the labeling. There is no fee for registration.

**Peter Bartlett, Bartlett Farm:** We do not approve of this. This approves the practice of cow sharing. That says he doesn't need to know about it. Any step toward regulation now is a sign that there is more coming. I would urge you to not place any regulation on the practice of cow sharing for that reason. It is a step toward regulating them out of business.

**Representative Headland:** I think it has broadened the opportunity for cow shares amongst operating dairies.



**Peter Bartlett:** It is only broadened in respect to the second proposed amendment. Prior to that, this is a restriction. Before any law was in place, that was the freedom for dairies to practice cow sharing. With this proposed change, it broadens as compared to an outright ban but it restricts compared to leaving it out.

**Representative Headland:** As legislators we can go ahead and resist any change and pass the bill as it came from the Senate. However, the Ag. Dept. has brought a problem they see with herd shares and the practice of selling raw milk. We can kick the can down the road, but it will be addressed in the future.

(17:40)

**Peter Bartlett:** The legislature is responsible to regulate the state of North Dakota. The judge rules between what is right or wrong. I don't think we need to practice preventative law. I think a judge's rule is the proper place for deciding that.

**Representative Boschee:** You have to consider the judicial branch can't rule because it is not clear enough. This would open up additional opportunities for you. Consumers could go to the Dept. of Ag. and find out who has cow shares in a certain county.

**Peter Bartlett:** The state doesn't do a good job of advertising. There are plenty of outlets for people to find out. That is not a good way to promote this legislation. No regulation protects us by allowing the free market to grow and prosper and individuals to choose for themselves.

**Representative Headland:** The only thing is considered a regulation would be C in a warning statement. If we took that out, just having to register with the department would be an overbearing prospect?

**Peter Bartlett:** Checking in with Big Brother isn't what people of North Dakota want. We don't need more oversight of our population. Regulation is what has caused dairy farmers to go out of business.

**Representative Kiefert:** Montana was mentioned. Do any states legally sell raw milk?

**Peter Bartlett:** Minnesota allows sales from the farm.

**Representative Kiefert:** Next session you could present a bill to have the right to sell raw milk.

(23:47)

**Robert Disney:** I agree with Mr. Bartlett. Is it important for the state to know we are selling raw milk? Does it benefit us or the state, outside of the supposed advertising?

**Representative Boschee:** I would support passing this amendment.

**Representative Kiefert:** If the cow share is legal, I don't see that we need to tell them what to do.



**Representative Headland:** I am not a fan of excess in government. We are responsible to present an option to the committee. I would have no objection to forward this proposal to the committee. I would like to pull letter C out. If we don't have consensus we can forward it as an option to the full committee and not a recommendation.

**Representative Headland:** I understood the supporters of the cow share agreements already include a statement that you are consuming a product that is raw. We could include language in letter B to require that.

**Representative Headland:** Closed the meeting

# 2013 HOUSE STANDING COMMITTEE MINUTES

House Agriculture Committee  
Peace Garden Room, State Capitol

SB 2072--Committee Work  
March 29, 2013  
Job #20697

Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

(Committee Work)  
Relating to dairy products regulations

## Minutes:

Amendment #.01002 & Attachment #1

## Report of subcommittee (two meetings)

**Representative Headland:** The subcommittee report is without recommendation. We believe the full committee should discuss this.

**Jacob Geiermann, Law Intern:** Explained amendment #.01002

This amendment would clarify existing law on cow share agreements. Under current law the sale of raw milk is prohibited and this amendment clarifies that and allows cow share agreements if certain conditions are met.

Section 1 of the amendment is expanding the definition of a dairy farm to include a place where milk is transferred in accordance with a shared animal ownership agreement.

Section 3 is creating a new definition in 4-30. That definition defines shared animal ownership agreements as a contractual arrangement where a person acquires an interest in a milk producing animal. They have an agreement for the boarding of that animal. As an owner they are entitled to a share of the milk from the animal. They are not purchasing the milk but are a part owner of cow that is producing the milk.

Section 4, subsection 2 clarifies that it is not a violation of the section to obtain raw milk if it is done in accordance with a shared animal ownership agreement. It can't be resold.

Section 8 requires registration with the Department of Agriculture by providing the name and address of the dairy farm.

Section 9, Requirements--it is allowed to enter into shared animal ownership agreements if certain conditions are satisfied. Registration is one requirement. The milk must be transferred at the farm to avoid the retail sale.



(4:53)

**Representative Headland:** That does not mean the dairy cannot deliver to the person who has the cow share contract?

**Jacob Geiermann:** I believe the transfer of ownership would occur at the farm but it could still be delivered. We may need clarification. The intent wasn't to prevent them from delivering.

**Representative Headland:** We want the transaction to be between the owners but not at a certain location.

**Jake Geierman:** Subsection 3 states that only individuals that have an agreement are able to receive milk.

Subsection 4 includes a requirement that these agreements have a warning statement that the milk is not pasteurized. There may be potential pathogens present. There are potential health concerns with the consumption of raw milk.

Subsection 5 requires owners of a dairy to provide information to the members.

- a. The standards used to maintain the health of the animals
- b. The standards used to insure the production of milk
- c. and d. are not requirements. If tests are performed on either the animal or on the milk, it would require the farm to share those results and provide an explanation of the meaning of those test results.

Section 10 would prohibit anyone from publishing statements that would imply the Department of Agriculture endorses these shared agreements.

Again this bill clarifies the existing law and insures that individuals can enter into these animal share agreements.

(9:00)

**Representative Headland:** I think we can move forward with this amendment. We would be providing protections to individuals who enter into animal share contracts. We could do nothing. If we do nothing, there may be laws that are being broken. This is a fair solution. This is not an over burdensome solution. It is a good compromise.

**Representative Headland:** Moved amendment #13.8013.01002.

**Representative Boschee:** Seconded the motion.

**Representative Larson:** I would be more comfortable if we would eliminate on page 2 of the amendments #2 about the transfer. Why even specify how the milk is transferred?

**Representative Headland:** I could go with that. What we are trying to do is keep the transfer between the two obligated parties. It is probably still covered in the rest of the amendment.



**Chairman Dennis Johnson:** I would have read it to be assured that it is between the dairy and the herd share person rather than have a warehouse as an alternative pickup point.

**Representative Kiefert:** Have the people that this affects had a chance to look at this new amendment? This was brought about as a concern for people drinking raw milk.

Refers to map (See attached #1) There are 23 states that have it legal to buy raw milk. If the dairy industry wants to regulate this, why don't they make the raw milk legal and then regulate it. Now they are trying to regulate something that people own. They own the cow and now we are regulating what they do with it.

The number of people drinking raw milk is increasing by 25% per year. There is a large segment that wants this. I think we should take some time and let them respond to this new amendment. I think we shouldn't amend it at all. Just pass the bill. Then look at legalizing it and then it can be regulated.

**Chairman Dennis Johnson:** My understanding of raw milk is it is illegal federally. The 23 states are the states that are trying to make it so it is acceptable by going through the herd share program.

**Representative Kiefert:** It is the interstate transfer that is illegal. It is not illegal at the federal. This map shows the states in yellow that legally sell it in the marketplace. The green ones are the ones where the farm sales are legal too. Almost half the country can sell raw milk already. Then the light green is the herd shares on the map.

**Representative Headland:** The amendment proposed is the Colorado statute we discussed yesterday. It is put into form to fit our Century Code. It is illegal in North Dakota to sell raw milk. It has been indicated that if we move forward, it is probably illegal and the Agriculture Department may be forced to shut down some people. It is not an over burdensome regulation.

**Vice Chair John Wall:** Page 2, under #5, how extensive are these requirements? Who will carry them out and at what cost to the producer? That would be letters a. through d. continued on page 3.

**Representative Headland:** Letter a.--this is a practice currently being done. The other standards are language from the Colorado statute.

**Representative Boschee:** #5, c. & d. That would be the results that if they did have a test result. It is not saying there has to be tests.

This issue isn't going to go away. We know there haven't been cases of people getting ill. But, what if something happens in the next two years? Then what type of regulation will be imposed? This allows us to put into statute what is already occurring. In my community we are talking about creating a food co-op supporting local organic businesses. There is potential to sell raw milk to consumers through a food co-op.



We agree no one should tell people that they can't consume raw milk. We understand the health benefits. We need to provide a process for it to happen safely. I like this amendment.

**Representative Headland:** This amendment would expand the opportunity for people to consume raw milk. It would give them more options. If you have a Class A dairy in your neighborhood, they can now participate.

**Representative Fehr:** If we need something on milk delivery for #2, I could offer language to clarify.

**Representative Fehr:** I would add "The owner of the dairy farm and individuals who have entered shared animal ownership agreements may enter into an agreement for milk delivery."

**Jacob Geiermann:** Page 2, #2 after "located:" add "this doesn't prohibit delivery of an animal's raw milk production in accordance with a shared animal ownership agreement."

**Voice Vote taken** on amendments. Amendments passed.

**Representative Trottier:** Page 2, 4c. Does pasteurized milk have to carry that statement and do all our other foods have to carry that? Are going to have to do that with other foods?

**Representative Boschee:** The individuals said that is already included in their agreements.

**Representative Headland:** Moved the amended version of SB 2072.

**Representative Heilman:** Seconded the motion.

**A Roll Call vote was taken:** Yes 12, No 1, Absent 0.

Do Pass as amended carries.

**Representative Headland** will carry the bill.

March 29, 2013

3/29/13  
C. J. C.  
10/3

PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and three new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; and to"

Page 1, line 1, replace "subsection" with "subsections 7 and"

Page 1, line 1, after "sections" insert "4-30-36,"

Page 1, after line 4, insert:

**"SECTION 1. AMENDMENT.** Subsection 7 of section 4-30-01 of the North Dakota Century Code is amended and reenacted as follows:

7. "Dairy or dairy farm" means a place where one or more dairy animals are kept, a part or all of the milk or milk products from which is sold or offered for sale, or transferred in accordance with a shared animal ownership agreement."

Page 1, after line 9, insert:

**"SECTION 3.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement.

**SECTION 4. AMENDMENT.** Section 4-30-36 of the North Dakota Century Code is amended and reenacted as follows:

**4-30-36. Standards for grade A milk and milk products - Adoption of amendments.**

1. Only grade A milk may be sold as fluid beverage for human consumption. The minimum standards for milk and milk products designated as grade A are the same as the minimum requirements of the Pasteurized Milk Ordinance which includes provisions from the "Grade A Condensed and Dry Milk Products and Condensed and Dry Whey - Supplement 1 to the Grade A PMO". The commissioner may adopt ~~as regulations~~ other standards in the interest of public safety, wholesomeness of product, consumer interest, sanitation, good supply, salability, and promotion of grade A milk and milk products.



- 2  
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2. It is not a violation of this section to transfer or obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement."

Page 2, after line 10, insert:

"**SECTION 8.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Dairy farm registration.**

The owner of a dairy farm that participates in a shared animal ownership agreement shall register with the commissioner by providing a written document that includes:

1. The name of the dairy farm; and
2. The address of the dairy farm.

**SECTION 9.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Requirements.**

A person that transfers an animal's raw milk production in accordance with a shared animal ownership agreement does not violate this chapter if:

1. The dairy farm is registered under section 8 of this Act;
2. The milk is transferred at the dairy farm where the milk-producing animal is located or delivered to another location in accordance with a shared animal ownership agreement;
3. The individual receiving milk has entered a shared animal ownership agreement with the owner of the dairy farm and is receiving milk on the individual's own behalf or on the behalf of another who has entered a shared animal ownership agreement with the owner of the dairy farm;
4. The shared animal ownership agreement contains a prominent statement warning that:
  - a. The milk is not pasteurized;
  - b. Potential pathogens may be present in the milk; and
  - c. There are potential health concerns associated with the consumption of raw milk or raw milk products; and
5. Annually, the owner of the dairy farm provides to individuals who have entered shared animal ownership agreements with the owner:
  - a. The standards used to ensure the health of the milk-producing animals that are part of the shared animal ownership agreement;
  - b. The standards used to ensure the production of milk;



- 3  
83
- c. The results of any tests performed on the milk-producing animals, together with an explanation of the test results; and
  - d. The results of any tests performed on the milk from the milk-producing animals, together with an explanation of the test results.

**SECTION 10.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Prohibition.**

A person may not publish any statement that asserts or implies the approval or endorsement by the commissioner of shared animal ownership agreements and the acquisition of raw milk under such agreements."

Renumber accordingly



Date: 3/29/13

Roll Call Vote #: 1

**2013 HOUSE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 2072**

House **Agriculture** Committee

Legislative Council Amendment Number .01002

Action Taken:  Do Pass  Do Not Pass  Amended  Consent Calendar  
 Rerefer to Appropriations  Reconsider

Motion Made By Rep. Headland Seconded By Rep. Boschee

Representatives	Yes	No	Representatives	Yes	No
Chairman Dennis Johnson			Rep. Joshua Boschee		
Vice Chairman John Wall			Rep. Jessica Haak		
Rep. Wesley Belter			Rep. Marvin Nelson		
Rep. Alan Fehr					
Rep. Craig Headland					
Rep. Joe Heilman					
Rep. Dwight Kiefert					
Rep. Diane Larson					
Rep. David Rust					
Rep. Wayne Trottier					

*Voice Vote passed*

Total Yes \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:

**Include the following:**  
**page 2, #2 after located: add "this doesn't prohibit delivery of an animal's raw milk production in accordance with the shared animals' raw milk agreement"**

*revised as →  
"or delivered to another location  
in accordance with a shared animal  
relationship agreement;"*

Date: 3/29/13

Roll Call Vote #: 2

**2013 HOUSE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 2072**

House **Agriculture** Committee

Legislative Council Amendment Number 13-8013-01003

Action Taken:  Do Pass  Do Not Pass  Amended  Consent Calendar  
 Rerefer to Appropriations  Reconsider

Motion Made By Rep. Headland Seconded By Rep. Heilman

Representatives	Yes	No	Representatives	Yes	No
Chairman Dennis Johnson	X		Rep. Joshua Boschee	X	
Vice Chairman John Wall	X		Rep. Jessica Haak	X	
Rep. Wesley Belter	X		Rep. Marvin Nelson	X	
Rep. Alan Fehr	X				
Rep. Craig Headland	X				
Rep. Joe Heilman	X				
Rep. Dwight Kiefert		X			
Rep. Diane Larson	X				
Rep. David Rust	X				
Rep. Wayne Trottier	X				

Total Yes 12 No 1

Absent 0

Floor Assignment Rep. Headland

If the vote is on an amendment, briefly indicate intent:



**REPORT OF STANDING COMMITTEE**

**SB 2072: Agriculture Committee (Rep. D. Johnson, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (12 YEAS, 1 NAYS, 0 ABSENT AND NOT VOTING). SB 2072 was placed on the Sixth order on the calendar.

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and three new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; and to"

Page 1, line 1, replace "subsection" with "subsections 7 and"

Page 1, line 1, after "sections" insert "4-30-36,"

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7. "Dairy or dairy farm" means a place where one or more dairy animals are kept, a part or all of the milk or milk products from which is sold or offered for sale, or transferred in accordance with a shared animal ownership agreement."

Page 1, after line 9, insert:

**"SECTION 3.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement.

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**4-30-36. Standards for grade A milk and milk products - Adoption of amendments.**

1. Only grade A milk may be sold as fluid beverage for human consumption. The minimum standards for milk and milk products designated as grade A are the same as the minimum requirements of the Pasteurized Milk Ordinance which includes provisions from the "Grade A Condensed and Dry Milk Products and Condensed and Dry Whey - Supplement 1 to the Grade A PMO". The commissioner may adopt ~~as regulations~~ other standards in the interest of public safety, wholesomeness of product, consumer interest, sanitation, good supply, salability, and promotion of grade A milk and milk products.
2. It is not a violation of this section to transfer or obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement."



Page 2, after line 10, insert:

**"SECTION 8.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Dairy farm registration.**

The owner of a dairy farm that participates in a shared animal ownership agreement shall register with the commissioner by providing a written document that includes:

1. The name of the dairy farm; and
2. The address of the dairy farm.

**SECTION 9.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Requirements.**

A person that transfers an animal's raw milk production in accordance with a shared animal ownership agreement does not violate this chapter if:

1. The dairy farm is registered under section 8 of this Act;
2. The milk is transferred at the dairy farm where the milk-producing animal is located or delivered to another location in accordance with a shared animal ownership agreement;
3. The individual receiving milk has entered a shared animal ownership agreement with the owner of the dairy farm and is receiving milk on the individual's own behalf or on the behalf of another who has entered a shared animal ownership agreement with the owner of the dairy farm;
4. The shared animal ownership agreement contains a prominent statement warning that:
  - a. The milk is not pasteurized;
  - b. Potential pathogens may be present in the milk; and
  - c. There are potential health concerns associated with the consumption of raw milk or raw milk products; and
5. Annually, the owner of the dairy farm provides to individuals who have entered shared animal ownership agreements with the owner:
  - a. The standards used to ensure the health of the milk-producing animals that are part of the shared animal ownership agreement;
  - b. The standards used to ensure the production of milk;
  - c. The results of any tests performed on the milk-producing animals, together with an explanation of the test results; and
  - d. The results of any tests performed on the milk from the milk-producing animals, together with an explanation of the test results.

**SECTION 10.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:



**Shared animal ownership agreement - Prohibition.**

A person may not publish any statement that asserts or implies the approval or endorsement by the commissioner of shared animal ownership agreements and the acquisition of raw milk under such agreements."

Renumber accordingly

**2013 CONFERENCE COMMITTEE**

**SB 2072**



# 2013 SENATE STANDING COMMITTEE MINUTES

Senate Agriculture Committee  
Roosevelt Park Room, State Capitol

SB 2072  
April 11, 2013  
21108

Conference Committee



Relating to dairy products regulations

## Minutes:

**Chairman Miller** opened the Conference committee on SB 2072. All committee members were present: Senators Miller, Larsen, Heckaman; Representatives Headland, Kiefert, Boschee.

**Representative Headland** explained the House amendments. First, it would clarify existing law on what constitutes a cow share agreement. Section 1, expands the definition of a dairy farm that would include a place where milk is transferred in accordance with a shared animal ownership agreement. Section 3, is the new definition of a shared animal ownership agreements as a contract and a person that acquires this has an ownership interest in a milk-producing animal. Section 4, clarifies that it is not a violation to obtain raw milk when you have a cow/herd share arrangement. Section 8, requires the dairy farm registration, this is the area of consternation. Section 9, just spells out the requirements of what the agreements are.

**Senator Heckaman:** Is this dairy shares idea patterned after similar laws in other states? Or is it from the Ag Department?

**Representative Headland:** These were patterned after the Colorado statute.

**Senator Miller:** Presented copies of a proposed amendment to SB 2072 that would change this to a legislative management study. It is just something to think about. The general thought may be that the registration is unnecessary but there is understanding of why it was asked for. **Attachment # 1**

**Representative Headland:** The registration for the shared herd agreement would serve the purpose of when the Ag Department has complaints about raw milk being sold. With registration, the Ag Department would know that the people registered were not doing it illegally and would not have to go out and inspect or investigate. However, I do agree that maybe the language in the registration is open to some further possible regulation through administrative rule. I would be willing to look at the possibility of adding language that clarifies legislative intent. The intent being that it does not go beyond registration.

**Senator Larson:** Do the people selling eggs, and other things, have to register?



**Representative Headland:** The difference is that the sale of eggs, meat and other products are legal. The sale of raw milk is illegal. We are just trying to provide a way to allow people that choose to drink raw milk access. Do we need the registration - I'm not sure we do. But I feel the registration helps protect the people that choose to enter into the agreement from unwanted inspections.

**Representative Boschee:** Explained that the House Ag Committee and sub-committee have had extensive conversation on these amendments. He expressed concern for the consumers so they can continue to have their access to raw milk if that is their choice. He explained how he felt this protected the consumer and also the legislative intent is not to regulate. He concluded that the amendments are a good thing.

**Senator Larsen:** Have the concerns been discussed that are reflected in the handout we received at our place in the committee room? **Attachment #2**

**Senator Miller:** Explained the usage of the wording "herd share" and commended the people of thinking outside the box and creating this unique channel.

**Representative Keifert:** The committee to begin with, didn't think we should be meddling in this area. In 28 states, buying raw milk is legal. Herd sharing and cow sharing is legal in North Dakota. He is against the amendments. The concern is that once they get started with regulations, where is it going to stop.

**Senator Larsen:** Has there been any incidents in North Dakota where someone has drank raw milk and it was a tragedy?

**Representative Keifert:** No one has died in the United States in the last 38 years from drinking raw milk.

**Representative Boschee:** These conversations were held in the House also. The argument here is whether or not people should have access to their herd shares. No one is disputing whether people should drink raw milk or not. These amendments will protect these consumers so they have continued access to their raw milk.

**Senator Larsen:** I find this as an encroachment of the government on people who want to be entrepreneurs. It is not needed.

**Representative Headland:** We have other products that people use that are illegal to sell and raw milk is listed as illegal to sell in North Dakota. I don't think we can talk about encroachment of government because this is already the law. Raw milk is illegal. We are not trying to take something away. What we are trying to do is allow for a practice of something that is being done, that today is essentially illegal.

**Senator Heckaman** expressed her need to go back and read her e-mails and get more information. She asked if the Department of Ag was in agreement to the amendments.

**Representative Headland:** The Ag Department did agree on the amendments.



**Representative Keifert** continued to speak in opposition to the amendments. Why not just legalize the buying of raw milk.

**Senator Miller:** Made the comparison to a brewery and gave his analogy.

**Senator Heckaman:** Part of the country wants more organic farming and wants to know where their food comes from. We want to allow these things, legally, to go on. She doesn't understand why people don't want this to happen. She would like more time to go back and read the e-mails and look at this closer.

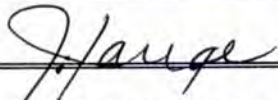
**Senator Miller:** We will need another meeting on this and he encouraged the committee to be ready to finish this bill. He said that there are options.

# 2013 SENATE STANDING COMMITTEE MINUTES

Senate Agriculture Committee  
Roosevelt Park Room, State Capitol

SB 2072  
April 16, 2013  
21155

Conference Committee



Relating to dairy products regulations

## Minutes:

**Chairman Miller** opened the Conference committee on SB 2072. All committee members were present: Senators Miller, Larsen, Heckaman; Representatives Headland, Kiefert, Boschee.

**Representative Headland** explained his amendment, #13.8013.01005 (**Attachment #1**). The amendment is fairly simple. It asked that the House recede from its amendments and further amend. It would get rid of the registration and replace it with a notification, exclusive to registered dairies that already have to register with the Ag Commissioner's office. In section 8, the notification of the commissioner is a bit more erroneous than I expected and anticipated so we may need further change. The amendment adds section 11 that is letting the commissioner know that his rule making authority on cow shares is limited and legislative intent would be that there are no further regulation of cow shares beyond the notification. I did have the intern attempt to rewrite the notification section.

**Senator Heckaman:** So the dairy just has to give notification that they sell shares?

**Rep. Headland:** The Ag Department inspects registered dairies and the Ag Department just needs to know which ones are selling shares.

**Rep. Boschee:** If I have 4 cows that I enter into a share agreement and I am not a licensed dairy, I don't have to notify?

**Rep. Headland:** That is correct. For the licensed dairies we have to decide if there is benefit to have the notification. I believe there is. He explained what he suggested for notifications language (**attachment #2**).

**Senator Larsen:** I continue with my position on stripping out all the amendments and we just stay with the original bill as it left the Senate.

**Rep. Boschee:** I think the House amendments protect the consumers that are in this practice. If you would have looked into what has happened in other states, with the USDA or FDA coming in and working with other agencies to regulate the consumption of raw milk within that state, we need to consider being proactive. This bill is a direct statement that



says that within the state of North Dakota people that enter into these agreements are legally allowed to do it. We recognize that people consume raw milk, they do it through a cow share agreement, and we respect and allow that to happen.

**Senator Larsen:** Isn't it true that South Dakota allows the selling of raw milk in stores?

**Rep. Boschee:** If we wanted to look at that in the future we could look at that.

**Rep. Headland:** The notification will give us information on how often this is happening. Maybe we should look at legalizing the sale of raw milk. Right now, the Ag Department does not have any knowledge of anyone who has a cow share agreement and if the department receives a complaint that someone is doing the illegal practice of selling the raw milk, they are forced to investigate. I don't think it is a big burden to ask a licensed dairy to notify the state ag department that they are participating in a share program.

**Senator Heckaman** agreed with Rep. Headland. It is a simple notification. She did suggest adding the possibility of a study to legalize the sale of raw milk.

**Senator Miller** asked Wayne Carlson how many dairies in ND?

**Wayne Carlson**, Director of Livestock, replied that there are 114 licensed dairies, 80 are grade A and the rest are manufacturing grade dairies. Presently, only one dairy is selling shares that he knows of.

**Senator Larsen:** We are talking about people who own shares of animals. He made some comparisons to other animals, like steers or elk. He compared share cows to other animals.

**Representative Headland** clarified that we are not going to register them we are just going to have a notification. The other major difference is that selling raw milk is illegal. We can't compare apples to oranges because it clouds the conversation.

Discussion followed on the amendments. There was discussion on a study to legalize the selling of raw milk. There was a comment on the importance of keeping the language and intent of section 11. There was concern on exact language in the amendments and the committee would like to work on the language further.

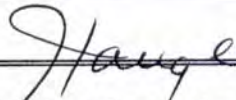
Conference committee adjourned.

# 2013 SENATE STANDING COMMITTEE MINUTES

Senate Agriculture Committee  
Roosevelt Park Room, State Capitol

SB 2072  
April 18, 2013  
21234

Conference Committee



Relating to dairy products regulations

## Minutes:

**Chairman Miller** opened the Conference committee on SB 2072. All committee members were present: Senators Miller, Larsen, Heckaman; Representatives Headland, Kiefert, Boschee.

**Representative Headland** explained the amendment #13.8013.1008. The changes made from the prior amendment are very simple. The first change is in section 8 and it just changes the wording in notification to grade A or manufacturing grade and notification must be in writing. We also added the study and language in section 11 using the wording of transferring milk. I am also wondering if the committee is open to further amending this amendment to striking the language in the amendment in Section 1, "or transferred in accordance with a shared animal ownership agreement."

**Chairman Miller:** I agree that there isn't a need for that language and we could strike it.

**Rep. Headland** moved the House recede from its amendments and further amend SB 2072 with the amendments presented #01008 minus section 7, subsection 1, resulting in version # 13.8013.01009.

**Rep. Boschee** seconded.

**Senator Kiefert** asked whether this protected only the consumers and not the operators.

**Senator Miller** replied that the amendments takes care of that concern when we change the wording from obtain raw milk to individual transferring.

**Roll call vote: 4-2-0**

Motion carried.



# 2013 SENATE STANDING COMMITTEE MINUTES

Senate Agriculture Committee  
Roosevelt Park Room, State Capitol

SB 2072  
April 22, 2013  
21401

Conference Committee

*Hauge*

Relating to dairy products regulations

**Minutes:**

**Chairman Miller** opened the Conference committee on SB 2211. All committee members were present: Senators Miller, Larsen, Heckaman; Representatives D. Johnson, Kiefert, Boschee.

**Representative Kiefert** moved the House recede from its amendments and further amend by adopting amendments 13.8013.01010.

**Senator Larsen** seconded.

**Representative Bocshee:** Just for clarification, we are defining a shared animal agreement saying it is not in violation to be in an agreement and defines that there will be no rule making authority during the interim and a study.

**Chairman Miller** replied that was correct. It is essentially the deletion of any regulatory provisions that we had.

Roll call vote: 5-0-0

Amendment passed.

**Chairman Miller:** adjourned the conference committee.

1 of 3  
4/18/13  
TD

PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

That the House recede from its amendments as printed on pages 1086 and 1087 of the Senate Journal and pages 1171-1173 of the House Journal and that Senate Bill No. 2072 be amended as follows:

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and four new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; to"

Page 1, line 1, after "sections" insert "4-30-36,"

Page 1, line 3, after "regulations" insert "; and to provide for a legislative management study"

Page 1, after line 9, insert:

**"SECTION 2.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement.

**SECTION 3. AMENDMENT.** Section 4-30-36 of the North Dakota Century Code is amended and reenacted as follows:

**4-30-36. Standards for grade A milk and milk products - Adoption of amendments.**

1. Only grade A milk may be sold as fluid beverage for human consumption. The minimum standards for milk and milk products designated as grade A are the same as the minimum requirements of the Pasteurized Milk Ordinance which includes provisions from the "Grade A Condensed and Dry Milk Products and Condensed and Dry Whey - Supplement 1 to the Grade A PMO". The commissioner may adopt ~~as regulations~~ other standards in the interest of public safety, wholesomeness of product, consumer interest, sanitation, good supply, salability, and promotion of grade A milk and milk products.
2. It is not a violation of this section to transfer or obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement."

Page 2, after line 10, insert:



"SECTION 7. A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Notification of commissioner.**

1. If during a calendar year the owner of a dairy farm licensed to sell grade A or manufacturing grade milk in this state enters or continues to participate in a shared animal ownership agreement, the owner shall notify the agriculture commissioner.
2. The notification must be in writing and must be submitted within thirty days after the conclusion of each calendar year.

SECTION 8. A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Requirements.**

A person that transfers an animal's raw milk production in accordance with a shared animal ownership agreement does not violate this chapter provided:

1. The milk is transferred at the dairy farm where the milk-producing animal is located or delivered to another location in accordance with a shared animal ownership agreement;
2. The individual receiving the milk has entered a shared animal ownership agreement with the owner of the dairy farm and is receiving the milk on the individual's own behalf or on behalf of another who has entered a shared animal ownership agreement with the owner of the dairy farm;
3. The shared animal ownership agreement contains a prominent statement warning that:
  - a. The milk is not pasteurized;
  - b. Potential pathogens may be present in the milk; and
  - c. There are potential health concerns associated with the consumption of raw milk or raw milk products.
4. Annually, the owner of the dairy farm provides to individuals who have entered shared animal ownership agreements with the owner:
  - a. The standards used to ensure the health of the milk-producing animals that are part of the shared animal ownership agreement;
  - b. The standards used to ensure the production of milk;
  - c. The results of any tests performed on the milk-producing animals, together with an explanation of the test results; and
  - d. The results of any tests performed on the milk from the milk-producing animals, together with an explanation of the test results.

SECTION 9. A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Prohibition.**

A person may not publish any statement that asserts or implies the approval or endorsement by the commissioner of shared animal ownership agreements and the acquisition of raw milk under such agreements.

**SECTION 10.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Commissioner - Rulemaking authority - Limitation.**

Notwithstanding chapter 28-32, the commissioner may not adopt any rule that restricts, limits, or imposes additional requirements on any individual transferring or obtaining raw milk in accordance with the terms of a shared animal ownership agreement.

**SECTION 11. LEGISLATIVE MANAGEMENT STUDY - RAW MILK.** During the 2013-14 interim, the legislative management shall consider studying the availability of raw or unpasteurized milk, for human consumption, in this state. The study should examine the nature and extent of governmental oversight with respect to the safety of the milk; the health of the animals used to produce the milk; and the conditions under which the product is produced, transferred, or obtained. The legislative management shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixty-fourth legislative assembly."

Renumber accordingly



April 22, 2013

*JK*  
4-22-13  
1 of 2

PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

That the House recede from its amendments as printed on pages 1086 and 1087 of the Senate Journal and pages 1171-1173 of the House Journal and that Senate Bill No. 2072 be amended as follows:

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and two new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; to"

Page 1, line 3, after "regulations" insert "; and to provide for a legislative management study"

Page 1, after line 9, insert:

**"SECTION 2.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement."

Page 2, after line 10, insert:

**"SECTION 6.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Raw milk.**

It is not a violation of this chapter to transfer or obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement.

**SECTION 7.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

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Notwithstanding chapter 28-32, the commissioner may not adopt any rule that restricts, limits, or imposes additional requirements on any individual transferring or obtaining raw milk in accordance with the terms of a shared animal ownership agreement.

**SECTION 8. LEGISLATIVE MANAGEMENT STUDY - RAW MILK.** During the 2013-14 interim, the legislative management shall consider studying the availability of raw or unpasteurized milk, for human consumption, in this state. The study should

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Renumber accordingly



Date \_\_\_\_\_

Roll Call Vote # \_\_\_\_\_

**2013 SENATE CONFERENCE COMMITTEE  
ROLL CALL VOTES**

BILL/RESOLUTION NO. 2072 as (re) engrossed

Senate Agricultural Committee

- Action Taken**
- SENATE accede to House Amendments
  - SENATE accede to House Amendments and further amend
  - HOUSE recede from House amendments
  - HOUSE recede from House amendments and amend as follows
  - Unable to agree**, recommends that the committee be discharged and a new committee be appointed

Motion Made by: Rep. Headland Seconded by: Rep. Boschee

Senators		Yes	No	Representatives		Yes	No
Senator Miller		✓		Rep. Headland		✓	
Senator Larsen			✓	Rep. Kiefert			✓
Senator Heckaman		✓		Rep. Boschee		✓	
Total Senate Vote		2	1	Total Rep. Vote		2	1

Vote Count      Yes: 3      No: 2      Absent: 0

Senate Carrier Senator Heckaman      House Carrier Rep. Headland

LC Number 13,8013 . 01009 of amendment

LC Number \_\_\_\_\_ of engrossment

Date 4-22-13

Roll Call Vote # 1

**2013 SENATE CONFERENCE COMMITTEE  
ROLL CALL VOTES**

BILL/RESOLUTION NO. 2072 as (re) engrossed

Senate agriculture Committee

- Action Taken**
- SENATE accede to House Amendments
  - SENATE accede to House Amendments and further amend
  - HOUSE recede from House amendments
  - HOUSE recede from House amendments and amend as follows
  - Unable to agree**, recommends that the committee be discharged and a new committee be appointed

Motion Made by: Rep. Kiefert Seconded by: Senator Larsen

Senators	Yes	No	Representatives	Yes	No
Senator Miller	✓		Rep. D. Johnson	✓	
Senator Larsen	✓		Rep. Kiefert	✓	
Senator Heckaman	✓		Rep. Boschee	✓	
Total Senate Vote	3	0	Total Rep. Vote	3	0

Vote Count Yes: 6 No: 0 Absent: 0

Senate Carrier Senator Miller House Carrier Rep Johnson

LC Number 13.8013.8 of amendment 01010

LC Number \_\_\_\_\_ of engrossment \_\_\_\_\_



**REPORT OF CONFERENCE COMMITTEE**

**SB 2072:** Your conference committee (Sens. Miller, Larsen, Heckaman and Reps. Headland, Kiefert, Boschee) recommends that the **HOUSE RECEDE** from the House amendments as printed on SJ pages 1086-1087, adopt amendments as follows, and place SB 2072 on the Seventh order:

That the House recede from its amendments as printed on pages 1086 and 1087 of the Senate Journal and pages 1171-1173 of the House Journal and that Senate Bill No. 2072 be amended as follows:

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**"SECTION 7.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:



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Renumber accordingly

SB 2072 was placed on the Seventh order of business on the calendar.

**REPORT OF CONFERENCE COMMITTEE**

**SB 2072:** Your conference committee (Sens. Miller, Klein, Heckaman and Reps. D. Johnson, Kiefert, Boschee) recommends that the **HOUSE RECEDE** from the House amendments as printed on SJ pages 1086-1087, adopt amendments as follows, and place SB 2072 on the Seventh order:

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any legislation required to implement the recommendations, to the sixty-fourth legislative assembly."

Renumber accordingly

SB 2072 was placed on the Seventh order of business on the calendar.

**2013 TESTIMONY**

**SB 2072**



COMMISSIONER  
DOUG GOEHRING



ndda@nd.gov  
www.agdepartment.com

**NORTH DAKOTA**  
**DEPARTMENT OF AGRICULTURE**  
STATE CAPITOL  
600 E BOULEVARD AVE DEPT 602  
BISMARCK ND 58505-0020

**Testimony of Wayne R. Carlson**  
**Livestock Development Director**  
**SB Bill 2072**  
**Senate Agriculture Committee**  
**Roosevelt Park Room**  
**January 10, 2013**

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Chairman Miller and members of the Senate Agriculture Committee, I am Wayne Carlson, division director of livestock development for the North Dakota Department of Agriculture (NDDA). I am here today in support of SB 2072, which will amend provisions of the North Dakota Century Code (NDCC) §4-30 to update federal references in the dairy product regulations.

The NDDA regulates milk production from the producer, through the processing and distribution stages to insure a safe and wholesome product for consumers. NDCC§ 4-30 is the law that sets the standards and requirements in all phases of production for milk and milk products.

North Dakota adopts federal regulations in NDCC §4-30 because the Food and Drug Administration (FDA) requires every state to adopt the same standards and regulations for interstate shipment of milk and milk products. The National Conference of Interstate Milk Shipments (NCIMS) develops these standards and regulations. NCIMS is an organization made up of state and federal dairy regulators, producers, and dairy processors. The NCIMS meets

every two years to update and revise existing Grade A milk and milk product standards and regulations. After the FDA approves the revisions to the standards and regulations, the NCIMS publishes the most current version in order for states to adopt into their standards and regulations. This bill updates these references to reflect the most current publications of these federal dairy regulations.

Three of those references are the "Pasteurized Milk Ordinance" (PMO), the "Procedures Governing the Cooperative State-Public Health Service Food and Drug Administration Program of National Conference on Interstate Milk Shipments" and the "Methods of Making Sanitation Ratings of Milk Shippers." Current publication dates for these are "2011" and they were released for general publication in the fall of 2012.

In addition, our state has adopted the latest edition of "Standard Methods for the Examination of Dairy Products," which also needs to be updated to the 2011 edition. This is the current laboratory testing requirements and procedures for milk and milk products.

These changes to the state law are important to our dairy industry because our Grade A milk and milk products will not be able to be shipped to other states if these changes are not adopted.

Chairman Miller and committee members, I urge a do pass on SB 2072. I would be happy to answer any questions you may have.



COMMISSIONER  
DOUG GOEHRING



#1a

ndda@nd.gov  
www.agdepartment.com

**NORTH DAKOTA**  
**DEPARTMENT OF AGRICULTURE**  
STATE CAPITOL  
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**Testimony of Wayne R. Carlson**  
**Livestock Development Director**  
**SB Bill 2072**  
**House Agriculture Committee**  
**Peace Garden Room**  
**March 14, 2013**

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Chairman Johnson and members of the House Agriculture Committee, I am Wayne Carlson, division director of livestock development for the North Dakota Department of Agriculture (NDDA). I am here today in support of SB 2072, which will amend provisions of the North Dakota Century Code (NDCC) §4-30 to update federal references in the dairy product regulations.

The NDDA regulates milk production from the producer, through the processing and distribution stages to insure a safe and wholesome product for consumers. NDCC§ 4-30 is the law that sets the standards and requirements in all phases of production for milk and milk products.

North Dakota adopts federal regulations in NDCC §4-30 because the Food and Drug Administration (FDA) requires every state to adopt the same standards and regulations for interstate shipment of milk and milk products. The National Conference of Interstate Milk Shipments (NCIMS) develops these standards and regulations. NCIMS is an organization made up of state and federal dairy regulators, producers, and dairy processors. The NCIMS meets

every two years to update and revise existing Grade A milk and milk product standards and regulations. After the FDA approves the revisions to the standards and regulations, the NCIMS publishes the most current version in order for states to adopt into their standards and regulations. This bill updates these references to reflect the most current publications of these federal dairy regulations.

Three of those references are the "Pasteurized Milk Ordinance" (PMO), the "Procedures Governing the Cooperative State-Public Health Service Food and Drug Administration Program of National Conference on Interstate Milk Shipments" and the "Methods of Making Sanitation Ratings of Milk Shippers." Current publication dates for these are "2011" and they were released for general publication in the fall of 2012.

In addition, our state has adopted the latest edition of "Standard Methods for the Examination of Dairy Products," which also needs to be updated to the 2011 edition. This is the current laboratory testing requirements and procedures for milk and milk products.

These changes to the state law are important to our dairy industry because our Grade A milk and milk products will not be able to be shipped to other states if these changes are not adopted.

I am also offering an amendment to SB 2072 that would make "cow shares" illegal. A cow share is the practice of a producer selling a share of a milk cow to a consumer. The consumer then is entitled to a set amount of milk per week. The consumer also pays a maintenance fee to the producer for his share of feed cost and other costs.



The cow shares concept allows producers to supply raw milk to consumers by circumventing state and federal law that prohibits the sale of raw milk to consumers.

North Dakota is one of 20 states that prohibit the sale of raw milk by adopting the PMO.

However, cow shares, unless specifically banned, have created a regulatory dilemma.

Is cow shares truly an ownership issue or is just a front to sell raw milk? Our department believes it is just a way to avoid the ban of raw milk to the consumer and is seeking clarity on this issue.

Chairman Johnson and committee members, I ask for your support and urge a do pass on SB 2072 as amended. I would be happy to answer any questions you may have.

3/14/13

#16  
Wayne Carlson

PROPOSED AMENDMENTS TO SENATE BILL 2072

Page 1, line 1, after "to" insert:

"create and enact a new subsection to section 4-30-01, providing a definition for cow-share program; create and enact a new section to chapter 4-30 of the North Dakota Century Code, relating to cow-share programs; and"

Page 2, after line 10, insert:

"SECTION 5. A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Cow-share program" means a program in which a person acquires an interest in a milk producing hooved mammal through an agreement with a producer that includes:

- (a) a bill of sale for an interest in the mammal;
- (b) a boarding arrangement under which the person boards the mammal with the producer for the care and milking of the mammal; and
- (c) an arrangement under which the person receives raw milk for personal consumption.

SECTION 6. A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

It is unlawful for any person to own, operate, organize, or otherwise participate in a cow-share program where the milk producing hooved mammal is located in North Dakota."



3/14/13

#1C

Wagne  
Carlson

FOR IMMEDIATE RELEASE  
July 19, 2011

Contact: Bob Ehart  
(202) 296-9680

### NASDA RELEASES RAW MILK SURVEY

*Washington, D.C.* – The National Association of State Departments of Agriculture (NASDA) has released updated results from a Raw Milk Survey.

NASDA conducted a Raw Milk Survey, in cooperation with the National Association of Dairy Regulatory Officials (NADRO), to gather current information about the regulation and sale of raw milk in the United States. Raw milk is defined as milk that has not been pasteurized. The Center for Disease Control (CDC) strongly discourages consumption of raw milk as pathogens from raw milk can result in kidney failure, paralysis and fatality, in some cases.

This survey is NASDA's third collection of data since 2004. In 2008, 50 states participated in the survey and 30 states allowed raw milk sales. NASDA's new data reflects no change in the number of states permitting unpasteurized milk sales both on the farm and in retail markets. The 2011 data shows the same 30 states allowing raw milk sales. Likewise, the same 20 states still prohibit the sale of raw milk to consumers. Five states have adopted stricter quality standards to regulate the sale of raw milk since the 2008 survey.

Of the 30 states where raw milk sales are allowed in some form, 13 states restrict legal sales to occur only on the farm where the milk is produced. The survey shows that 12 other states allow the sale of raw milk at retail stores separate from the farm. The remaining five states restrict the availability of raw milk to special markets or have compound regulations.

NASDA represents the commissioners, secretaries, and directors of the state departments of agriculture in all 50 states and four territories. The information for this survey was received from the NADRO members in each state.

NEWS RELEASE



**The National Association of State Departments of Agriculture (NASDA)**  
1156 15<sup>th</sup> Street, N.W., Suite 1020  
Washington, D.C. 20005  
(202) 296-9680  
www.nasda.org  
President: Leonard Blackham - Commissioner, Utah Department of Agriculture and Food

## **Summary of results:**

Of the 50 respondents, 30 states authorize the legal sale of raw milk, in some specified manner, for direct human consumption. The remaining 20 states prohibit the sale of raw milk to consumers. The following data represents the 30 states that allow raw milk sales in some form.

### **Sales of raw milk restricted to the farm:**

- 13 states restrict legal sales to occur only on the farm where the milk is produced (AR, IL, KS, KY, MA, MN, MS, NE, NY, OK, RI, TX, WI)
  - Four of these states (MN, WI, OK, IL) further restrict sales to only incidental occurrences (i.e., occasional; not as regular course of business; no advertising)
  - Kansas allows sales directly to the consumer on the farm with minimal on-farm advertising.
  - Four states (AR, KY, MS, RI) restrict sales to goat milk only, with two states (KY, RI) also requiring a prescription from a physician
    - AR allows 100 gallons of raw, liquid goat milk to be sold from the farm each month.
- 5 states have a coliform standard for milk sold only on-farm (ID, MA, NY, OR, TX)

### **Sales of raw milk at retail stores separate from farm:**

- 12 states allow the sale of raw milk at retail stores separate from the farm (AZ, CA, CT, ID, ME, NH, NM, NV, PA, SC, UT, WA)
  - One of the 12 (UT), requires the store to be owned by the producer, even though it can be located off of the farm.
  - Another state (SC) allows the sale of raw milk both on and off the farm and at farmers' markets if a permit is obtained. Further, farmers must provide retail stores with a warning plaque to be displayed in front of the raw milk.
- Of these 12 states, all 12 have a total coliform standard.
  - 9 states have a coliform standard of  $\leq 10$ /mL (AZ, CA, ME, NH, NV, PA, SC, UT, WA)
  - 1 state has a coliform standard of  $\leq 25$ /mL (ID)
  - 2 states have a coliform standard of  $\leq 50$ /mL (CT, NM)

### **Sales of raw milk at farmers' markets and states with compound regulations:**

- 5 states have unique regulations that do not fit in either of the categories above. (CO, MO, OR, SD, VT)
  - One state (OR) allows on-farm sales of raw cow's milk only from farms with no more than two producing cows, nine producing sheep and/or 9 producing goats; Only goat milk is allowed at retail off farm.
  - Of the five states, one state (CO) prohibits all sales of raw milk; however, raw milk may be legally obtained through "share" operations.
  - Another state (VT), allows raw milk to be sold on the farm and if farmers comply with further standards they are also allowed deliver to retail stores. Raw milk sales are prohibited at farmers' markets and advertising is not restricted.
  - Two states (SD, MO,) allow farmers to deliver to farmers' market but not to stores.
  - Of these five states, 4 have minimum standard requirements (MO, OR, SD, VT)
  - 1 state has a coliform standard of  $\leq 10$ /mL (VT, OR)
  - 1 state has a coliform standard of  $\leq 100$ /mL (MO)
  - 1 state requires the same standards for raw milk as pasteurized milk (SD)

**The Sale of Raw Milk is prohibited in 20 States:** (AL, AK, DE, FL, GA, HI, IN, IA, LA, MD, MI, MT, NJ, NC, ND, OH, TN, VA, WV, WY)

States that have added quality standards for raw milk since 2008 are highlighted in red

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**2011 Survey Questions:**

1. Is the sale of raw milk for direct human consumption legal in your state?
2. Do your state laws or regulations expressly prohibit animal share raw milk operations?
3. Do your state laws or regulations authorize raw milk sales only on the farm?
4. Are raw milk sales at retail stores or markets, separate from the farm, legal in your state?
5. Does your state have any microbial standards for raw milk sold to the consumer? If yes, please specify.
6. Is sampling for compliance with the above standard(s) conducted at the farm bulk tank, or at the final package/bottle?
7. Are there any county or local government bans on raw milk sales in your state?
8. Approximately how many producers of milk to be sold raw are operating in your state?
9. What has changed regarding the regulation of raw milk since the 2008 survey?

(###)



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[www.nasda.org](http://www.nasda.org)

President: Leonard Blackham - Commissioner, Utah Department of Agriculture and Food

#2  
3/14/13

SB 2072....3-14-13

Good morning Committee members;

For the record, my name is Gary Hoffman I'm the director of the North Dakota Dairy Coalition. I am here this morning in opposition to the sale of raw milk at the farm, at farmers markets, cow shares or any other venue that would put ND citizens at risk.

Quite a few years ago I was in charge of the ND dairy inspection program. There were several times we were called on to investigate the illness of a person who got sick while spending time at grandma/grandpa's farm during the summer. We found it was usually a case of kids spending their summer vacation at a relative's dairy farm, consuming raw milk and getting sick.

The farmer and his family had developed immunity to raw milk but kids from town hadn't been exposed to it and ended up getting sick. Fortunately, no one died or ended up on dialysis for the rest of their lives. It could happen.

Also, as a former dairy producer, I would never take the risk of selling raw milk and having a child get sick. It just isn't worth it.

Again, I would urge a no vote on the sale of raw milk in ND.

I'd be happy to answer any questions. Gary Hoffman



#3a

## The Truth about Cow-Sharing in North Dakota

### SB 2072 Testimony of Peter Bartlett

Manager of Bartlett Farm Cow-Share Dairy ([www.BartlettFarm.us](http://www.BartlettFarm.us), 701-263-4574, Bottineau, ND)

March 14, 2013

Chairman Johnson and members of the House Agricultural Committee (Wall, Belter, Fehr, Headland, Heilman, Kiefert, Larson, Rust, Trottier, Boschee, Haak, Nelson),

My name is Peter Bartlett, I am 19 years old and I live with my family on a small diversified farm in the rural Bottineau North Dakota area. I have the privilege of taking care of a growing herd of purebred Jersey cows on our farm and enjoy all the work that goes into milking them and caring for their health. My family's livelihood is centered around the cows Sandy, Della, Heidi, and Esther, and the cow-share dairy we have developed continues to be a wonderful experience for all of us. This is my first time presenting before a committee, so I ask that you please bear with me as I share my opposition to making cow-sharing illegal in North Dakota.

I have one primary reason and several secondary reasons opposing the amendment to SB 2072. My primary reason is as follows:

**A private cow-share contract between two parties is not under the state's jurisdiction.**

To illustrate this principle, let's take an example I have based on a true story of two families. I will call them the Smiths and the Johnsons. These families are neighbors and are interested in owning a cow to be able to drink fresh milk, make butter, cheese, yogurt etc. The Smith family lives on a small lot of land that is too small to keep a cow. The Johnsons own a large section of pasture and have more time to do chores than the Smiths. They decide to go in together and buy a Jersey cow for milk, each family paying half. Because the cow will be kept at the Johnsons, the Smiths will pay the Johnsons to do their chores.

This is the essence of cow-sharing. It is a personal, private, mutually beneficial agreement between two parties. I doubt that any of the members of this committee believe the government should regulate neighbors in a situation such as this. Whether it is two, three, four, five, or fifty owners of the same animal, this issue of cow-sharing is not a matter of food safety, but of our fundamental right to private property. I agree with Canadian judge Paul Kowarsky, who ruled in the 2010 Michael Schmidt case that cow-sharing was outside regulators' jurisdiction

(<http://thecompletepatient.com/article/2010/january/21/huge-victory-michael-schmidt-canadian-judge-rules-cow-shares-outside>).

My secondary reasons are as follows:

1. **There is more to the raw milk story than the statistics provided by the proponents of pasteurization.** I could give you plenty of statistics showing the safety of raw milk, but I would encourage you to look them up for yourself on the web at [www.RealMilk.com](http://www.RealMilk.com). As legislators I'm

sure you often get hammered by statistics from both sides of those giving testimonies. It has been said that 62.5% of all statistics are made up on the spot. I would, however, like to point out that there is much more going on behind the scenes of the raw milk debate than first meets the eye. An indicator that North Dakota's ban of raw milk sales is not really about food safety is the fact that the consumption of raw milk is not prohibited by North Dakota law. To me, this indicates that there are financial interests at stake. I ask you to please dig deeper than the surface and learn the truth on both sides of this critical story.

2. **Please give preference to the voice of the citizens of ND over the Ag Department** when making your decision on SB 2072. I would like to point out that the design of our three branches of government is to balance the power of the state. Today, all across our nation I am seeing more and more blurring of the lines between each branch. Our representative government, at every level, should represent what is best for the people under them. This morning, I am sad to say, we have witnessed the executive branch (i.e. Ag Dept.) testifying *for* legislation *against* the will of the people to whom legislators are accountable. This is blurring the lines and is unhealthy for the future of our state.
3. **People who purchase cow-shares are serious, conscientious, and educated individuals** who believe they can benefit from raw milk, and will only patronize farmers they trust in order to obtain their choice of milk for their family.

To conclude, I would urge all of you not to compromise principle on the basis of speculation, or to "do evil that good may come" (Romans 3:8).

Thank you for your time.

Sincerely,

Peter Bartlett



#36

## Should Herd and Cow Sharing Be Legal in North Dakota? Yes

### SB 2072 Testimony of James Bartlett, March 14, 2013

Owner of Bartlett Farm ([www.BartlettFarm.us](http://www.BartlettFarm.us), 701-263-4575, Bottineau, ND)

Chairman Johnson and members of the House Agricultural Committee (Wall, Belter, Fehr, Headland, Heilman, Kiefert, Larson, Rust, Trottier, Boschee, Haak, Nelson),

Thank you for the opportunity to testify in support of keeping herd and cow shares legal in North Dakota and not infringing upon the private property rights and individual liberties of North Dakota citizens.

1. A herd or cow share is a contract between two parties regarding private property. The Eighth Commandment, "thou shalt not steal," does involve the civil government enforcement of justice in contracts and commerce between man and man, but nowhere is the civil government given authority to control private property or the means of production.
2. There are two competing views of economic liberty in the room. (1) Adam Smith in The Wealth of Nations stated that, "To prohibit a great people...from making all that they can of every part of their own produce, or from employing their stock and industry in the way that they judge most advantageous to themselves, is a manifest violation of the most sacred rights of mankind." (2) Maynard Keynes and Karl Marx maintained a very different view, where a form of utopia would be achieved through strict state control of property rights and individual liberties.
3. For anyone interested in the philosophical and theological basis for these two views of liberty, here is a snapshot. (1) For one group individual liberty arises from a theistic perspective, where individuals are sinful and God is in control. (2) The second group holds an atheistic view, where man is inherently good and government controls the evolution of society toward utopia.
4. The effort by government officials and conventional dairy agribusiness to make herd and cow shares illegal in North Dakota is rooted in the second perspective with the following two ideas branching from that: (1) The erroneous assumption that raw milk from pastured cows is a health hazard. (2) Big dairy businesses should be protected from competition. In other words, it is about the money, not the health of North Dakota citizens. The following quote captures this point from The Untold Story of Milk, Revised and Updated: The History, Politics and Science of Nature's Perfect Food: Raw Milk from Pasture-Fed Cows, p. 441.

*"Clearly, mandatory pasteurization is a fascist tactic, the tool of corporate- and industry-influenced government agencies that would be another step towards the enslavement of a once-free people. They cry "public safety;" what we hear is "corporate profits."*

5. Regarding the safety of consuming raw milk, I refer you to THE FACTS ABOUT



REAL RAW MILK, from [www.realmilk.com](http://www.realmilk.com). The slides located at <http://www.realmilk.com/safety/real-milk-powerpoint/> are a quick read and address: the feed given to confinement cows, the lowered nutrient availability in pasteurized milk, feedlot versus pastured cattle, heat-resistant pathogens in pasteurized milk, rebuttal to FDA warning against raw milk, misinformation and disinformation about raw milk, techniques for blaming raw milk, some outbreaks due to pasteurized milk, and a summary of raw milk safety.

6. There are many issues to understand before anyone could make an informed decision about the this amendment. I encourage you to read *The Untold Story of Milk*, [www.Realmilk.com](http://www.Realmilk.com), and [www.FTCLDF.org](http://www.FTCLDF.org) to learn the scientific, political, and legal status of this issue nationwide.

Chairman Johnson and members of the House Agricultural committee, I conclude with the same encouragement that Pastor William Cooper spoke to the Massachusetts Legislators in 1740:

*"Let me tell you, Gentlemen, your votes are not your own; you vote for Christ and for His people, and therefore ... True men will act upon principle and not be daunted by frowns or clamors. Men not governed by narrow and selfish views, but can generously sacrifice their private interest to that of the public when they stand in competition. And men who appear to act in the fear of God in their private life – for only such will act for His glory in a public station, and they are the most likely to be favored with the divine presence and blessing."*

Thank you for voting to improve both the health and liberty of North Dakota citizens by keeping cow and herd sharing legal in North Dakota.

James Bartlett, Owner, Bartlett Farm, 701-263-4574

*"It is very difficult to get a man to understand something when his salary depends on not understanding it."* Upton Sinclair



Mary O'Connell  
3/14/13 #4

This is a testimony prepared by Alexa Johnson, a concerned mother from Williston:

By now I hope you have seen the video featuring my 3 year old son, Ronnie. From birth, Ronnie had a severe case of eczema, which we now know is a classic pasteurized dairy symptom. He also battled chronic diarrhea and excessive gas. Ronnie always had a sore throat. I had a terrible time getting the little insomniac to sleep at night. He suffered an endless stream of ear infections. And the very worst symptom---he had almost no appetite. Ronnie could not gain adequate weight.

By the time Ronnie was 2 years old I tried eight different doctors—including 2 allergists, a dermatologist and an ear/nose/throat doctor. They kept Ronnie on a stream of steroids and antibiotics that never treated his root ailment. As a last resort I had Ronnie's tonsils and adenoids removed. None of these treatments helped Ronnie. Though the well-meaning physicians assured us that all Ronnie needed was time to "turn around" we knew different. Our toddler, who ate no more than 32 ounces of pasteurized milk, half a crust of bread and a bite of sausage every day, was starving.

After a great deal of research we learned that raw milk might be able to help Ronnie. This living milk introduces good bugs that flush out bad bugs. Ronnie started consuming raw milk last April. Within 10 days his skin cleared, his diarrhea disappeared and his appetite doubled. Before raw milk we had to take Ronnie to the doctor every 3 weeks. Since last April we have not had to visit a doctor once. Ronnie has consistently gained a pound every month.

Do not pass this amendment. If cow share dairies are outlawed I honestly do not know what I will do. Raw milk is the only thing that has helped my child. Peter Bartlett, the dairy manager, handles the milk meticulously. I have 100 percent faith in his integrity. He has provided for my child what scores of doctors could not. I beg you, do not give a positive recommendation to this amendment.

August 8, 2012

Keith was crazy! When I was in high school our long-time family friend gently attempted to explain the wonders of raw milk. He even gave me a gift membership to the Weston A. Price Foundation, the flagship organization that champions raw milk. Still, I was not convinced. Raw milk was hard to get in North Dakota. And to me, it didn't sound safe, or important. Little did I know that raw milk would save my own child.

Ronnie was born in 2010. Eczema riddled his little face. My poor baby was constantly itching. Our doctor assured us that he would grow out of it. At the same time, I also allowed my real estate sales career to

trump his need for breastmilk and put him on store-bought dairy formula when he was 3 months old. (Though many people suggested I use soy formula I had learned enough from the Weston A. Price Foundation publication "Soy Alert!" that the excessive He continued to battle severe eczema, diarrhea, ear infections, a sore throat, insomnia, poor appetite, excessive gas and an inability to gain weight. I took Ronnie to a total of 6 conventional doctors and treated him exactly as they suggested: steroids, antibiotics and surgical removal of tonsils and adenoids. None of these treatments helped Ronnie. Though the well-meaning physicians assured us that all Ronnie needed was time to "turn around" we knew different. Our toddler who ate practically nothing every day was starving.

My husband and I were not raised to trust naturopathic medicine. Our families taught us that these "witch doctors" were only out to make a buck and sell vitamins. But we knew we had to help Ronnie eat. So we contacted Dr. Todd Ferguson of Moorhead's Prairie Naturopathic Doctors. Because we live out in Williston we chose to do a phone consultation.

Within that hour Dr. Todd diagnosed Ronnie with dysbiosis, a microbial imbalance of the digestive system---too many bad bugs, too few good bugs. The probiotic (beneficial microorganism) supplement and probiotic diet Dr. Todd suggested have revolutionized Ronnie's health. Within 36 hours of taking the probiotic prescribed, Ronnie ate 70% more food. He has gained 4 pounds (a great accomplishment for a 26 pound body), his skin has cleared, his diarrhea and ear infections have disappeared. Best of all, he has a good appetite!

Nancy may not remember me, but I know her from a few LIFE Coalition events and Anita Hardmeyer. Yesterday I learned of your plight, Nancy. I am praying The Divine Mercy Chaplet for you daily. In the meantime I can't resist telling you about my 2 year old son's health issues and ongoing recovery.

Throughout this ordeal I have learned a great deal about the importance about the food you consume.



COMMISSIONER  
DOUG GOEHRING



[ndda@nd.gov](mailto:ndda@nd.gov)  
[www.nd.gov/ndda](http://www.nd.gov/ndda)

**NORTH DAKOTA**  
**DEPARTMENT OF AGRICULTURE**  
STATE CAPITOL  
600 E. BOULEVARD AVE. - DEPT. 602  
BISMARCK, ND 58505-0020

2072

## MEMORANDUM

TO: House Agriculture Committee Members

FROM: <sup>WR</sup> Wayne R. Carlson, Livestock Development Director

DATE: March 18, 2013

RE: Requested information

As requested, enclosed is information regarding raw milk.

If you have any questions call me at 328-4761.

## Food Poisoning Law Blog : Food Poisoning Lawyer & Attorney : PritzkerLaw : Food Safety, Outbreaks & Recalls

Published By  
Pritzker Olsen Attorneys

Campylobacter, Clostridium botulinum, E. coli O157:H7, Listeria monocytogenes, Norovirus, Salmonella, Staphylococcus, Shigella, Toxoplasma, Vibrio vulnificus

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Fred Pritzker is one of America's most experienced food safety lawyers. He has been involved in virtually all of the major foodborne illness outbreaks throughout the United States. He also advocates for food safety and legislative reform. Read More.

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[Home](#) > [Alaska Campylobacter](#) >

### Kenai Raw Milk Campylobacter Outbreak

Posted on March 5, 2013 by [PritzkerLaw](#)

Alaska's Kenai Peninsula is the center of a raw milk *Campylobacter* outbreak that public health officials have traced to a cow share program. The Alaska Section of Epidemiology has confirmed 22 illnesses, including an infant who became infected from a contagious adult. Some of the outbreak victims have had recurrent bouts of the intestinal disease and two people have been hospitalized and released, a state health official told [Food Poisoning Bulletin](#)



All probable and confirmed cases have been linked to consumption of raw milk from an eight-cow farm on the Kenai Peninsula that operates a cow-share program. The milk is distributed to shareholders **throughout the Kenai Peninsula, in Anchorage, and in Sitka.** The state is asking health care providers who see patients with acute gastroenteritis to ask about raw milk exposure and obtain stool cultures. Providers should also be aware of [Guillain-Barré syndrome](#) as a potential complication of *Campylobacter* infection. Alaska officials say that at least one person in the current outbreak has developed [reactive arthritis](#), a debilitating disease that can last a lifetime.

*Campylobacter* is a pathogen that is found in cow manure. The bacteria can find its way into the milk supply and cluster there. The organism is normally killed in pasteurization, but raw milk is unpasteurized and considered dangerous by many health experts -- especially if you are pregnant, aging, dealing with a suppressed immune system or if you are very young. For help in pursuing a legal claim to recover damages,



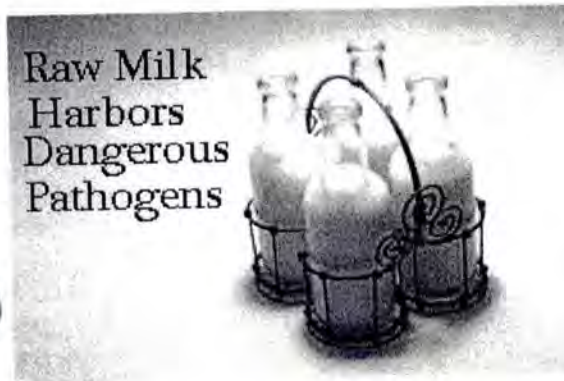
contact a food poisoning attorney at Pritzker Olsen, 1-888-377-8900 (Toll Free) or leave your contact information and a lawyer from our firm will promptly respond.

Tags: Alaska Campylobacter, Campylobacter, Campylobacter Attorney, Campylobacter Lawsuit, Food Poisoning, Raw Milk Campylobacter

## Alaska Food Poisoning Milk Outbreak

Posted on February 23, 2013 by PritzkerLaw

Alaska's raw milk *Campylobacter* outbreak has expanded to include 18 people, all of whom have been linked to consumption of raw milk from a farm on the Kenai Peninsula that operates a cow-share program. The milk is distributed to shareholders throughout the Kenai Peninsula, in Anchorage, and in Sitka. There is at least one secondary case of an infant who became ill after having close contact with a person who was confirmed to be infected by the outbreak strain of *Campylobacter*.



The Alaska Section of Epidemiology released an initial notice of this outbreak on February 15, 2013. Some of the victims of this outbreak have had recurrent illness. Two required hospitalization. State health officials are planning to contact a list of people who are suspected of receiving or consuming raw, unpasteurized milk from the involved farm, which has not been named. They expect the number of confirmed cases to rise.

Symptoms of campylobacteriosis include diarrhea, abdominal cramps, and fever. Illness usually occurs 2 to 5 days after exposure to the pathogen and lasts about a

week. The illness is usually mild and some people with campylobacteriosis have no symptoms at all. However, in some persons with compromised immune systems, it can cause a serious, life-threatening infection. A small percentage of people may have joint pain and swelling after infection. In addition, a rare disease called Guillain-Barre syndrome that causes weakness and paralysis can occur several weeks after the initial illness.

Tags: Alaska Campylobacter, Campylobacter, Campylobacter Lawyer, Campylobacter Outbreak, GBS Attorney, Guillain Barre Attorneys, Raw Milk Food Poisoning

Published Oct. 28, 2010

## 7 more sickened after drinking raw milk in Minnesota

By: Associated Press, INFORUM

MINNEAPOLIS (AP) — Illnesses in seven more people have been tied by the Minnesota Department of Health to the consumption of raw milk from a farm in Sibley County.

The department says Thursday that three people were infected with a bacterium and four more with a parasite.

The patients told Health Department investigators they had consumed raw milk. The department says those that named a source named the Hartmann dairy farm near Gibbon.

The department say laboratory tests found the bacteria and the virus in most of the ill people was genetically identical to samples taken from the farm this summer.

Hartmann's farm was implicated in an outbreak of E. coli infections in May and June. A telephone listing for Michael Hartmann ran unanswered Thursday.

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ProMED-mail post

<<http://www.promedmail.org>>

ProMED-mail is a program of the

International Society for Infectious Diseases <<http://www.isid.org>>

Date: Thu 27 May 2010

Source: Star Tribune, Minneapolis-St. Paul (MN) [edited]

<<http://www.startribune.com/lifestyle/health/94980484.html?elr=KArksLckD8EQDUoaEyqyP4O:DW3ckUiD3aPc:Yyc:aUnciaec8O7EyUsl>>

A Minnesota toddler has been hospitalized with a life-threatening illness and 3 other people have been sickened by E. coli-tainted raw milk, an outbreak that is likely to sharpen a national debate on the growing popularity of the controversial beverage.

3 of the 4 E. coli cases are linked to unpasteurized milk produced at the Hartmann Dairy Farm in Gibbon, Minnesota, which is also known as MOM, or Minnesota Organic Milk, state health and agricultural department officials said Wednesday, 26 May 2010. They said consumers should discard any dairy products, including cheese and ice cream, made by Hartmann.

Of the 4 cases of E. coli O157:H7, 2 were reported in the metro area, the other 2 in outstate counties, state officials said. None of the milk involved so far appears to have been sold in stores, said Heidi Kassenborg, the Minnesota Department of Agriculture's director of dairy and food inspection.

Raw milk hasn't been pasteurized, that is, treated with heat to kill organisms that can make people sick. Interstate sales of raw milk are banned, but more than 20 states allow sales, usually limited, of the product. In Minnesota, raw milk is restricted to "occasional purchases directly at the farm where the milk is produced," Kassenborg said.

Raw milk is roundly condemned by public health authorities because it can carry dangerous bacteria such as E. coli, Salmonella, and Campylobacter. But there is a growing movement of raw milk advocates who believe the drink has health benefits, and that they should have the right to drink it.

Last week [week of 17 May 2010] Wisconsin Gov. Jim Doyle vetoed a bill that would have allowed limited sales of raw milk, irking raw milk supporters but winning praise from food safety advocates.

Each year, several dozen people are usually sickened by raw milk in Minnesota. But this is the 1st outbreak, 2 or more cases that are linked, in at least 15 years, Health Department officials say.

"The fact is, raw milk is unsafe to drink, and that's unfortunately been evidenced by the outbreak we've seen" in Minnesota, Kassenborg said.

Assistant state epidemiologist Richard Danila said the Health Department found 4 cases of E. coli O157:H7 between 1 and 21 May 2010, all of which had the same DNA fingerprint. 2 of those sickened were school-age children, 1 was a man who was at least 70 years old, and the 4th was a toddler. All 4

were hospitalized: 1 overnight, 2 for 4 days, and the other, the toddler, is still in the hospital after being admitted late last week [week of 17 May 2010].

According to the Health and Agriculture Departments [the man who] operates the farm, couldn't be reached for comment.

A parent of 1 of the sickened children told state investigators that he or she didn't realize the Hartmann milk was raw milk. The parents of the toddler with HUS [hemolytic uremic syndrome] knew they were buying raw milk, it was said, adding that doesn't necessarily mean they understood it was unpasteurized and potentially unhealthy. The toddler's parents were characterized as "distraught."

State officials aren't sure where the Hartmann raw milk was purchased. But some of it may have been purchased at a metro-area "pickup point," Danila said without elaborating. One Hartmann Dairy customer, a south Minneapolis resident, said she picks up raw milk weekly at a neighbor's house through a "milk club." Several families belong, and pay Hartmann directly. The arrangement appears to be common.

The state revoked Hartmann Dairy Farm's license to produce Grade A milk in 2001 for "general unsanitary conditions," Kassenborg said.

[Byline: Mike Hughlett]

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Communicated by:  
ProMED-mail  
<[promed@promedmail.org](mailto:promed@promedmail.org)>

[The state of Minnesota in the Midwestern US can be located on the HealthMap/ProMED-mail interactive map at <<http://healthmap.org/r/01oZ>>.\_ Sr.Tech.Ed.MJ]

[A previous ProMED-mail posting (E. coli O157, unpasteurized milk, 2005 - USA (WA) 20070302.0741) contains an excellent discussion on the subject of enteric illnesses such as \_E. coli\_ O157:H7, salmonellosis and campylobacteriosis transmitted by unpasteurized dairy products.

Certain other diseases that can be related to unpasteurized milk are highlighted in these paragraphs extracted from Leedom JM: Milk of nonhuman origin and infectious diseases in humans. Clin Infect Dis 2006; 43(5): 610-5 (<<http://www.journals.uchicago.edu/doi/full/10.1086/507035>>) with the citations renumbered to be consecutive starting from 1:

"In 1996 and 1998, there were 2 episodes involving rabid cows that occurred in Massachusetts (1). Milk from rabid cows can contain rabies virus, and transmission via unpasteurized milk is theoretically possible. Temperatures reached during pasteurization kill the virus. A total of 80 persons consumed unpasteurized milk that was collected from the 2 cows, and 9 more had contact with saliva from the cows. All 89 persons received post-exposure rabies prophylaxis, and there were no human cases of rabies. A similar report in Oklahoma of possible rabies exposure associated with the consumption of raw milk or cream from a rabid cow was circulated in



2006 (2).

Tickborne encephalitis, a zoonotic arbovirus infection usually transmitted to humans by the bite of an *Ixodes persulcatus* or *Ixodes ricinus* tick, is endemic to Central Europe, Eastern Europe, and Russia (3). However, the virus can be found in the milk of cows and goats with tickborne encephalitis and was reported to be transmissible to humans by the consumption of unpasteurized milk (4). A case-control study failed to confirm oral transmission (5).

A diarrhea syndrome (later named Brainerd diarrhea) occurred among 122 residents of Brainerd, Minnesota, during the period December 1983-July 1984 (6). It was characterized by acute onset, marked urgency, lack of systemic symptoms, failure to respond to conventional antimicrobial agents, and a long median duration of illness (median duration, 16.5 months). The syndrome was linked to consumption of raw milk from a single dairy (6). No etiologic agent was ever isolated. The outbreak of Brainerd diarrhea stopped when all of the dairy's output was diverted and pasteurized (6, MT Osterholm, personal communication).

Subsequent outbreaks in Illinois and Texas were not directly associated with milk, although cattle had been in the vicinity of an Illinois well that had its water implicated as a vehicle of transmission (7). Another outbreak of Brainerd-like diarrhea, although not associated with raw milk, affected 58 (15 per cent) of 394 passengers aboard a cruise ship visiting the Galapagos Islands in Ecuador (8).

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8. Mintz ED, Weber JT, Guris D, et al: An outbreak of Brainerd diarrhea among travelers to the Galapagos Islands. *J Infect Dis* 1998; 177: 1041-5 [available at <<http://www.journals.uchicago.edu/doi/pdf/10.1086/515237>>]. - Mod.LL]

[see also:

Campylobacteriosis, unpasteurized milk - USA (O2): (UT) 20100519.1654 Salmonellosis, unpasteurized milk - USA: (UT) 20100517.1616 Campylobacteriosis, unpasteurized milk - USA: (MI ex IN) 20100329.0981 2009

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Campylobacteriosis, unpasteurized milk - USA (O2): (WI) 20090917.3264 Campylobacteriosis, unpasteurized milk - USA: (CO) 20090415.1430 2008

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Campylobacteriosis, unpasteurized milk - USA (CA) 20080817.2557 2007

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Campylobacteriosis, unpasteurized milk - USA (KS) 20071205.3922 Salmonellosis, serotype Typhimurium, raw milk - USA (O2): (PA), CDC report 20071108.3629 Salmonellosis, free unpasteurized milk - USA (PA) (O3) 20070815.2667 Campylobacteriosis, unpasteurized milk - USA (GA) 20070803.2520 Salmonellosis, free unpasteurized milk - USA (PA) 20070722.2354 Listeriosis, unpasteurized cheese - USA (IN) 20070425.1351 Campylobacteriosis, unpasteurized milk - USA (UT) (O2) 20070324.1033 Campylobacteriosis, unpasteurized milk - USA (UT) 20070322.1004 Salmonellosis, serotype Typhimurium, raw milk - USA (PA) 20070303.0748 E. coli O157, unpasteurized milk, 2005 - USA (WA) 20070302.0741 2006

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Foodborne illness, unpasteurized milk - USA (OH) 20060929.2794 E. coli O157, unpasteurized milk - USA (CA) (O3) 20060929.2791 E. coli O157, unpasteurized milk - USA (WA): recall 20060929.2790 E. coli O157, unpasteurized milk - USA (CA) (O2): background 20060927.2761 E. coli O157, unpasteurized milk - USA (CA) 20060922.2706 E. coli O157, unpasteurized milk - USA (OR, WA) (O4) 20060121.0199 2005

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E. coli O157, unpasteurized milk - USA (OR, WA) 20051216.3622 2003

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Salmonellosis, raw milk - USA (Ohio) (O3) 20030204.0308 Salmonellosis, raw milk - USA (Ohio) 20030105.0033] .....ll/mj/lm

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## Raw Milk in Michigan Linked to Q Fever

By Mary Rothschild | June 24, 2011

A Michigan woman endured prolonged hospitalization for Q-fever meningitis and two other women were also diagnosed with bacterial Q-fever infection after they drank unpasteurized milk from a farm in Livingston County, according to the Michigan Department of Community Health.

All three women, in their 30s and 40s, acknowledged obtaining raw milk from the farm as part of a herd share arrangement, according to a report in the Kalamazoo Gazette.

As a result of the three cases of Q fever, the Michigan health department of this week issued a warning about the dangers of consuming unpasteurized raw milk. Herd share schemes, in which participants pay for a share in a cow or goat in return for unpasteurized milk, are "not inspected or regulated under Michigan dairy laws," the statement noted. Raw milk products are not permitted to be sold at retail in Michigan.

Q-fever is a communicable disease caused by the bacteria *Coxiella burnetii*, an organism common in farm animals. But while such bacterial infections are common among cow, goat and sheep herds — one national study estimated that at times 90 percent of dairy herds can carry the germs — human cases of Q fever are rare.

Infected animals shed the organism in their manure, urine and milk and people can become infected when they drink milk that has not been heat-treated or inhale such pathogens or breathe contaminated barnyard dust.

Health departments in Washington and Montana are investigating human cases of Q fever said to be linked not to raw milk but to inhalation of barnyard particles contaminated by infected goats, according to a report in the Spokesman-Review.

The illness has sickened six people in Washington's Grant County, where health department officials say there hasn't been a human case of Q fever for 20 years. The problem began at a farm that breeds and sells goats, according to the state Department of Agriculture, and infected goats from that farm have now been traced to nine other counties.

Q fever is also the probable cause of six illnesses in Montana. The Montana goats believed responsible for that outbreak are linked to the Washington outbreak, the agriculture department spokesman said.

Although the infected goats were not milking goats, but were being raised for show and possibly for meat, Washington agriculture officials said that as a precaution they have increased testing at farms that handle and bottle unpasteurized goat milk.

Jason Kelly, communications director for the state's Department of Agriculture, said Washington requires annual herd-health testing for raw milk dairies for animals that are about to join a milking herd. The tests have turned up Q fever before, "which is not surprising given the bacteria's high prevalence in goats and sheep," Kelly said in an email. Animals that test positive must be treated before they are allowed to be milked, he added.

Only about one half of all people infected with Q fever show immediate signs of illness, according to the Centers for Disease Control and Prevention. Symptoms of Q fever, which is a reportable disease, include high fevers (up to 105-105 F), severe headache, joint and body aches, fatigue, chills/sweats, non-productive cough, chest pain, stomach pain, nausea, vomiting and diarrhea.

Although most people with Q fever recover, complications can include pneumonia, hepatitis, inflammation of the heart tissue and central nervous system. Pregnant women may be at risk for miscarriage.

Left untreated, Q fever can lead to chronic illness that can affect a person's heart, liver, brain and lungs and may be fatal.

Less than 5 percent of patients develop chronic Q fever, which can occur within six weeks after infection or even years later. A post-Q fever fatigue syndrome has been reported to occur in 10 to 25 percent of patients.

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**KAL** 1 year ago

Multiple pathogens, including Q fever, have been associated with development of chronic fatigue syndrome. Like the common cold and hepatitis, CFS appears to be triggered by multiple pathogens.

A 2006 CDC study, which included patients who had contracted Q fever, found that the severity of the initial infection rather than psychological factors or a specific microbe was the key to development of CFS.

Although the research criteria for CFS requires six months duration of symptoms, most clinicians believe it can be diagnosed in less than a month.

Many ME/CFS experts believe the severity of the post exertional exhaustion lasting more than 24-hours, unrelieved by rest and occurring upon minimal exertion, in addition to other symptoms, is the key to a differential diagnosis.

1 person liked this.



**Donna D'Antuono** 10 months ago

Thank you Michael for your comment. :) I am an RN a mother of three and our family has always consumed raw milk for the last 10 years. Raw milk obtained from properly taken care of animals that have been pastured and cared for without vaccinations and a proper organic diet will rarely have the problems associated with conventional farming. GO RAW MILK!!!!



**Michael** 1 year ago

Sorry but dairy products in general, and pasteurized milk specifically is an asthma trigger. Raw milk is not. The pasteurization process, along with eliminating the bad pathogens, also destroys beneficial bacteria, proteins and enzymes that aid in digestion. Raw milk is also more nutritional and it has the ability to strengthen the immune system. Pasteurized milk delivers none of these benefits. Dr. Joseph Mercola would disagree with you that raw milk is unsafe, and check out his website for more info at [mercola.com](http://mercola.com). Nutritionist Shawn Stevenson would also disagree with you. I only purchase raw milk as my daughter is asthma and I have seen a marked improvement in her condition since discontinuing cooked milk. Cooked milk is not the only asthma trigger, but it does contribute heavily with its mucous building properties.



**Katie Dellar** 1 year ago

As a dairy farmer, consumer, and mother, I cannot stress enough the importance of consuming pasteurized dairy products. Pasteurization is the only safe way to consume dairy, period. Pasteurized dairy products are the only dairy products consumed at home, and we have a tank full of yummy, nutritious milk in our barn every day! My entire family takes part in our farm, it is our livelihood. We love what we do. We love our cows. We love taking part in feeding America. We know what a huge responsibility it is, and how much trust Americans put in our family and all the other farm families across the country to feed their family. Even we strive to be better than we were the day before. Our number one goal is to provide American families, just like ours, with a quality, safe, nutrient dense product they can feel good about feeding their family. There are very high standards we must meet in order to be able to have our dairy products sold to the public in stores, and we are upheld to those standards by a minimum of four random

inspections per year. If we do not meet or exceed those standards, we lose our license, if we lose our license, we lose our way. No farmer wants to lose their way of life, because every farmer loves what they do, so we make sure to exceed the expectations standards imposed on us by the state and the cooperative we ship our milk with. If you are curious about life on the farm, please check out my facebook page, look up Dairy Mom, and you will find me. But, again, please, only consume pasteurized dairy products. We work as hard as we can every day to provide you with safe, nutritious, pasteurized dairy products, take advantage of that!

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July 18, 2012

To: State and Territorial Epidemiologists  
State Public Health Veterinarians

**The Ongoing Public Health Hazard of Consuming Raw Milk**

*The purpose of this letter is to provide state and territorial public health officials with information and resources on the risks of consuming raw milk and other unpasteurized dairy products. Please distribute this letter to those involved with raw milk issues in your state and territory, and to others who have an interest in this important public health issue.*

The role of raw milk and other unpasteurized dairy products in the transmission of infectious diseases is well documented. Pasteurization is the process of heating milk to a high enough temperature for a long enough time to kill disease-causing bacteria. Raw milk was recognized as a source of severe infections over 100 years ago, and pasteurization of milk to prevent these infections is one of the public health triumphs of the 20<sup>th</sup> century. Human pathogens such as *Escherichia coli* O157, *Campylobacter jejuni*, and *Salmonella* can contaminate milk during the milking process because they are shed in the feces of healthy-looking dairy animals, including cows and goats. Infection with these pathogens can cause severe, long-term consequences, such as hemolytic uremic syndrome, which can result in kidney failure, and Guillain-Barré syndrome, which can result in paralysis. These infections are particularly serious in those who are very young, very old, or who have impaired immune systems. They can even be fatal.

Adherence to good hygienic practices during milking can reduce, but not eliminate, the risk of milk contamination. Pasteurization is the only way to ensure that fluid milk products do not contain harmful bacteria. In order to be pasteurized, milk is legally required to meet the Grade A standard for cleanliness. Routine pasteurization of milk began in the 1920s and became widespread in the United States by 1950 as a means to reduce contamination and resulting illness. This led to dramatic reductions in diseases previously associated with milk. Many public health experts consider pasteurization to be one of public health's most effective food safety interventions. Pasteurization is recommended for all animal milk consumed by humans by the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the American Academy of Pediatrics, the American Academy of Family Practitioners, the American Veterinary Medical Association, the National Association of State Public Health Veterinarians, and many other medical and scientific organizations.

In 1987, the FDA prohibited the distribution of raw milk over state lines for direct sale to consumers. Despite the federal ban on sale of raw milk across state lines and broad use of



pasteurization by the dairy industry, human illness and outbreaks associated with consumption of unpasteurized products continue to occur. Raw milk is still available for sale in many states, and CDC data shows that the rate of raw milk-associated outbreaks is higher in states in which the sale of raw milk is legal than in states where sale of raw milk is illegal.

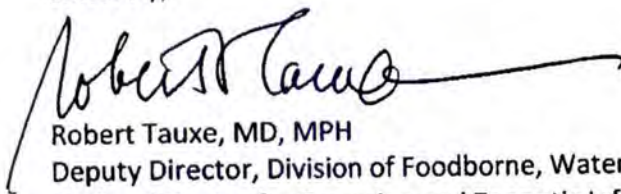
Among dairy product-associated outbreaks reported to CDC between 1973 and 2009 in which the investigators reported whether the product was pasteurized or raw, 82% were due to raw milk or cheese. From 1998 through 2009, 93 outbreaks due to consumption of raw milk or raw milk products were reported to CDC. These resulted in 1,837 illnesses, 195 hospitalizations, and 2 deaths. Most of these illnesses were caused by *Escherichia coli*, *Campylobacter*, or *Salmonella*. It is important to note that a substantial proportion of the raw milk-associated disease burden falls on children; among the 93 raw dairy product outbreaks from 1998 to 2009, 79% involved at least one person younger than 20 years old.

A study released by CDC in February 2012 examined the impact of laws preventing raw milk sales on the number of dairy outbreaks in the United States during 1993—2006. Three-quarters of the outbreaks reported occurred in states where the sale of raw milk was legal at the time. Experts also found that those sickened in raw milk outbreaks were 13 times more likely to be hospitalized than those who got ill from pasteurized milk during an outbreak. States that allow the legal sale of raw milk for human consumption have more raw milk-related outbreaks of illness than states that do not allow raw milk to be sold legally.

To protect the health of the public, state regulators should continue to support pasteurization and consider further restricting or prohibiting the sale and distribution of raw milk and other unpasteurized dairy products in their states.

CDC has a recently updated [raw milk website](#) that contains useful information and materials, including a list of relevant publications and other scientific resources on illnesses associated with raw milk consumption. This information can be shared with persons involved in foodborne outbreak investigations and the regulation of unpasteurized dairy products.

Sincerely,



Robert Tauxe, MD, MPH  
Deputy Director, Division of Foodborne, Waterborne, and Environmental Diseases  
National Center for Emerging and Zoonotic Infectious Diseases  
Centers for Disease Control and Prevention  
1600 Clifton Road NE, MS C-09  
Atlanta, Georgia 30333

## Raw Milk Resources

### • RESOURCES FOR CONSUMERS

- CDC: Food Safety and Raw Milk
  - <http://www.cdc.gov/foodsafety/rawmilk/raw-milk-index.html>
  - <http://www.cdc.gov/foodsafety/rawmilk/raw-milk-videos.html>
  - <http://www2.cdc.gov/podcasts/player.asp?f=8622941>
- FDA: Consumer Information About Milk Safety
  - <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/MilkSafety/ConsumerInformationAboutMilkSafety/default.htm>
- FoodSafety.gov
  - <http://www.foodsafety.gov/keep/types/milk/index.html>
- Real Raw Milk Facts
  - <http://www.realrawmilkfacts.com/>

### • RESOURCES FOR PUBLIC HEALTH OFFICIALS

- Selected MMWR Articles
  - CDC. Notes from the Field: *Salmonella* Newport infections associated with consumption of unpasteurized milk --- Utah, April--June 2010. MMWR Morb Mortal Wkly Rep 2010;59:817-818. [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5926a6.htm?s\\_cid=mm5926a6\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5926a6.htm?s_cid=mm5926a6_w)
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<http://198.246.98.21/mmwr/preview/mmwrhtml/mm5125a2.htm>
  - CDC. Outbreak of Listeriosis Associated With Homemade Mexican-Style Cheese — North Carolina, October 2000--January 2001. MMWR Morb Mortal Wkly Rep 50;560-2. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5026a3.htm>
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  - CDC. Campylobacteriosis Associated with Raw Milk Consumption – Pennsylvania. MMWR Morb Mortal Wkly Rep. 1983;32:337-8,344.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/00000104.htm>
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- Langer AJ, Ayers T, Grass J, Lynch M, Angulo FJ, Mahon BE. Nonpasteurized dairy products, disease outbreaks, and state laws-United States, 1993-2006. Emerging infectious diseases. Mar 2012;18(3):385-391.
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<http://www.fda.gov/Food/ResourcesForYou/HealthEducators/ucm089619.htm>
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## Press Release

**For Immediate Release:** February 21, 2012

**Contact :** CDC Division of News and Electronic Media (<http://www.cdc.gov/media>)  
(404) 639-3286

### Majority of dairy-related disease outbreaks linked to raw milk

*CDC Report Shows Higher Rates of "Raw" Milk Outbreaks in States Where It's Legal*

The rate of outbreaks caused by unpasteurized milk (often called raw milk) and products made from it was 150 times greater than outbreaks linked to pasteurized milk, according to a study by the Centers for Disease Control and Prevention. The 13-year review also revealed that the states where the sale of raw milk was legal had more than twice the rate of outbreaks as states where it was illegal.

The study, published Feb. 21 in the CDC journal Emerging Infectious Diseases (<http://wwwnc.cdc.gov/eid/>), reviewed dairy product outbreaks from 1993 to 2006 in all 50 states. The authors compared the amount of milk produced in the United States during the study period (about 2.7 trillion pounds) to the amount that CDC estimates was likely consumed raw (1 percent or 27 billion pounds) to determine the 150 times higher rate for outbreaks caused by raw milk products. Raw milk products include cheese and yogurt.

The study included 121 dairy-related disease outbreaks, which caused 4,413 illnesses, 239 hospitalizations and three deaths. In 60 percent of the outbreaks (73 outbreaks) state health officials determined raw milk products were the cause. Nearly all of the hospitalizations (200 of 239) were in those sickened in the raw milk outbreaks. These dairy-related outbreaks occurred in 30 states, and 75 percent (55 outbreaks) of the raw milk outbreaks occurred in the 21 states where it was legal to sell raw milk products at the time. The study also reported that seven states changed their laws during the study period.

Consumers can't tell if raw milk is safe to drink by looking at, smelling, or tasting it. Even under ideal conditions of cleanliness, collecting milk introduces some bacteria. Unless the milk is pasteurized, these bacteria can multiply and grow in the milk and cause illness. Pasteurization involves heating milk to kill disease-causing bacteria.

"This study shows an association between state laws and the number of outbreaks and illnesses from raw milk products," said Robert Tauxe, M.D., M.P.H., deputy director of CDC's Division of Foodborne, Waterborne and Environmental Diseases (DFWED) (<http://www.cdc.gov/media/subtopic/sme/tauxe.html>). "Restricting the sale of raw milk products is likely to reduce the number of outbreaks and can help keep people healthier. The states that allow sale of raw milk will probably continue to see outbreaks in the future."

The study also found that the raw milk product outbreaks led to much more severe illnesses, and disproportionately affected people under age 20. In the raw milk outbreaks with known age breakdowns, 60 percent of patients were younger than age 20, compared to 23 percent in outbreaks from pasteurized products. Children are more likely than adults to get seriously ill from the bacteria in raw milk.




“While some people think that raw milk has more health benefits than pasteurized milk, this study shows that raw milk has great risks, especially for children, who experience more severe illnesses if they get sick,” said study co-author Barbara Mahon, M.D., M.P.H., deputy chief of CDC’s DFWED Enteric Diseases Epidemiology Branch. “Parents who have lived through the experience (<http://www.cdc.gov/foodsafety/rawmilk/raw-milk-videos.html>) of watching their child fight for their life after drinking raw milk now say that it’s just not worth the risk.” Among other key findings:

- Thirteen percent of patients in raw milk outbreaks were hospitalized compared to 1 percent in pasteurized milk outbreaks. This may be because raw milk outbreaks were all caused by bacteria, such as E. coli O157, which tend to produce more severe illnesses, according to the study.
- Pasteurized milk and cheese outbreaks were often caused by relatively mild infections like norovirus and Staphylococcus aureus.

To view the study, please visit [www.cdc.gov/eid](http://www.cdc.gov/eid) (<http://www.cdc.gov/eid>). For more information about raw milk, visit <http://www.cdc.gov/foodsafety/rawmilk/raw-milk-index.html> (<http://www.cdc.gov/foodsafety/rawmilk/raw-milk-index.html>).

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## Raw (Unpasteurized) Milk



**Raw milk can carry harmful germs that can make you very sick or kill you. If you're thinking about drinking raw milk because you believe it has health benefits, consider other options.**

### Trying to decide about raw milk?

Developing a healthy lifestyle is a process with many decisions and steps. One step you might be thinking about is adding raw milk to your diet. Raw milk is milk that has not been pasteurized to kill harmful germs. Germs include bacteria, viruses, and parasites. It's important to understand the risks of drinking raw milk, especially because you may be hearing claims about the supposed "benefits" of raw milk.

Raw milk contains bacteria, and some of them can be harmful. So, if you're thinking about consuming raw milk because you believe that it is a good source of beneficial bacteria, you need to know that it isn't and you may instead get sick from the harmful bacteria. If you think that certain types of bacteria may be beneficial to your health, consider getting them from foods that don't involve such a high risk. For example, so-called probiotic bacteria are sometimes added to pasteurized fermented foods, such as yogurt and kefir.



Milk and products made from milk need minimal processing, called pasteurization, which can be done by heating the milk briefly (for example, heating it to 161°F for about 20 seconds). When milk is pasteurized, some bacteria remain in it, but the disease-causing ones are killed. Harmful germs usually don't change the look, taste, or smell of milk, so only when milk has been pasteurized can you be confident that these germs are not present. To ensure that milk is safe, processors rapidly cool it after pasteurization, practice sanitary handling, and store milk in clean, closed containers at 45°F or below.

Remember, you can't look at, smell, or taste a bottle of raw milk and tell if it's safe to drink. Make the best decision for the health of your family. If you want to keep milk in your family's diet, protect them by not giving them raw milk. Even healthy adults can get sick from drinking raw milk. If you're thinking about drinking raw milk because you believe it has health benefits, consider other options.

### Who is at greatest risk of getting sick from drinking raw milk?

The risk of getting sick from drinking raw milk is greater for infants and young children, the elderly, pregnant women, and





people with weakened immune systems, such as people with cancer, an organ transplant, or HIV/AIDS, than it is for healthy school-aged children and adults. But, it is important to remember that healthy people of any age can get very sick or even die if they drink raw milk contaminated with harmful germs.

## What are the risks associated with drinking raw milk?

Raw milk can carry harmful bacteria and other germs that can make you very sick or kill you. While it is possible to get foodborne illnesses from many different foods, raw milk is one of the riskiest of all.



Getting sick from raw milk can mean many days of diarrhea, stomach cramping, and vomiting. Less commonly, it can mean kidney failure, paralysis, chronic disorders, and even death.

Many people who chose raw milk thinking they would improve their health instead found themselves (or their loved ones) sick in a hospital for several weeks fighting for their lives from infections caused by germs in raw milk. For example, a person can develop severe or even life-threatening diseases, such as Guillain-Barré syndrome, which can cause paralysis, and hemolytic uremic syndrome, which can result in kidney failure and stroke.

## Aren't raw or natural foods better than processed foods?

Many people believe that foods with no or minimal processing are better for their health. Many people also believe that small, local farms are better sources of healthy food. However, some types of processing are needed to protect health. For example, consumers process raw meat, poultry, and fish for safety by cooking. Similarly, when milk is pasteurized, it is heated just long enough to kill disease-causing germs. Most nutrients remain after milk is pasteurized. There are many local, small farms that offer pasteurized organic milk and cheese products.

## **I've heard that many organic and raw milk producers are creating sanitary and humane conditions for raising animals and producing "safe" raw milk and raw milk products (like cheeses and yogurts). Does this help reduce milk contamination?**

Adherence to good hygienic practices during milking can reduce, but not eliminate, the risk of milk contamination. The dairy farm environment is a reservoir for illness-causing germs. No matter what precautions farmers take, and even if their raw milk tests come back negative, they cannot guarantee that their milk, or the products made from their milk, are free of harmful germs.

- Germs such as *Escherichia coli*, *Campylobacter*, and *Salmonella* can contaminate milk during the process of milking dairy animals, including cows, sheep, and goats. Animals that carry these germs usually appear healthy.

## How does milk get contaminated?





Milk contamination may occur from:

- Cow feces coming into direct contact with the milk
- Infection of the cow's udder (mastitis)
- Cow diseases (e.g., bovine tuberculosis)
- Bacteria that live on the skin of cows
- Environment (e.g., feces, dirt, processing equipment)
- Insects, rodents, and other animal vectors
- Humans, for example, by cross-contamination from soiled clothing and boots

Pasteurization is the only way to kill many of the bacteria in milk that can make people very sick.

## Information about raw milk-related outbreaks

States that allow the legal sale of raw milk for human consumption have more raw milk-related outbreaks of illness than states that do not allow raw milk to be sold legally.

Among dairy product-associated outbreaks reported to CDC between 1998 and 2011 in which the investigators reported whether the product was pasteurized or raw, 79% were due to raw milk or cheese. From 1998 through 2011, 148 outbreaks due to consumption of raw milk or raw milk products were reported to CDC. These resulted in 2,384 illnesses, 284 hospitalizations, and 2 deaths. Most of these illnesses were caused by *Escherichia coli*, *Campylobacter*, *Salmonella*, or *Listeria*. It is important to note that a substantial proportion of the raw milk-associated disease burden falls on children; among the 104 outbreaks from 1998-2011 with information on the patients' ages available, 82% involved at least one person younger than 20 years old.

A study released by CDC in February 2012 examined the number of dairy outbreaks in the United States during a 13-year period. Between 1993 and 2006, 60% (73/121) of dairy-related outbreaks reported to CDC were linked to raw milk products. Three-quarters of these outbreaks occurred in states where the sale of raw milk was legal at the time. Experts also found that those sickened in raw milk outbreaks were 13 times more likely to be hospitalized than those who got ill from pasteurized milk during an outbreak.

As a consumer, you can take steps when grocery shopping and at home with all of your dairy products to minimize the risk of getting sick:



1. Only consume pasteurized milk and milk products. Look for the word "pasteurized" on the dairy labels. If in doubt, don't buy it!
2. Keep pasteurized dairy products refrigerated at 40 degrees Fahrenheit or below at home and dispose of any expired products to reduce the risk of illness.
3. If you consume soft, fresh, un-aged cheeses like queso fresco, make sure they are made from pasteurized milk. Aged cheeses made from raw milk are generally okay to eat because germs usually die off during the aging process. However, outbreaks associated with these cheeses have been identified.

Reported outbreaks represent the tip of the iceberg. For every outbreak and every illness reported, many others occur, and most illnesses are not part of recognized outbreaks. Protect yourself and your loved ones. Avoid raw milk, it's just not worth the risk.

## More Information

- Visit CDC's Raw (Unpasteurized) Milk website (</foodsafety/rawmilk/raw-milk-index.html>)
- [Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws – United States, 1993-2006](#) [PDF - 268KB] (<http://wwwnc.cdc.gov/eid/article/18/3/pdfs/11-1370.pdf>) ([Questions and Answers about the study \(/foodsafety/rawmilk/nonpasteurized-outbreaks.html\)](/foodsafety/rawmilk/nonpasteurized-outbreaks.html))
- Watch [Real Stories of the Dangers of Raw Milk \(/foodsafety/rawmilk/raw-milk-videos.html\)](/foodsafety/rawmilk/raw-milk-videos.html)
- Listen to "Got Milk? [PODCAST – 5:28 minutes] (<http://www2c.cdc.gov/podcasts/player.asp?f=10651>)", to learn about the risks associated with drinking unpasteurized (raw) milk
- Visit FoodSafety.gov's [Myths about Raw Milk \(http://www.foodsafety.gov/keep/types/milk/index.html\)](http://www.foodsafety.gov/keep/types/milk/index.html) [http://www.cdc.gov/Other/disclaimer.html]
- Visit FDA's [The Dangers of Raw Milk: Unpasteurized Milk Can Pose a Serious Health Risk \(http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm079516.htm\)](http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm079516.htm) [http://www.cdc.gov/Other/disclaimer.html], [FDA Federal Registry: Cheeses and Related Cheese Products \(http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=133&showFR=1\)](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=133&showFR=1) [http://www.cdc.gov/Other/disclaimer.html]
- Visit [Real Raw Milk Facts \(http://www.realrawmilkfacts.com\)](http://www.realrawmilkfacts.com) [http://www.cdc.gov/Other/disclaimer.html]
- [Got raw milk? Don't Drink It](/media/matte/2012/02_Raw_Milk_Dontdrink.pdf) [PDF - 330KB] (/media/matte/2012/02\_Raw\_Milk\_Dontdrink.pdf)

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## Food Safety

### Food Safety and Raw Milk

“Back to nature”-- that’s what many Americans are trying to do with the foods that they buy and eat. They are shopping at farmers’ markets, picking organic foods at their grocery stores, participating in food cooperatives (or co-ops), and some are even growing their own food. Many people are trying to eat foods that are produced with minimal processing.

However, milk and products made from milk (including certain cheeses, ice cream, and yogurt) are foods that, when consumed raw, can pose severe health risks. Milk and products made from milk need minimal processing, called pasteurization, which can be done by heating the milk briefly (for example heating it to 161 °F for about 20 seconds), to kill disease-causing germs (e.g., *Salmonella*, *Escherichia coli* O157, *Campylobacter*) that can be found in raw milk.

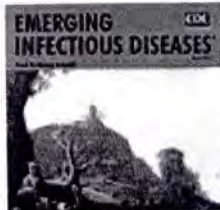
#### Real-Life Raw Milk Stories

**Three people tell their stories of how the decision to bring raw milk into their home led to illness and other consequences.**

**More>>**

[\(/foodsafety/rawmilk/raw-milk-videos.html\)](/foodsafety/rawmilk/raw-milk-videos.html)

#### New Publication and Features



[\(/foodsafety/rawmilk/nonpasteurized-outbreaks.html\)](/foodsafety/rawmilk/nonpasteurized-outbreaks.html) **Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws—United States, 1993–2006** [PDF - 7 pages]  
<http://wwwnc.cdc.gov/eid/article/18/3/pdfs/11-1370.pdf>

[Emerging Infectious Diseases, Volume 18, Number 3—March 2012](http://wwwnc.cdc.gov/eid/article/18/3/11-1370_article.htm)  
[http://wwwnc.cdc.gov/eid/article/18/3/11-1370\\_article.htm](http://wwwnc.cdc.gov/eid/article/18/3/11-1370_article.htm)

Press Release [\(/media/releases/2012/p0221\\_raw\\_milk\\_outbreak.html\)](/media/releases/2012/p0221_raw_milk_outbreak.html) (February 21, 2012)

Main Findings [\(/foodsafety/rawmilk/nonpasteurized-outbreaks.html\)](/foodsafety/rawmilk/nonpasteurized-outbreaks.html)



CDC Expert Commentary  
 Robert Tauxe, MD, MPH

#### **Got Milk? Don't Get Raw Milk! A Cautionary Tale.**

<http://www.medscape.com/viewarticle/742147> <http://www.cdc.gov/Other/disclaimer.html>

May 16, 2011

CDC expert Dr. Rob Tauxe discusses the dangers of raw milk.



Before the invention and acceptance of pasteurization, raw milk was a common source of the bacteria that cause tuberculosis, diphtheria, severe streptococcal infections, typhoid fever, and other foodborne illnesses. These illnesses killed many people each year, especially young children. In the 1900s many mothers recognized this risk and would boil milk (bringing it to a temperature of 212°F) before giving it to their infants and young children.

Many studies have shown that pasteurization does not significantly change the nutritional value of milk – pasteurized milk is rich in proteins, carbohydrates, and other nutrients. Heat slightly affects a few of the vitamins found in milk-- thiamine, vitamin B12, and vitamin C-- but milk is only a minor source of these vitamins.

This website provides information for people who want to know about:

- Important things to consider if you are trying to decide whether you and your family want to try raw milk and milk products
- Diseases caused by raw milk and milk products
- Outbreaks of foodborne illnesses involving raw milk and raw milk products

## Information for Consumers

Trying to Decide about Raw Milk? (</foodsafety/rawmilk/decide-raw-milk.html>)

Questions and Answers About Raw Milk (</foodsafety/rawmilk/raw-milk-questions-and-answers.html>)

CDC Feature: Raw (Unpasteurized) Milk (</Features/RawMilk/>)

## Related Resources

- 2011 Foodborne Illness Estimates (</foodborneburden>)
- Brucellosis (</nczved/divisions/dfbmd/diseases/brucellosis/>)
- Campylobacteriosis (</nczved/divisions/dfbmd/diseases/campylobacter/>)
- Foodborne Infections ([/nczved/divisions/dfbmd/diseases/foodborne\\_infections/](/nczved/divisions/dfbmd/diseases/foodborne_infections/))
- Listeriosis (</nczved/divisions/dfbmd/diseases/listeriosis/>)
- Salmonellosis (</nczved/divisions/dfbmd/diseases/salmonellosis/>)
- Shigellosis (</nczved/divisions/dfbmd/diseases/shigellosis/>)
- Shiga toxin-producing *E. coli* ([/nczved/divisions/dfbmd/diseases/enterohemorrhagic\\_ecoli/technical.html](/nczved/divisions/dfbmd/diseases/enterohemorrhagic_ecoli/technical.html))

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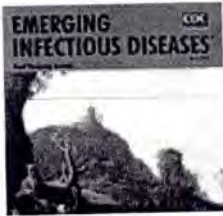


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## Food Safety

### Raw Milk Questions and Answers

#### New Publication



Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws—United States, 1993–2006 in Emerging Infectious Diseases [PDF - 7 pages]  
<http://wwwnc.cdc.gov/eid/article/18/3/pdfs/11-1370.pdf>

Main Findings: Nonpasteurized Disease Outbreaks, 1993-2006  
[\(/foodsafety/rawmilk/nonpasteurized-outbreaks.html#nonpasteurized\)](/foodsafety/rawmilk/nonpasteurized-outbreaks.html#nonpasteurized)

Questions and Answers: What is this study about?  
<http://wwwdev.cdc.gov/foodsafety/rawmilk/nonpasteurized-outbreaks.html#about>

#### Frequently Asked Questions

- **About Raw Milk**
  - What is raw milk? (#rawmilk)
- **Raw Milk Risks**
  - What are the risks associated with drinking raw milk? (#risks)
  - Who is at greatest risk of getting sick from drinking raw milk? (#who)
  - Can drinking raw milk hurt me or my family? (#hurt)
  - Aren't raw or natural foods better than processed foods? (#raw)
  - Does drinking raw milk prevent or cure any diseases, such as asthma, allergies, heart disease, or cancer? (#prevent)
  - I know people who have been drinking raw milk for years, and they never got sick. Why is that? (#years)
- **Pasteurization**
  - What is pasteurization, and how does it work in milk? (#past)
  - What is the history of the recommendation for pasteurization in the United States? (#history)
  - Does pasteurization change milk's nutritional benefits? (#benefits)
  - Is it true that raw milk has more enzymes and nutrients than pasteurized milk? (#enzymes)
- **Milk Production**
  - How does milk get contaminated? (#contaminated)
  - Does milk have a "built-in" safety mechanism that prevents bacterial contamination? (#builtin)
  - My farmer performs laboratory tests for bacteria in raw milk, so isn't it safe? (#lab)
  - My farmer uses grass-fed cows and goats to produce raw milk, so isn't it safe? (#grass)
  - My farmer's raw milk is organic, so isn't it safe? (#organic)
  - I've heard that many organic and raw milk producers are creating sanitary and humane conditions for raising animals and producing "safe" raw milk and raw milk



products (like cheeses and yogurts). Does this help reduce milk contamination? (#sanitary)

- Can I still get a disease from raw milk and raw milk products if the cows or goats are healthy, clean, and grass-fed or if the dairy is especially careful and clean when collecting the milk? (#disease)
- **Raw Milk Laws**
  - Is it legal to buy or sell raw milk? (#legal)
- **Raw Milk-Related Outbreaks**
  - How many outbreaks are related to raw milk? (#related-outbreaks)
  - Are there more outbreaks related to raw milk in states where it is legal to sell? (#outbreaks-legal)
  - Where can I learn more about the paper published in 2012, "Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws—United States, 1993-2006?" (/foodsafety/rawmilk/nonpasteurized-outbreaks.html)

## About Raw Milk

### What is raw milk?

Raw milk is milk from cows, goats, sheep, or other animals that has not been pasteurized. Although precise data are not available, it is thought that less than 1% of milk sold to consumers in the United States has not been pasteurized.

### Raw Milk Risks

What are the risks associated with drinking raw milk?



Raw milk can carry harmful bacteria and other germs that can make you very sick or kill you. While it is possible to get foodborne illnesses from many different foods, raw milk is one of the riskiest of all.

Getting sick from raw milk can mean many days of diarrhea, stomach cramping, and vomiting. Less commonly, it can mean kidney failure, paralysis, chronic disorders, and even death.

Many people who chose raw milk thinking they would improve their health instead found themselves (or their loved ones) sick in a hospital for several weeks fighting for their lives from infections caused by germs in raw milk. For example, a person can develop severe or even life-threatening diseases, such as Guillain-Barré syndrome, which can cause paralysis, and hemolytic uremic syndrome, which can result in kidney failure and stroke.

- Illness can occur from the same brand and source of raw milk that people had been drinking for a long time without becoming ill.



- A wide variety of germs that are sometimes found in raw milk, can make people sick, including **bacteria** (e.g., *Brucella* (<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/brucellosis/>), *Campylobacter* (<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/campylobacter/>), *Listeria* (<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/listeriosis/>), *Mycobacterium bovis* (a cause of tuberculosis), *Salmonella* (<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/salmonellosis/>), Shiga toxin-producing *Escherichia coli* [e.g., *E. coli* O157 ([http://www.cdc.gov/nczved/divisions/dfbmd/diseases/ecoli\\_o157h7/](http://www.cdc.gov/nczved/divisions/dfbmd/diseases/ecoli_o157h7/))], *Shigella* (<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/shigellosis/>), *Yersinia* (<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/yersinia/>), **parasites** (e.g., *Giardia* ([http://www.cdc.gov/ncidod/dpd/parasites/giardiasis/factsht\\_giardia.htm#transmission](http://www.cdc.gov/ncidod/dpd/parasites/giardiasis/factsht_giardia.htm#transmission))), and **viruses** (e.g., *norovirus* (<http://www.cdc.gov/Features/Norovirus/>)).
- Each ill person's symptoms can differ, depending on the type of germ, the amount of contamination, and the person's immune defenses.

## Who is at greatest risk of getting sick from drinking raw milk?

The risk of getting sick from drinking raw milk is greater for infants and young children, the elderly, pregnant women, and people with weakened immune systems, such as people with cancer, an organ transplant, or HIV/AIDS, than it is for healthy school-aged children and adults. But, it is important to remember that healthy people of any age can get very sick or even die if they drink raw milk contaminated with harmful germs.

## Can drinking raw milk hurt me or my family?

Yes. Raw milk can cause serious infections. Raw milk and raw milk products (such as cheeses and yogurts made with raw milk) can be contaminated with bacteria that can cause serious illness, hospitalization, or death. These harmful bacteria include *Brucella*, *Campylobacter*, *Listeria*, *Mycobacterium bovis*, *Salmonella*, Shiga toxin-producing *E. coli*, *Shigella*, *Streptococcus pyogenes*, and *Yersinia enterocolitica*. From 1998 through 2011, 148 outbreaks due to consumption of raw milk or raw milk products were reported to CDC. These resulted in 2,384 illnesses, 284 hospitalizations, and 2 deaths. Most of these illnesses were caused by *Escherichia coli*, *Campylobacter*, *Salmonella*, or *Listeria*. It is important to note that a substantial proportion of the raw milk-associated disease burden falls on children; among the 104 outbreaks from 1998-2011 with information on the patients' ages available, 82% involved at least one person younger than 20 years old.

Because not all cases of foodborne illness are recognized and reported, the actual number of illnesses associated with raw milk likely is greater.

## Aren't raw or natural foods better than processed foods?

Many people believe that foods with no or minimal processing are better for their health. Many people also believe that small, local farms are better sources of healthy food. However, some types of processing are needed to protect health. For example, consumers process raw meat, poultry, and fish for safety by cooking. Similarly, when milk is pasteurized, it is heated just long enough to kill disease-causing germs. Most nutrients remain after milk is pasteurized. There are many local, small farms that offer pasteurized organic milk and cheese products.

## Does drinking raw milk prevent or cure any diseases, such as asthma, allergies, heart disease, or cancer?



No. There are no health benefits from drinking raw milk that cannot be obtained from drinking pasteurized milk that is free of disease-causing bacteria. The process of pasteurization of milk has never been found to be the cause of chronic diseases, allergies, or developmental or behavioral problems.

I know people who have been drinking raw milk for years, and they



never got sick. Why is that?

The presence of germs in raw milk is unpredictable. The number of disease-causing germs in the raw milk may be too low to make a person sick for a long time, and later high enough to make the same person seriously ill. For some people, drinking contaminated raw milk just once could make them really sick. Even if you trust the farmer and your store, raw milk is never a guaranteed safe product. Drinking raw milk means taking a real risk of getting very sick.

## Pasteurization

What is pasteurization, and how does it work in milk?

Pasteurization is the process of heating milk to a high enough temperature for a long enough time to kill illness-causing bacteria contained in the milk. As most commonly applied, pasteurization heats milk to a high temperature for a short time, which kills the bacteria that cause illness. It was invented in a time when millions of people became sick and died of diseases like tuberculosis, scarlet fever, typhoid fever, and other infections that were transmitted through raw milk. Pasteurization has prevented millions of people from becoming ill.

Raw milk contains bacteria, and some of them can be harmful. So, if you're thinking about consuming raw milk because you believe that it is a good source of beneficial bacteria, you need to know that it isn't and you may instead get sick from the harmful bacteria. If you think that certain types of bacteria may be beneficial to your health consider getting them from foods that don't involve such a high risk. For example, so-called probiotic bacteria are sometimes added to pasteurized fermented foods, such as yogurt and kefir.

Pasteurized milk products have occasionally caused illnesses and outbreaks. Usually, this has happened because of germs introduced in the dairy after the pasteurization process. Pasteurized milk that is correctly handled in the dairy, bottled, sealed, and refrigerated after pasteurization, and that is properly handled by the consumer, is very unlikely to contain illness-causing bacteria. Considering the amount of pasteurized milk consumed in the United States, illness from it is exceedingly rare.



What is the history of the recommendation for pasteurization in the



## United States?

Routine pasteurization of milk began in the United States in the 1920s and became widespread by 1950 as a means to reduce contamination and reduce human illnesses. It led to dramatic reductions in the number of people getting sick from diseases that had previously been transmitted commonly by milk. Most public health professionals and health care providers consider pasteurization to be one of public health's most effective food safety interventions ever!

Many medical and scientific organizations recommend pasteurization for all milk consumed by humans; these include CDC, the Food and Drug Administration, the American Academy of Pediatrics, the American Veterinary Medical Association, the National Association of State Public Health Veterinarians, and others.

## Does pasteurization change milk's nutritional benefits?

No. Many studies have shown that pasteurization does not significantly change the nutritional value of milk and dairy products. All of the nutritional benefits of drinking milk are available from pasteurized milk without the risk of disease that comes with drinking raw milk.

## Is it true that raw milk has more enzymes and nutrients than pasteurized milk?

While it's true that the heating process of pasteurization does inactivate some enzymes in milk, the enzymes in raw animal milk are not thought to be important in human health. Some nutrients are somewhat reduced in raw milk, but the United States diet generally has plenty of other sources of these nutrients. For example, vitamin C is reduced by pasteurization, but raw milk is not a major source of vitamin C.

## Milk Production



## How does milk get contaminated?

Milk contamination may occur from:

- Cow feces coming into direct contact with the milk
- Infection of the cow's udder (mastitis)
- Cow diseases (e.g., bovine tuberculosis)
- Bacteria that live on the skin of cows
- Environment (e.g., feces, dirt, processing equipment)
- Insects, rodents, and other animal vectors
- Humans, for example, by cross-contamination from soiled clothing and boots

Pasteurization is the only way to kill many of the bacteria in milk that can make people very sick.

## Does milk have a “built-in” safety mechanism that prevents bacterial contamination?

No. Disease-causing organisms can only be eliminated in milk through pasteurization or by adding chemicals to the milk. Pasteurization is the best method of eliminating disease-causing organisms in milk and the only method routinely used in the United States.

## My farmer performs laboratory tests for bacteria in raw milk, so isn't it safe?

Even negative tests do not guarantee that raw milk is safe to drink. People have become very sick from drinking raw milk that came from farms that regularly tested their milk for bacteria and whose owners were sure that their milk was safe.

## My farmer uses grass-fed cows and goats to produce raw milk, so isn't it safe?

Outbreaks of illness related to raw milk have been traced back to both grass-fed and grain-fed animals.

## My farmer's raw milk is organic, so isn't it safe?

Raw organic milk is not safe. Pasteurized organic milk is available in many places, including supermarkets, farmers' markets, and dairies.

## I've heard that many organic and raw milk producers are creating sanitary and humane conditions for raising animals and producing



“safe” raw milk and raw milk products (like cheeses and yogurts).  
Does this help reduce milk contamination?

Adherence to good hygienic practices during milking can reduce, but not eliminate, the risk of milk contamination. The dairy farm environment is a reservoir for illness-causing germs. No matter what precautions farmers take, and even if their raw milk tests come back negative, they cannot guarantee that their milk, or the products made from their milk, are free of harmful germs.

- Germs such as *Escherichia coli* O157, *Campylobacter*, and *Salmonella* can contaminate milk during the process of milking dairy animals, including cows and goats. Animals that carry these germs are usually healthy.



Can I still get a disease from raw milk and raw milk products if the cows or goats are healthy, clean, and grass-fed or if the dairy is especially careful and clean when collecting the milk?

Yes. Even healthy animals may carry germs that can contaminate milk. Milk may be contaminated with bacteria during the milk collection process. Small numbers of bacteria might multiply and grow in the milk before someone drinks it if it is raw. Dairying methods have improved over the years but are still no substitute for pasteurization in assuring that milk is safe to drink. Raw milk supplied by “certified,” “organic,” or “local” dairies has no guarantee of being safe.

## Raw Milk Laws

Is it legal to buy or sell raw milk?

Yes, in some states. Because of the potential for serious illness, federal law prohibits dairies from distributing raw milk across state lines in final package form (packaged so that it can be consumed). This means that raw milk can only be distributed across state lines if it is going to be pasteurized or used to make aged (over 60 days) cheese before being sold to consumers. Each state makes its own laws about selling raw milk within the borders of the state. In about half of states, sale of raw milk directly to consumers is illegal. In the remaining states, raw milk may be sold directly to consumers.

## Raw Milk-Related Outbreaks

How many outbreaks are related to raw milk?



CDC collects data on foodborne disease outbreaks voluntarily reported by the state, local, territorial, or tribal health departments. The health departments conduct most outbreak investigations reported to CDC. The data reported may change frequently as reporting agencies enter new records and modify or delete old ones.

Among dairy product-associated outbreaks reported to CDC between 1998 and 2011 in which the investigators reported whether the product was pasteurized or raw, 79% were due to raw milk or cheese. From 1998 through 2011, 148 outbreaks due to consumption of raw milk or raw milk products were reported to CDC. These resulted in 2,384 illnesses, 284 hospitalizations, and 2 deaths. Most of these illnesses were caused by *Escherichia coli*, *Campylobacter*, *Salmonella*, or *Listeria*. It is important to note that a substantial proportion of the raw milk-associated disease burden falls on children; among the 104 outbreaks from 1998-2011 with information on the patients' ages available, 82% involved at least one person younger than 20 years old.

Reported outbreaks represent the tip of the iceberg. For every outbreak and every illness reported, many others occur, and most illnesses are not part of recognized outbreaks.

Are there more outbreaks related to raw milk in states where it is legal to sell?

Yes. States that allow the legal sale of raw milk for human consumption have more raw milk-related outbreaks of illness than states that do not allow raw milk to be sold legally.

**For more information about outbreaks related to raw milk**, [see the main findings \(/foodsafety/rawmilk/nonpasteurized-outbreaks.html\)](#) of "[Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws—United States, 1993-2006 \(http://wwwnc.cdc.gov/eid/ahead-of-print/article/18/3/11-1370\\_article.htm\)](#)."

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## Austria, Bulgaria, Croatia, Czech Republic, Poland, Slovenia,

These countries allow the distribution of unprocessed raw milk. This is mostly done by automatic vending machines known as "Mlekomat". An EU programm supports the farmers with 50% of their investments in vending machines.<sup>[*citation needed*]</sup>



A bottle of green-top milk

## North America

### Canada

The sale of raw milk directly to consumers is prohibited in Canada<sup>[16]</sup> under the *Food and Drug Regulations* since 1991.

No person shall sell the normal lacteal secretion obtained from the mammary gland of the cow, genus *Bos*, or of any other animal, or sell a dairy product made with any such secretion, unless the secretion or dairy product has been pasteurized by being held at a temperature and for a period that ensure the reduction of the alkaline phosphatase activity so as to meet the tolerances specified in official method MFO-3, Determination of Phosphatase Activity in Dairy Products, dated November 30, 1981.

—<sup>[17]</sup>, Section B.08.002.2 (1)

Provincial laws also forbid the sale and distribution of raw milk. For instance, Ontario's Health Protection and Promotion Act, subsection 18(1) reads: "No person shall sell, offer for sale, deliver or distribute milk or cream that has not been pasteurized or sterilized in a plant that is licensed under the Milk Act or in a plant outside Ontario that meets the standards for plants licensed under the Milk Act."

In January 2010, Michael Schmidt was found not guilty on 19 charges relating to the sale of raw milk in the Ontario Court of Justice.<sup>[18]</sup> As of February, 2011, that case is under appeal with a scheduled hearing date in April, 2011.

In British Columbia, Alice Jongerden is challenging the constitutionality of that province's legislation, which deems raw milk to be a hazardous product.<sup>[19]</sup>

Meanwhile, Canada does permit the sale of raw milk cheeses that are aged over 60 days. In 2009, the province of Quebec modified regulations to allow raw milk cheeses aged less than 60 days provided stringent safeguards are met.<sup>[20]</sup>

### United States

*Main article: United States raw milk debate*

Twenty-eight U.S. states do not prohibit sales of raw milk.<sup>[21]</sup> Cow shares can be found, and raw milk purchased for animal consumption in many states where retail for human consumption is prohibited.



Most states impose restrictions on raw milk suppliers due to concerns about safety. As of 2009, the state of Connecticut has discussed creating possible restrictions upon the sale of raw milk to farms and farmer's markets.<sup>[22]</sup> The FDA reports that, in 2002, consuming partially heated raw milk and raw milk products caused 200 Americans to become ill in some manner.<sup>[23]</sup>

Many governmental officials and the majority of public health organizations hold to the need for pasteurization. Before pasteurization, many dairies, especially in cities, fed their cattle on low-quality food, and their milk was rife with dangerous bacteria. Pasteurizing it was the only way to make it safely drinkable. As pasteurization has been standard for many years, it is now widely assumed that raw milk is dangerous.<sup>[24]</sup> The Cornell University Food Science Department has compiled data indicating that pathogenic microorganisms are present in between 0.87% and 12.6% of raw milk samples.<sup>[25]</sup>

Proponents of raw milk (in the U.S.) advance two basic arguments for unpasteurized milk. They claim that pasteurization destroys or damages some of the milk's nutrients, and that while pasteurization may kill dangerous bacteria, it also kills off good bacteria that raw milk supporters claim to have health benefits.<sup>[26]</sup> The United States Food and Drug administration claims that this is false, and that pasteurizing milk does not destroy any of its nutritive value.<sup>[8]</sup>

Proponents also invoke the benefits of direct-marketing when promoting the sale of raw milk. The ability of the farmer to eliminate the middle-man and sell directly to the consumer allows for greater profitability. Many manufacturers sell small-scale pasteurization equipment, thereby allowing farmers to both bypass the milk processors and sell pasteurized milk directly to the consumer. Additionally, some small U.S. dairies are now beginning to adopt low-temperature vat pasteurization.<sup>[27]</sup> Advocates of low-temperature vat pasteurization note that it produces a product similar to raw milk in composition and is not homogenized.

## Oceania

### Australia

The sale of raw milk for drinking purposes is illegal in all states and territories in Australia, as is all raw milk cheese. This has been circumvented somewhat by selling raw milk as *bath milk*. An exception to the cheese rule has been made recently for two Roquefort cheeses. There is some indication of share owning cows, allowing the "owners" to consume the raw milk, but also evidence that the government is trying to close this loophole.<sup>[28][29]</sup>

### New Zealand

Raw milk products can be made and sold in New Zealand, but is highly regulated to offset the pathogen risk. Raw milk for drinking can only be sold directly from a producer (the farm gate) and only in amounts suitable for personal consumption.<sup>[30]</sup>

## See also

- Milk
- Raw foodism



# Nonpasteurized Dairy Products, Disease Outbreaks, and State Laws—United States, 1993–2006

Adam J. Langer, Tracy Ayers, Julian Grass, Michael Lynch, Frederick J. Angulo, and Barbara E. Mahon

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### Learning Objectives

Upon completion of this activity, participants will be able to:

- Evaluate the epidemiology of foodborne illness related to the consumption of dairy products
- Analyze the clinical presentation and outcomes of foodborne disease related to the consumption of dairy products
- Distinguish the organism most commonly associated with foodborne illness after consumption of unpasteurized dairy products
- Assess sources of contamination of pasteurized dairy products

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Although pasteurization eliminates pathogens and consumption of nonpasteurized dairy products is uncommon, dairy-associated disease outbreaks continue to occur. To determine the association of outbreaks caused by nonpasteurized dairy products with state laws regarding sale of these products, we reviewed dairy-associated outbreaks during 1993–2006. We found 121 outbreaks for which the product's pasteurization status was known;

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among these, 73 (60%) involved nonpasteurized products and resulted in 1,571 cases, 202 hospitalizations, and 2 deaths. A total of 55 (75%) outbreaks occurred in 21 states that permitted sale of nonpasteurized products; incidence of nonpasteurized product-associated outbreaks was higher in these states. Nonpasteurized products caused a disproportionate number ( $\approx 150\times$  greater/unit of product consumed) of outbreaks and outbreak-associated illnesses and also disproportionately affected persons <20 years of age. States that restricted sale of nonpasteurized products had fewer outbreaks and illnesses; stronger restrictions and enforcement should be considered.



In the United States, milk and other dairy products are dietary staples; the 2010 Dietary Guidelines for Americans recommend that most Americans include dairy products in their diet (1). However, numerous pathogens can contaminate dairy products and cause illness and death. Milkborne infections were relatively common before the advent of pasteurization in the late 19th century (2), and in the United States today, illness related to consumption of nonpasteurized dairy products remains a public health problem.

In 1948, Michigan enacted the first statewide requirement that dairy products be pasteurized, and many other states soon did the same (2). In 1987, the United States Food and Drug Administration prohibited distribution of nonpasteurized dairy products in interstate commerce for sale to consumers (3). However, sale of nonpasteurized dairy products within the state where they are produced is regulated by each state, and some states permit sale of these products. Despite the federal ban on the sale of nonpasteurized products in interstate commerce, the broad use of pasteurization by the dairy industry, and the infrequency with which nonpasteurized dairy products are consumed, illnesses and outbreaks associated with consumption of these products continue to occur (4–23).

State and local health departments report foodborne disease outbreaks to the Centers for Disease Control and Prevention (CDC) through the Foodborne Disease Outbreak Surveillance System. As a result of efforts to enhance outbreak surveillance starting in 1998, the total number of outbreak reports increased substantially (24). A recent comprehensive analysis of foodborne disease outbreaks associated with dairy products (dairy-associated outbreaks) reported to CDC reviewed outbreaks that occurred during 1973–1992 (4). We reviewed subsequent dairy-associated outbreaks, reported in the United States during 1993–2006. We characterized the outbreaks and examined their association with state laws regarding sale of nonpasteurized dairy products.

## Methods

To compare the incidence of foodborne outbreaks involving nonpasteurized dairy products among states with differing laws with regard to the sale of these products (i.e., states that permitted their sale vs. states that prohibited their sale), we reviewed reports of foodborne disease outbreaks involving dairy products reported to CDC during 1993–2006. These reports, completed by state and local health departments, typically included the number of cases associated with the outbreak; the age and sex distribution of outbreak-associated case-patients; the number of hospitalizations and deaths; the etiologic agent associated with the outbreak; the type of dairy product implicated (e.g., fluid milk, cheese); and whether the implicated dairy

product was marketed, labeled, or otherwise presented to the consumer as pasteurized or nonpasteurized. Hereafter, we refer to these products as pasteurized or nonpasteurized. Thus, any outbreak involving a dairy product that was contaminated after pasteurization or that was intended to be pasteurized but underwent inadequate pasteurization was classified as involving pasteurized product. When possible, we corrected missing or incomplete data by asking the health department that conducted the investigation for more information.

To determine whether the sale of nonpasteurized dairy products was legal at the time of each outbreak, we contacted the 50 state departments of health and agriculture and requested data on whether the state permitted the sale of nonpasteurized dairy products produced in that state for each year from 1993 through 2006. We defined an illegal state-year as a year in which a state prohibited the sale of all nonpasteurized products, and we defined a legal state-year as a year in which a state permitted the sale of nonpasteurized dairy products produced in that state. Data on the estimated population, by state, for each year were obtained from the US Census Bureau. To compare the incidence of outbreak and outbreak-associated cases during illegal state-years to that during legal state-years, we stratified the outbreaks by legal status of the state in which the outbreak occurred at the time of the outbreak and calculated incidence density ratios for reported outbreaks (Poisson model) and for outbreak-associated cases (zero-inflated negative binomial model).

## Results

During 1993–2006, a total of 30 states reported 122 foodborne disease outbreaks caused by contaminated dairy products. Dairy-associated outbreaks occurred in all years except 1996, and outbreaks involving nonpasteurized dairy products occurred in all years except 1994 and 1996. The number of reported dairy-associated outbreaks increased in 1998 after surveillance for foodborne disease outbreaks was enhanced (Figure 1).

Whether the product was pasteurized or nonpasteurized was known for 121 of the 122 outbreaks, and most outbreaks (73 [60%]) involved nonpasteurized dairy products. Of the 121 outbreaks for which product pasteurization status was known, 65 (54%) involved cheese and 56 (46%) involved fluid milk. Of the 65 outbreaks involving cheese, 27 (42%) involved cheese made from nonpasteurized milk. Of the 56 outbreaks involving fluid milk, an even higher percentage (82%) involved nonpasteurized milk.

The 121 outbreaks involving dairy products for which pasteurization status was known resulted in 4,413 reported illnesses. Among these illnesses, 1,571 (36%) resulted from nonpasteurized dairy products. The median number of persons reported ill during outbreaks involving



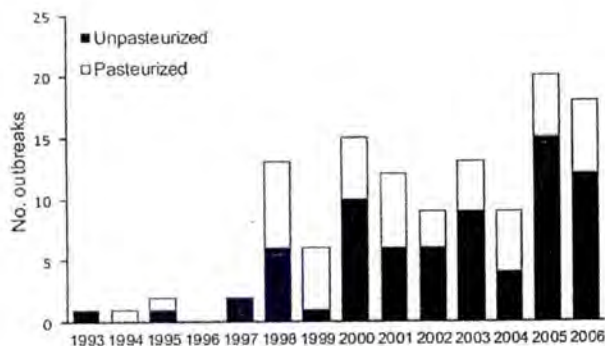


Figure 1. Number of dairy product-associated outbreaks, by year and pasteurization status of product, United States, 1993–2006.

nonpasteurized dairy products was 11 (range 2–202). Outbreaks involving nonpasteurized dairy products resulted in 202 hospitalizations (hospitalization rate 13%). In contrast, outbreaks involving pasteurized dairy products resulted in 37 hospitalizations (hospitalization rate 1%). Two deaths were associated with an outbreak caused by consuming nonpasteurized dairy products, and 1 death was associated with an outbreak caused by a pasteurized product (Table).

Ill persons in outbreaks involving nonpasteurized dairy products were generally younger than those in outbreaks involving pasteurized dairy products. For the 60 outbreaks involving nonpasteurized dairy products for which age of patients was known, 60% of patients were <20 years of age; for the 37 outbreaks involving pasteurized dairy products for which age of patients was known, 23% of patients were <20 years of age ( $p < 0.001$ ).

The causative agent was identified for all 73 outbreaks involving nonpasteurized dairy products; all were caused by bacteria. One outbreak was caused by *Campylobacter* spp. and Shiga toxin-producing *Escherichia coli*. Among the remaining 72 outbreaks, 39 (54%) were caused by *Campylobacter* spp., 16 (22%) by *Salmonella* spp., 9 (13%) by Shiga toxin-producing *E. coli*, 3 (4%) by *Brucella* spp., 3 (4%) by *Listeria* spp., and 2 (3%) by *Shigella* spp. Among the 30 outbreaks involving pasteurized dairy products for

which the causative agent was reported, 13 (44%) were caused by norovirus, 6 (20%) by *Salmonella* spp., 4 (13%) by *Campylobacter* spp., 3 (10%) by *Staphylococcus aureus*, and 1 (3%) each by *Clostridium perfringens*, *Bacillus cereus*, *Listeria* spp., and *Shigella* spp.

A total of 48 reported outbreaks involved pasteurized dairy products. The source of contamination was reported for 7 (14%) of these outbreaks, of which at least 4 (57%) probably resulted from post-pasteurization contamination by an infected food handler. Failure of the consumer to store the dairy product at an appropriate temperature probably contributed to 3 other outbreaks. Such temperature abuse can enable pathogens (present because they either survived pasteurization in low numbers or were introduced after pasteurization) to multiply to concentrations capable of causing illness.

During the study period, 43 (86%) states did not change their legal status regarding the sale of nonpasteurized dairy products produced in that state. Among these 43 states, selling nonpasteurized dairy products produced in that state was legal in 21 (49%). Of the 7 states that changed their legal status, 3 changed from legal to illegal (Mississippi in 2005, Ohio in 2003, and Wisconsin in 2005), 3 changed from illegal to legal (Arkansas in 2005, Illinois in 2005, and Nevada in 2005), and 1 (Oregon) changed from legal to illegal in 1999 and then back to legal in 2005 (Figure 2).

Among the 700 state-years (14 years  $\times$  50 states) included in our analysis of the association of legal sales status and nonpasteurized dairy-associated outbreaks, sale of nonpasteurized dairy products produced in the state was legal for 342 state-years and illegal for 358 state-years. We excluded from analysis 2 outbreaks caused by nonpasteurized dairy products because each occurred in multiple states with differing laws. Of the 71 remaining outbreaks involving nonpasteurized dairy products, 55 (77%) occurred in states where sale of nonpasteurized dairy products produced in that state was legal. Among these 71 outbreaks involving nonpasteurized dairy products, 1,526 persons became ill and 1,112 (73%) of these illnesses occurred in states where it was legal to sell nonpasteurized dairy products. Also among these 71 outbreaks involving nonpasteurized dairy products, 15 occurred in states where sale of nonpasteurized dairy

Table. Characteristics of disease outbreaks after consumption of dairy products, United States, 1993–2006

Product	Outbreak characteristic, no.			
	Total	Associated illnesses	Associated hospitalizations	Associated deaths
Nonpasteurized				
Fluid milk	46	930	71	0
Cheese	27	641	131	2
Total	73	1,571	202	2
Pasteurized				
Fluid milk	10	2,098	20	0
Cheese	38	744	17	1
Total	48	2,842	37	1
All dairy	121	4,413	239	3







amount of nonpasteurized and pasteurized dairy products consumed. Total milk production in the United States in 2010 was estimated at 193 billion pounds, suggesting that  $\approx 2.7$  trillion pounds of milk were consumed during the 14 years from 1993 through 2006 (27). If 1% of dairy products were consumed nonpasteurized, then during these 14 years, 73 outbreaks were caused by the 27 billion pounds of nonpasteurized dairy products that were consumed and 48 by the 2,673 billion pounds of pasteurized products that were consumed. Therefore, the incidence of reported outbreaks involving nonpasteurized dairy products was  $\approx 150\times$  greater, per unit of dairy product consumed, than the incidence involving pasteurized products. If, as is probably more likely,  $<1\%$  of dairy products are consumed nonpasteurized, then the relative risk per unit of nonpasteurized dairy product consumed would be even higher.

After 1998, when surveillance for foodborne outbreaks was enhanced, the number of reported foodborne disease outbreaks caused by dairy products increased, as did the total number of reported foodborne outbreaks. Outbreaks involving nonpasteurized dairy products were all associated with bacterial enteric pathogens, most of which have known animal reservoirs. In contrast, among outbreaks in which a pasteurized dairy product was implicated, the most commonly reported causative agent was norovirus (44% of outbreaks), a pathogen with a human reservoir. These results suggest that outbreaks caused by nonpasteurized dairy products are probably caused by pathogens in the dairy environment, which would be eliminated by proper pasteurization, and that outbreaks caused by pasteurized dairy products are probably caused by contamination of the products at some point after pasteurization.

The objective of pasteurization is to eliminate from fluid milk those pathogens that originate in the dairy environment; however, pasteurization does not protect against contamination that might occur later, such as during food handling. In addition, if pasteurization is not performed properly (for appropriate times and at appropriate temperatures), pathogens might not be eliminated from the milk. Appropriate post-pasteurization food-handling practices can minimize the risk for reintroduction of pathogens into dairy products after pasteurization. In addition, other precautions, such as maintaining the dairy product at an appropriate temperature and disposing of expired products, reduce the risk to the consumer should the product become contaminated after pasteurization. When outbreaks do occur because of contamination of dairy products that are marketed as pasteurized, the source of contamination is typically traced to improper pasteurization, improper storage, or improper handling of the products after marketing (28–30). In our study, all outbreaks associated with pasteurized products for which

information on the source of contamination was available were attributed to post-pasteurization mishandling.

Among outbreak-associated cases involving nonpasteurized dairy products, 60% involved persons  $<20$  years of age. Public health and regulatory authorities are obligated to protect persons who cannot make fully informed decisions (e.g., children) from potential health hazards. Dietary decisions for younger children, in particular, are often made by caregivers. The American Academy of Pediatrics advises against giving nonpasteurized dairy products to children and recommends that pediatricians counsel caregivers against use of these products (31).

Proportionately more persons were hospitalized during outbreaks caused by nonpasteurized (13%) than by pasteurized dairy products (1%). This observation suggests that infections associated with nonpasteurized dairy products might be more severe, and it is consistent with the more frequent identification of bacterial, rather than viral or toxic, causative agents and with the larger proportion of illnesses affecting children.

Limitations of this analysis are primarily associated with the nature of the CDC Foodborne Disease Outbreak Surveillance System. Outbreak reporting by state and local health departments is voluntary, and outbreak reports are not always complete. For this analysis, we obtained missing data whenever possible by contacting the reporting state health department. In addition, the CDC outbreak surveillance database is dynamic; reporting agencies can submit new reports and can change or delete previous reports at any time as new information becomes available. Therefore, the results of this analysis represent data available at 1 point in time and might differ from those published earlier or subsequently.

In summary, foodborne outbreaks involving dairy products continue to be a public health problem in the United States, and this problem is disproportionately attributable to nonpasteurized dairy products. Since the US Food and Drug Administration prohibited distribution of nonpasteurized dairy products in interstate commerce for sale to consumers in 1987, all legal sale and distribution has occurred within states that permit the sale of nonpasteurized dairy products that originated in that state. How much illegal distribution in interstate commerce continues is unknown. The increased risk for outbreaks associated with legal intrastate sale of nonpasteurized dairy products demonstrated in this analysis can be weighed against the purported nutritional or other health benefits attributed to these products. Scientifically credible evidence for the health benefits of nonpasteurized dairy products beyond the benefits of those of otherwise equivalent pasteurized products is lacking (32). The risk for outbreaks resulting from cheese made from nonpasteurized milk in states where nonpasteurized



milk sale is legal may be higher for particular groups within those states. For example, in recent years, foodborne outbreaks involving nonpasteurized dairy products have been reported in association with traditional nonpasteurized products marketed to the growing Hispanic community in the United States (5,33).

Our analysis shows that legal intrastate sale of nonpasteurized dairy products is associated with a higher risk for dairy-related outbreaks and implies that restricting sale of nonpasteurized dairy products reduces the risk for dairy-related outbreaks within that state. Pasteurization is the most reliable and feasible way to render dairy products safe for consumption. Although warning labels and signs or government-issued permits are prudent where the sale of nonpasteurized dairy products is legal, they have not been shown to be effective and, given the results of this analysis, do not seem to reduce the incidence of outbreaks involving nonpasteurized dairy products to the degree that pasteurization does (18). Whether certain types of warnings or more explicit health advisories might be more effective than others is unknown. Public health officials at all levels should continue to develop innovative methods to educate consumers and caregivers about the dangers associated with nonpasteurized dairy products. State officials should consider further restricting or prohibiting the sale or distribution of nonpasteurized dairy products within their states. Federal and state regulators should continue to enforce existing regulations to prevent distribution of nonpasteurized dairy products to consumers. Consumption of nonpasteurized dairy products cannot be considered safe under any circumstances.

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Dr Langer was a CDC Preventive Medicine Fellow assigned to the Division of Foodborne, Bacterial, and Mycotic Diseases at the time of this study. He is now an epidemiologist with the CDC Division of Tuberculosis Elimination. His research interests include the investigation of infectious disease outbreaks and animal-to-human transmission of infectious agents.

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Raw milk is milk that has not been pasteurized before consumption. The Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) recommend drinking only pasteurized milk, because raw milk may contain harmful bacteria such as *E. coli* O157:H7, *Listeria* and *Salmonella* that can cause life-threatening illnesses. This recommendation has been affirmed by the American Medical Association and the American Academy of Pediatrics, among others.

## Raw Milk and the Law

Because raw milk, by nature, may contain harmful bacteria such as *E. coli* O157:H7, *Listeria* and *Salmonella* that can cause life-threatening illnesses, it is a violation of federal law to sell raw milk for consumer use across state lines. However, raw milk regulations vary by state, and some states allow the sale of raw milk within their borders. This means that, in some states, raw milk may be sold to local retail food stores or directly from the farm to consumers.<sup>1</sup>

## Risks of Raw Milk Consumption

The American Academy of Pediatrics (AAP) warns of the serious risks for children who consume raw milk. Similarly, pregnant women, the elderly, and those with compromised immune systems should not consume raw milk.<sup>2</sup> Before the invention and acceptance of pasteurization, raw milk was a common source of bacteria that caused serious illnesses such as tuberculosis, diphtheria, and typhoid fever. In the 1900s, many mothers recognized this risk and would boil milk before giving it to their infants and young children.

Despite repeated health warnings, the Centers for Disease Control and Prevention (CDC) identified 86 outbreaks of foodborne illness that implicated raw milk or cheese made from raw milk from 1998 through 2008. These outbreaks accounted for 1,676 illnesses, 191 hospitalizations, and two deaths.<sup>3</sup>

Since 2005, disease outbreaks related to the consumption of raw milk have been documented in multiple states. In late 2005, 18 cases of infection with *E. coli* O157:H7, mostly among children under the age of 14, occurred in Oregon and Washington.<sup>4</sup> At least 87 people became ill in Kansas in two separate outbreaks of campylobacteriosis during the end of 2007; both outbreaks were associated with consumption of raw milk or raw milk products.<sup>5</sup> In 2008, an outbreak of campylobacteriosis in California was associated with the consumption of unpasteurized milk supplied from a farm operating a cow-share program.<sup>6</sup> Farm share programs have become popular in order to circumvent state laws that prohibit drinking raw milk by one other than the cow owner. A cow-share program typically allows people to buy stock in a cow, thus giving them personal ownership of that animal and the milk she produces.

## The Importance of Pasteurization

Pasteurization is a simple, effective method that kills the harmful pathogens found in raw milk. Since its introduction more than a century ago, pasteurization has been recognized around the world as an essential tool for ensuring that milk and dairy foods are safe. During pasteurization, the temperature of milk is raised to 145° for 30 minutes or to at least 161° Fahrenheit for more than 15 seconds; it is then rapidly cooled. In addition to helping extend milk's shelf-life, this process destroys many harmful bacteria, including *Salmonella*, *Campylobacter* and *Listeria*. Some dairy foods are pasteurized using the "ultra high temperature" method, which is particularly effective in extending shelf-life. This process heats milk to 280° Fahrenheit for more than two seconds. Because of pasteurization, less than 1.5 percent of annual foodborne illness outbreaks in the United States involve dairy foods.<sup>7</sup>



While pasteurization has helped provide safe, nutrient-rich milk and cheese for over 100 years, some people continue to believe that pasteurization harms milk and that raw milk is a safe, healthier alternative. Here are some proven facts about milk and pasteurization:

- Pasteurization DOES kill harmful bacteria.
- Pasteurization DOES save lives.
- Raw milk DOES NOT kill dangerous pathogens by itself.
- 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.
- Pasteurization DOES NOT reduce milk's nutritional value.<sup>8</sup>

In 1924, the U.S. Public Health Service developed a regulation known as the Standard Milk Ordinance; the ordinance was adopted by both local and state milk-control agencies. This regulation is known today as the "Grade 'A' Pasteurized Milk Ordinance" (PMO). It is periodically reviewed and modified in cooperation with state and local governments, the dairy industry, and educational and research institutions. All 50 states have voluntarily adopted the PMO guidelines, which establish maximum allowable bacterial limits in pasteurized milk.

## Nutritional Value and Safety

There is no scientific evidence to suggest that there is any meaningful difference in the nutritional value of pasteurized and unpasteurized (raw) milk.<sup>6</sup> In addition, vitamin D, which is not found in significant amounts in raw milk, is added to processed milk, making it an even more nutritious product. Vitamin D insufficiency and deficiency is a common problem in the United States affecting many Americans, especially those of Hispanic or African American descent. The addition of vitamin D makes pasteurized milk an excellent source of this essential nutrient, providing 25% of the daily value in one 8-ounce serving.

Pasteurization does not affect a person's ability to digest lactose, the sugar present in milk. The enzyme required to break down lactose, known as lactase, is produced by cells that line the small intestine in the human body. This enzyme is not present in either raw or pasteurized milk.

Dairy foods are among the most tested and regulated foods in the United States. In addition to the extensive and rigorous safety and quality tests that dairy foods go through before they reach the grocery store, dairy farms and plants must meet stringent federal and local regulations, including those developed by the U.S. Department of Agriculture, the FDA, and other state regulatory agencies.

The FDA advises consumers to be alert when they buy milk or milk products.<sup>9</sup> To avoid raw milk, here are a few things the FDA suggests:

- Read the label on milk or milk products before you buy them. Many companies put the word "pasteurized" right on the label, but it is not required by law.
- Ask store employees if specific brands are pasteurized.
- At farm stands or farmers' markets, ask if the milk and cream being sold have been pasteurized. If the market sells yogurt, ice cream, or cheese, ask if they were made with pasteurized milk.

These groups endorse the importance of pasteurization and warn against raw milk consumption:<sup>10</sup>

- American Academy of Pediatrics
- American Medical Association
- American Veterinary Association
- Association of Food and Drug Officials
- Centers for Disease Control and Prevention
- Health Canada
- International Association of Food Protection
- National Association of State Public Health Veterinarians
- National Environmental Health Association
- U.S. Food and Drug Administration
- World Health Organization

**Additional Resources Include:**

Dairy Farming Today  
[www.dairyfarmingtoday.org](http://www.dairyfarmingtoday.org)

**USDA Food Safety Research Information Office**

<http://fsrio.nal.usda.gov>

Modern Dairy Farming Practices and Milk Quality: Myths and Facts, Dairy Council Digest, May/June, 2007  
[http://www.nationaldairycouncil.org/SiteCollectionDocuments/footer/FAQ/food\\_safety/DairyCouncilDigest783.pdf](http://www.nationaldairycouncil.org/SiteCollectionDocuments/footer/FAQ/food_safety/DairyCouncilDigest783.pdf)

*Also refer to Midwest Dairy Association fact sheets “Dairy Food Safety” and “Critical Steps from Cow to Consumer for Wholesome Milk.”*

*This fact sheet was reviewed by John Fetrow, VMD, MBA; Mike Hutjens, PhD; Lloyd Metzger, PhD; JW Schroeder, PhD; and Leo Timms, PhD, in November 2011 for its content and accuracy.*

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# DAIRY FOOD SAFETY FACT SHEET

The dairy industry takes food safety very seriously. Throughout the years, dairy farmers and processors have worked closely with the Food and Drug Administration (FDA) and state regulatory officials to establish safety regulations and practices including the Pasteurized Milk Ordinance and the Hazard Analysis and Critical Control Point system. As a result, American milk and dairy products are among the safest and most highly regulated foods in the world.

## Milk Safety Regulations and Procedures

The federal Pasteurized Milk Ordinance (PMO) is a set of requirements for milk production, milk hauling, pasteurization, product safety, equipment sanitation and labeling. It is one of the most effective tools to protect the safety of milk. Today, less than 1 percent of foodborne illness outbreaks in the U.S. involve dairy products.<sup>1</sup>

Milk is routinely sampled and tested by state regulatory authorities according to procedures outlined in the PMO. In addition, the FDA and Environmental Protection Agency (EPA) monitor dairy farmers and processors nationwide to ensure that the regulations of the PMO are being followed.<sup>2</sup>

The Hazard Analysis and Critical Control Point (HACCP) system is a structured and scientific process used throughout the food industry to help ensure food safety. Processing plants identify critical steps throughout the manufacturing process and establish plans to monitor and minimize any risks. HACCP plans are reviewed, approved, and enforced by food safety agencies.



All milk is sampled according to the federal Pasteurized Milk Ordinance to assure its safety and quality.

## The Role of Pasteurization

Since its introduction more than a century ago, pasteurization has been recognized around the world as an essential tool for ensuring that milk and dairy products are safe. Pasteurization is a simple, effective way to kill bacteria without affecting the taste or nutritional value of milk.<sup>3</sup>

Pasteurization involves heating raw milk to a certain temperature for a specific period of time. In the U.S., pasteurized milk must be heated to a minimum of 145°F for 30 minutes or to 161°F or more for 15 seconds.<sup>4</sup>

The dairy industry, the Centers for Disease Control and Prevention (CDC), the FDA, and many health and scientific organizations strongly support the pasteurization of milk.<sup>5</sup>

## Antibiotics

On every dairy farm, antibiotics are given only when they are necessary to treat and cure an illness. They are only given for a prescribed period of time to treat the specific illness. The milk from cows undergoing treatment never reaches the food supply. During 2010, nearly four million tests (3,892,196) were conducted on milk samples to detect antibiotic or other drug residues with less than 0.03% positive (1,245). Any milk testing positive was destroyed—it never reached the consumer market.<sup>6</sup>

In spite of the many benefits antibiotics bring to animals and humans, there is concern from public health, food safety, and regulatory perspectives about use of antimicrobials in food-producing animals. Raw food and undercooked food of plant and animal origin can be sources of antimicrobial-resistant pathogenic bacteria, such as *Salmonella* or enterotoxigenic *E. coli* or *C. jejuni*.<sup>7</sup> Raw milk consumption can significantly increase human exposure to antimicrobial-resistant bacteria.<sup>8</sup> Still, the overall health consequences of antimicrobial resistance of dairy pathogens affecting humans appears to be small and is likely not a human health concern as long as the milk is pasteurized.<sup>9</sup>



## The Facts about Bovine Somatotropin

Cows naturally produce bovine somatotropin in their pituitary gland; it directs how energy and nutrients are used for growth in young cattle and for milk production in lactating cows. Dairy farmers may choose to use a supplemental recombinant bovine somatotropin (rbST) to allow cows to produce more milk.<sup>10</sup>

There are several reasons why bovine somatotropin, which is naturally present in cow's milk, does not have any physiological effect on humans consuming the milk. Bovine somatotropin is species-specific, which means that, because it is only produced in cows, it is not biologically active in humans.<sup>11</sup> Therefore, any trace amounts of bovine somatotropin that remain after pasteurization of milk are broken down in the gut into inactive protein fragments (i.e., amino acids) by enzymes in the human gastrointestinal tract, just like any other dietary protein.<sup>12</sup>

Milk from rbST-supplemented cows is safe for human consumption. This has been affirmed and reaffirmed since the use of bovine somatotropin was approved in the early 1990s. Considerable testing was done before rbST was commercially released, and the FDA has determined that there is no difference between milk from cows who receive rbST and those that do not. In 2008, the Journal of the American Dietetic Association published findings from research that tested whole milk samples obtained from retail stores across the U.S. with three label claims related to farm practices: 1) conventional, 2) from cows not treated with rbST, and 3) USDA-certified organic. The research concluded that all three types of milk are virtually identical in terms of quality, safety and nutritional composition. None of the samples had detectable levels of antibiotics. Concentrations of bST in milk were the same regardless of milk label.<sup>13</sup>

## Pesticides

Pesticide and herbicide residues are not a health concern in any U.S. milk products as a result of preventative programs in the industry and federal regulations that limit exposure to these contaminants.<sup>14,15</sup> All pesticides sold in the U.S. must be approved for safety by the Environmental Protection Agency before being used.<sup>19</sup> Regulatory agencies have also set tolerance or threshold levels for allowable pesticide residues in foods such as milk.<sup>15</sup> Because pesticides and herbicides are found in water and soil, extremely low levels can be found in all foods, conventional and organic.

The FDA, under its pesticide monitoring program, collects and samples food nationwide for pesticide and other chemical contaminants.<sup>16</sup> This surveillance has shown that pesticide contamination of foods in the U.S. is extremely low. For example, no samples of domestic dairy products tested in Fiscal Year 2008 contained levels of pesticide residues above well-established thresholds.<sup>16</sup> Foods shown to contain levels of chemical residues above the maximum allowable levels are removed from the marketplace.<sup>16</sup>

*Also refer to Midwest Dairy Association "Milk and Hormones" and "Raw Milk" fact sheets.*

*This fact sheet was reviewed by John Fetrow, VMD, MBA; Mike Hutjens, PhD; Lloyd Metzger, PhD; JW Schroeder, PhD; and Leo Timms, PhD, in November 2011 for its content and accuracy.*

<sup>1</sup> USDHHS/PHS/FDA. 2009. Grade 'A' pasteurized milk ordinance, 2009 revision. <[http://www.fda.gov/downloads/Food/FoodSafety/Product SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf](http://www.fda.gov/downloads/Food/FoodSafety/Product%20SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf)>. Accessed 2011 November.

<sup>2</sup> USDHHS/PHS/FDA. 2009. Grade 'A' pasteurized milk ordinance, 2009 revision. <[http://www.fda.gov/downloads/Food/FoodSafety/Product SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf](http://www.fda.gov/downloads/Food/FoodSafety/Product%20SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf)>. Accessed 2011 November.

<sup>3</sup> USDHHS/PHS/FDA. 2009. Grade 'A' pasteurized milk ordinance, 2009 revision. <[http://www.fda.gov/downloads/Food/FoodSafety/Product SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf](http://www.fda.gov/downloads/Food/FoodSafety/Product%20SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf)>. Accessed 2011 November.

<sup>4</sup> USDHHS/PHS/FDA. 2009. Grade 'A' pasteurized milk ordinance, 2009 revision. <[http://www.fda.gov/downloads/Food/FoodSafety/Product SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf](http://www.fda.gov/downloads/Food/FoodSafety/Product%20SpecificInformation/MilkSafety/NationalConferenceonInterstateMilkShipmentsNCIMSMODELDocuments/UCM209789.pdf)>. Accessed 2011 November.

<sup>5</sup> USDHHS/FDA/CFSN, 2003, Mar. Sale/consumption of raw milk-position statement; M-1-03-4. <[www.cfsan.fda.gov/~ear/mi-03-4.html](http://www.cfsan.fda.gov/~ear/mi-03-4.html)>. Accessed 2011 November.

<sup>6</sup> USDHHS/FDA/CFSN. 2010. National milk drug residue data base. <<http://www.fda.gov/downloads/Food/FoodSafety/Product-SpecificInformation/MilkSafety/MiscellaneousMilkSafetyReferences/UCM244299.pdf>>. Accessed 2011 November.

<sup>7</sup> Sammarco ML, Ripabelli G, Fanelli I. 2010. Prevalence and biomolecular characterization of Campylobacter spp. isolated from retail meat. J Food Prot 73:720-728.



- 8 Straley BA, Donaldson SC, Hedge NV. 2006. Public health significance of antimicrobial-resistant gram-negative bacteria in raw bulk tank milk. *Foodborne Pathogens and Disease* 3:222-233.
- 9 Oliver, SP, Murinda, SE, and Jayarao, BM. 2011. Impact of antibiotic use in adult dairy cows on antimicrobial resistance of veterinary and human pathogens: a comprehensive review. *Foodborne Pathogens and Disease* 8(3).
- 10 Crooker, BA, et al. 1994. Dairy research and bovine Somatotropin. University of Minnesota.
- 11 Technology Assessment Panel. 1991. NIH Technology Assessment Conference Statement on Bovine Somatotropin. *Journal of American Medical Association* 265:1423-1425.
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- 13 Vicini, J et al. 2008. Survey of retail milk composition as affected by label claims regarding farm-management practices *J Am Diet Assoc.*108:1198-1203.
- 14 International Food Information Council Foundation. 2009, Oct. IFIC review: pesticides and food safety. Washington, DC: International Food Information Council Foundation. <[www.foodinsight.org](http://www.foodinsight.org)>. Accessed 2011 November.
- 15 International Food Information Council Foundation. 2009, Sept. Background on agricultural practices and food technologies. <[www.foodinsight.org](http://www.foodinsight.org)>. Accessed 2011 November.
- 16 USDA. 2008. Pesticide Monitoring Program. <[www.fda.gov/Food/FoodSafety/FoodContaminantsAdulteration/Pesticides/ResidueMonitoringReports/ucm228867.htm](http://www.fda.gov/Food/FoodSafety/FoodContaminantsAdulteration/Pesticides/ResidueMonitoringReports/ucm228867.htm)>. Accessed November 2011.

a.m.  
3/28/13

March 19, 2013

PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

Page 1, line 1, after "Act" insert "to create and enact a new section to chapter 4-30 of the North Dakota Century Code, relating to dairy animal ownership programs; and"

Page 2, after line 10, insert:

"SECTION 5. A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership - Raw milk.**

The owner or operator of a dairy farm that is licensed to sell grade A milk may not participate in a shared animal ownership program. For purposes of this section, a shared animal ownership program means any contractual arrangement under which:

1. A person acquires an ownership interest in a milk-producing animal;
2. A person agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
3. As a condition of the contract, the person is entitled to receive a proportionate share of the animal's raw milk production."

Renumber accordingly



3/28/13

P.M.

#1

(1) The acquisition of raw milk from cows or goats by a consumer for use or consumption by the consumer shall not constitute the sale of raw milk and shall not be prohibited if all of the following conditions are met:

(a) The owner of a cow, goat, cow shares, or goat shares shall receive raw milk directly from the farm or dairy where the cow, goat, or dairy herd is located and the farm or dairy is registered pursuant to subsection (2) of this section. A person who is the owner of a cow share or goat share in a cow, goat, or dairy herd may receive raw milk on behalf of another owner of the same cow, goat, or dairy herd. A person who is not an owner of a cow share or goat share in the same cow, goat, or dairy herd shall not receive raw milk on behalf of the owner of a cow share or goat share.

(b) The milk is obtained pursuant to a cow share or a goat share. A cow share or a goat share is an undivided interest in a cow, goat, or herd of cows or goats, created by a written contractual relationship between a consumer and a farmer that includes a legal bill of sale to the consumer for an interest in the cow, goat, or dairy herd and a boarding contract under which the consumer boards the cow, goat, or dairy herd in which the consumer has an interest with the farmer for care and milking, and under which the consumer is entitled to receive a share of milk from the cow, goat, or dairy herd.

(c) A prominent warning statement that the milk is not pasteurized and a list of potential pathogens that may be present in the milk is delivered to the consumer with the milk or is displayed on a label affixed to the milk container; and

(d) Information describing the standards used by the farm or dairy with respect to herd health, and in the production of milk from the herd, is provided to the consumer by the farmer together with results of tests performed on the cows or goats that produced the milk, tests performed on the milk, and an explanation of the tests and test results.


(2) Registration of a farm or dairy as required by paragraph (a) of subsection (1) of this section shall be accomplished by delivering to the agriculture commissioner a written statement containing:

(a) The name of the farmer, farm, or dairy;

(b) A valid, current address of the farmer, farm, or dairy; and

(c) A statement that raw milk is being produced at the farm or dairy.

(3) Retail sales of raw, unpasteurized milk shall not be allowed. Resale of raw milk obtained from a cow share or goat share is strictly prohibited. Raw milk that is not intended for pasteurization shall not be sold to, or offered for sale at, farmers' markets, educational institutions, health care facilities, nursing homes, governmental organizations, or any food establishment.



(4) No person who, as a consumer, obtains raw milk in accordance with this section shall be entitled to sell or redistribute the milk.

(5) No producer of raw milk shall publish any statement that implies approval , endorsement, or quality standards by the agriculture commissioner.



#1

**Kiefert, Dwight H.**

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**From:** Bartlett Farm Office <office@bartlettfarm.us>  
**Sent:** Thursday, March 28, 2013 10:52 PM  
**To:** Johnson, Dennis E.; Wall, John D.; Belter, Wesley R; Fehr, Alan; Headland, Craig A.; Heilman, Joe A.; Kiefert, Dwight H.; Larson, Diane K.; Rust, David S.; Trottier, Wayne A.; Boschee, Joshua A.; Haak, Jessica E.; Nelson, Marvin E.  
**Subject:** From Peter Bartlett on cow-shares

Good evening Representatives,

Thank you to the subcommittee for hearing me today on the cow-share regulation amendments. The latest proposal is to copy wording from another state to regulate cow-sharing. We have been told you will meet on this tomorrow morning. At the time of the subcommittee hearing, I did not realize the extent of this legislation. Please notice the following:

- 1. Prohibits delivery of cow-share owners' milk.** From section (1)(a): "The owner of a cow, goat, cow shares, or goat shares shall receive raw milk directly from the farm or dairy where the cow, goat, or dairy herd is located . . ." Disallowing owners to have their milk delivered will cause families (including Ronnie's from Williston as testified today) from receiving the milk he needs to thrive.
- 2. Prohibits sharing personal property (milk) with friends.** From section (4): "No person who, as a consumer, obtains raw milk in accordance with this section shall be entitled to sell or redistribute the milk." Outlawing people from sharing their milk with someone else is intrusive of private property.

**This puts licensed *and* hobby farmers in North Dakota at risk of lawsuit by vague wording. Please do not support any amendment to SB 2072.**

You probably have, and will, receive more disapproval of this version of the Dairy Department's amendment.

Thank you for your time! I enjoy discussing this with you.

Sincerely,

Peter Bartlett

---

BARTLETT FARM  
1854 107th St NE  
Bottineau, ND 58318  
701-263-4574  
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Website: <http://BartlettFarm.us>

Like us on Facebook for more updates at [www.facebook.com/ndbartlettfarm](http://www.facebook.com/ndbartlettfarm)

Dear Members of the House Ag Committee--

My name is Annie Carlson; a farmer, consumer and citizen. I have been in attendance at all portions of this bill. At the conclusion of the subcommittee meeting this afternoon, Representative Boschee made the comment "This new amendment should appease the ag department". I was taken aback. It is not the ag department who should be appeased! The Department of Agriculture serves at the pleasure and direction of the Legislature. In turn, the legislature serves the interests of the public.

As many members of your committee have stated, you have received a lot of communication on this issue. Please hear just one more:

Mr. Carlson and Commissioner Goerhing asked you as the House Ag Committee to provide direction on cow/herd shares. Give them that direction. Direct them in no-uncertain terms that cow/herd share is legal in this state. Direct them in no-uncertain terms that cows in a herd/cow share program are private property and therefore not subject to even reporting to the state.

If this direction requires yet another version of an amendment, then please take the time to do so. Representative Boschee told us today that the judicial system would be looking for clear direction from the legislature. Give them that direction! Please remember all the emails, calls and visits you have received regarding this issue and make cow/herd share legal, without strings or reporting or follow-up.

Thank you for listening to all sides of this issue!  
Also, thank you for serving our state and the public good!  
Sincerely,  
Annie Carlson



PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and three new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; and to"

Page 1, line 1, replace "subsection" with "subsections 7 and"

Page 1, line 1, after "sections" insert "4-30-36,"

Page 1, after line 4, insert:

**"SECTION 1. AMENDMENT.** Subsection 7 of section 4-30-01 of the North Dakota Century Code is amended and reenacted as follows:

7. "Dairy or dairy farm" means a place where one or more dairy animals are kept, a part or all of the milk or milk products from which is sold or offered for sale, or transferred in accordance with a shared animal ownership agreement."

Page 1, after line 9, insert:

**"SECTION 3.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement.

**SECTION 4. AMENDMENT.** Section 4-30-36 of the North Dakota Century Code is amended and reenacted as follows:

**4-30-36. Standards for grade A milk and milk products - Adoption of amendments.**

1. Only grade A milk may be sold as fluid beverage for human consumption. The minimum standards for milk and milk products designated as grade A are the same as the minimum requirements of the Pasteurized Milk Ordinance which includes provisions from the "Grade A Condensed and Dry Milk Products and Condensed and Dry Whey - Supplement 1 to the Grade A PMO". The commissioner may adopt other standards in the interest of public safety, wholesomeness of product, consumer interest, sanitation, good supply, salability, and promotion of grade A milk and milk products.

2. It is not a violation of this section to obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement."

Page 2, after line 10, insert:

"**SECTION 8.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Dairy farm registration.**

The owner of a dairy farm that participates in a shared animal ownership agreement shall register with the commissioner by providing a written document that includes:

1. The name of the dairy farm; and
2. The address of the dairy farm.

**SECTION 9.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Requirements.**

A person that transfers an animal's raw milk production in accordance with a shared animal ownership agreement does not violate this chapter if:

1. The dairy farm is registered under section 8 of this Act;
2. The milk is transferred at the dairy farm where the milk-producing animal is located;
3. The individual receiving milk has entered a shared animal ownership agreement with the owner of the dairy farm and is receiving milk on the individual's own behalf or on the behalf of another who has entered a shared animal ownership agreement with the owner of the dairy farm;
4. The shared animal ownership agreement contains a prominent statement warning that:
  - a. The milk is not pasteurized;
  - b. Potential pathogens may be present in the milk; and
  - c. There are potential health concerns associated with the consumption of raw milk or raw milk products; and
5. Annually, the owner of the dairy farm provides to individuals who have entered shared animal ownership agreements with the owner:
  - a. The standards used to ensure the health of the milk-producing animals that are part of the shared animal ownership agreement;
  - b. The standards used to ensure the production of milk;
  - c. The results of any tests performed on the milk-producing animals, together with an explanation of the test results; and



- d. The results of any tests performed on the milk from the milk-producing animals, together with an explanation of the test results.

**SECTION 10.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

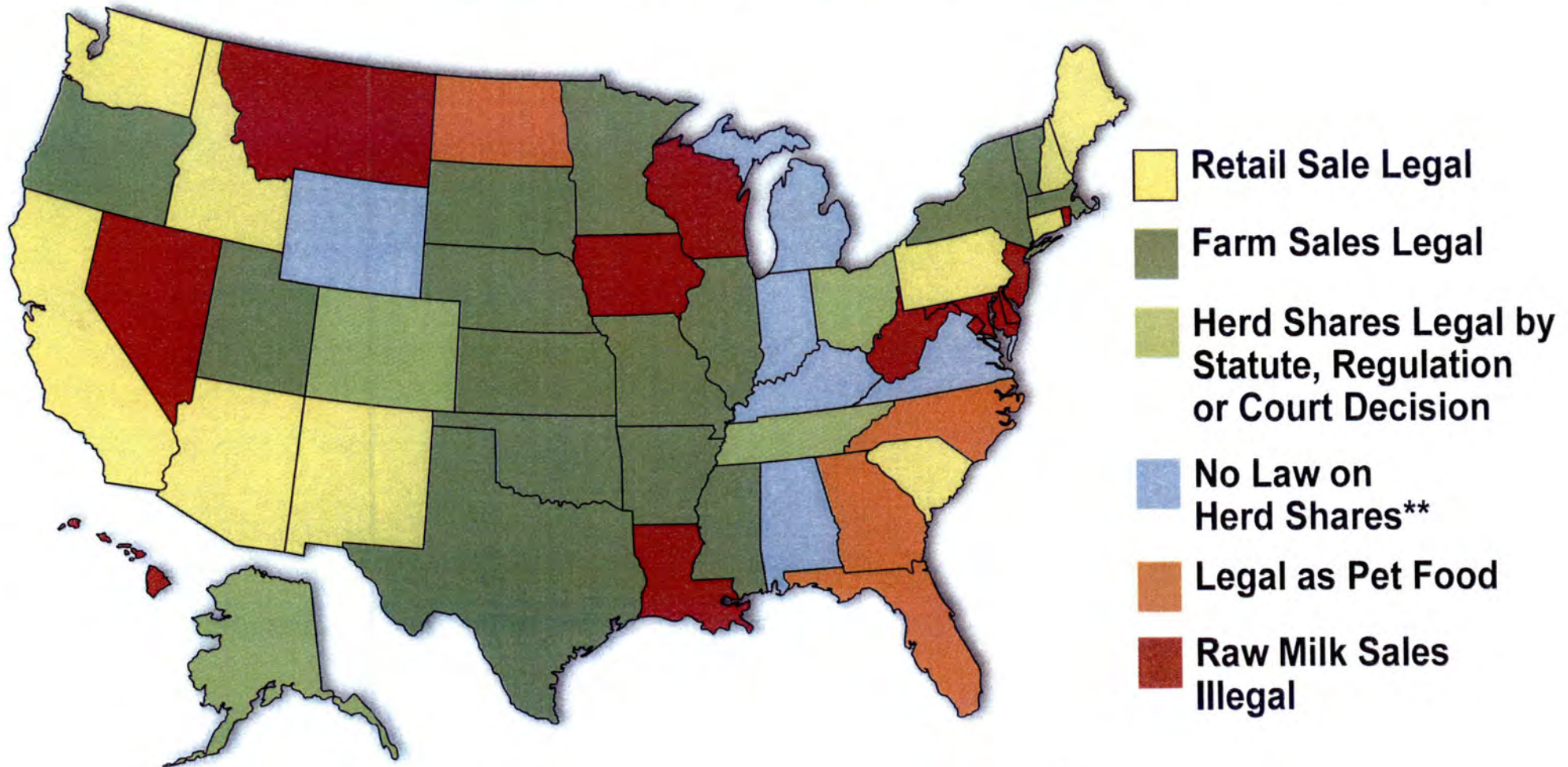
**Shared animal ownership agreement - Prohibition.**

A person may not publish any statement that asserts or implies the approval or endorsement by the commissioner of shared animal ownership agreements and the acquisition of raw milk under such agreements."

Renumber accordingly

# RAW MILK NATION<sup>®</sup>

## State-by-State\* Review of Raw Milk Laws



May 17, 2010

Visit [www.farmtoconsumer.org](http://www.farmtoconsumer.org) for more details and to view an interactive map.

\* Other forms of raw milk distribution may also be allowed in any particular state.

\*\* There is no law either legalizing or prohibiting herd shares. State is aware herd share programs currently exist and has taken no action to try to stop them.



Farm-to-Consumer  
Legal Defense Fund<sup>®</sup>



April 8, 2013

PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

That the House recede from its amendments as printed on pages 1086 and 1087 of the Senate Journal and pages 1171-1173 of the House Journal and that Senate Bill No. 2072 be amended as follows:

Page 1, line 3, after "regulations" insert "; and to provide for a legislative management study"

Page 2, after line 10, insert:

**"SECTION 5. LEGISLATIVE MANAGEMENT STUDY - RAW MILK.** The legislative management shall consider studying the availability of raw or unpasteurized milk, for human consumption, in this state. The study should examine the nature and extent of governmental oversight with respect to the safety of the milk, the health of the animals used to produce the milk, and the conditions under which the product is produced, and transferred or obtained. The legislative management shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixty-fourth legislative assembly."

Renumber accordingly

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# 2

## Why Remove the SB 2072 Amendment?

### *Answers to Common Misunderstandings*

**1. FALSE: Cow-sharing is the same as selling raw milk.**

Cow-sharing is NOT the same as selling raw milk. It works the same way as when somebody purchases a steer to butcher for themselves. Once they own that steer, they can do whatever they want with its meat. If cow-sharing were the same as selling raw milk, the Dairy Director would not have thought it necessary to introduce a new law banning it.

**2. FALSE: Cow-sharing will be illegal unless we pass this amendment.**

Cow-sharing is already legal in ND and protected under private property law. This amendment begins to interfere with what is currently a free market activity.

**3. FALSE: This amendment will allow people more access to raw milk.**

There is nothing in the way of more people starting their own cow-share dairies right now.

**4. FALSE: Registering is necessary so the State can get in contact with cow-share producers if someone gets sick from raw milk.**

If the State wants to know where the milk came from, they can simply ask the person who consumed it.

**5. FALSE: This amendment will protect people who enter into cow-share agreements.**

This is based on the assumptions that 1) cow-shares are sales of raw milk, and 2) people who purchase raw milk can be prosecuted. As we saw above, cow-shares are NOT sales of raw milk. Even if they were misinterpreted as such, the purchaser could still NOT be prosecuted. While it is illegal to sell raw milk in ND, it is not illegal to purchase it. Only the producer in this case could be prosecuted. This amendment only concerns producers. It in no way affects the legal protection of people entering into cow-share agreements.

**6. FALSE: The Ag Department has the best interests of cow-share dairies in mind.**

This amendment was NOT developed by the House Ag Committee, but by the Ag Department. The Ag Department initially presented an amendment to completely ban participation in cow-share dairies and restrict raw milk consumption. While this amendment doesn't go that far, it still represents the negative interests of the Ag Department toward those who wish to consume raw milk.

**CONCLUSION: This amendment does not help cow-share dairies, but is instead unnecessary, unhelpful, and intrusive to private property rights. Please remove the SB 2072 amendment.**



PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

That the House recede from its amendments as printed on pages 1086 and 1087 of the Senate Journal and pages 1171-1173 of the House Journal and that Senate Bill No. 2072 be amended as follows:

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and four new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; and to"

Page 1, line 1, replace "subsection" with "subsections 7 and"

Page 1, line 1, after "sections" insert "4-30-36,"

Page 1, after line 4, insert:

**"SECTION 1. AMENDMENT.** Subsection 7 of section 4-30-01 of the North Dakota Century Code is amended and reenacted as follows:

7. "Dairy or dairy farm" means a place where one or more dairy animals are kept, a part or all of the milk or milk products from which is sold or offered for sale, or transferred in accordance with a shared animal ownership agreement."

Page 1, after line 9, insert:

**"SECTION 3.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement.

**SECTION 4. AMENDMENT.** Section 4-30-36 of the North Dakota Century Code is amended and reenacted as follows:

**4-30-36. Standards for grade A milk and milk products - Adoption of amendments.**

1. Only grade A milk may be sold as fluid beverage for human consumption. The minimum standards for milk and milk products designated as grade A are the same as the minimum requirements of the Pasteurized Milk Ordinance which includes provisions from the "Grade A Condensed and Dry Milk Products and Condensed and Dry Whey - Supplement 1 to the Grade A PMO". The commissioner may adopt as regulations other



standards in the interest of public safety, wholesomeness of product, consumer interest, sanitation, good supply, salability, and promotion of grade A milk and milk products.

2. It is not a violation of this section to transfer or obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement."

Page 2, after line 10, insert:

"**SECTION 8.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Notification of commissioner.**

1. If the owner of a dairy farm licensed to sell grade A or manufacturing grade milk in this state enters a shared animal ownership agreement, the owner shall notify the agriculture commissioner in writing, within thirty days of signing the agreement.
2. If the owner of a dairy farm licensed to sell grade A or manufacturing grade milk in this state entered a shared animal ownership agreement before August 1, 2013, the owner shall notify the agriculture commissioner in writing, no later than September 1, 2013.

**SECTION 9.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Requirements.**

A person that transfers an animal's raw milk production in accordance with a shared animal ownership agreement does not violate this chapter provided:

1. The milk is transferred at the dairy farm where the milk-producing animal is located or delivered to another location in accordance with a shared animal ownership agreement;
2. The individual receiving the milk has entered a shared animal ownership agreement with the owner of the dairy farm and is receiving the milk on the individual's own behalf or on behalf of another who has entered a shared animal ownership agreement with the owner of the dairy farm;
3. The shared animal ownership agreement contains a prominent statement warning that:
  - a. The milk is not pasteurized;
  - b. Potential pathogens may be present in the milk; and
  - c. There are potential health concerns associated with the consumption of raw milk or raw milk products.
4. Annually, the owner of the dairy farm provides to individuals who have entered shared animal ownership agreements with the owner:



- a. The standards used to ensure the health of the milk-producing animals that are part of the shared animal ownership agreement;
- b. The standards used to ensure the production of milk;
- c. The results of any tests performed on the milk-producing animals, together with an explanation of the test results; and
- d. The results of any tests performed on the milk from the milk-producing animals, together with an explanation of the test results.

**SECTION 10.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Prohibition.**

A person may not publish any statement that asserts or implies the approval or endorsement by the commissioner of shared animal ownership agreements and the acquisition of raw milk under such agreements.

**SECTION 11.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Commissioner - Rulemaking authority - Limitation.**

Notwithstanding chapter 28-32, the commissioner may not adopt any rule that restricts, limits, or imposes additional requirements on any individual obtaining raw milk in accordance with the terms of a shared animal ownership agreement."

Renumber accordingly

SUBSTITUTE LANGUAGE TO PROPOSED AMENDMENT 13.8013.01005

Page 2, after line 10, insert:

"SECTION 8. A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Notification of commissioner.**

Annually, the owner of a dairy farm licensed to sell grade A or manufacturing grade milk in this state participating in any shared animal ownership agreements shall notify the commissioner in writing:

- a) The name of the dairy farm; and
- b) The address of the dairy farm.



PROPOSED AMENDMENTS TO SENATE BILL NO. 2072

That the House recede from its amendments as printed on pages 1086 and 1087 of the Senate Journal and pages 1171-1173 of the House Journal and that Senate Bill No. 2072 be amended as follows:

Page 1, line 1, after "to" insert "create and enact a new subsection to section 4-30-01 and four new sections to chapter 4-30 of the North Dakota Century Code, relating to shared animal ownership agreements; to"

Page 1, line 1, replace "subsection" with "subsections 7 and"

Page 1, line 1, after "sections" insert "4-30-36,"

Page 1, line 3, after "regulations" insert "; and to provide for a study"

Page 1, after line 4, insert:

**"SECTION 1. AMENDMENT.** Subsection 7 of section 4-30-01 of the North Dakota Century Code is amended and reenacted as follows:

7. "Dairy or dairy farm" means a place where one or more dairy animals are kept, a part or all of the milk or milk products from which is sold or offered for sale or transferred in accordance with a shared animal ownership agreement."

Page 1, after line 9, insert:

**"SECTION 3.** A new subsection to section 4-30-01 of the North Dakota Century Code is created and enacted as follows:

"Shared animal ownership agreement" means any contractual arrangement under which an individual:

- a. Acquires an ownership interest in a milk-producing animal;
- b. Agrees to pay another for, reimburse another for, or otherwise accept financial responsibility for the care and boarding of the milk-producing animal at the dairy farm; and
- c. Is entitled to receive a proportionate share of the animal's raw milk production as a condition of the contractual arrangement.

**SECTION 4. AMENDMENT.** Section 4-30-36 of the North Dakota Century Code is amended and reenacted as follows:

**4-30-36. Standards for grade A milk and milk products - Adoption of amendments.**

1. Only grade A milk may be sold as fluid beverage for human consumption. The minimum standards for milk and milk products designated as grade A are the same as the minimum requirements of the Pasteurized Milk Ordinance which includes provisions from the "Grade A Condensed and



Dry Milk Products and Condensed and Dry Whey - Supplement 1 to the Grade A PMO". The commissioner may adopt ~~as regulations~~ other standards in the interest of public safety, wholesomeness of product, consumer interest, sanitation, good supply, salability, and promotion of grade A milk and milk products.

2. It is not a violation of this section to transfer or obtain raw milk under a shared animal ownership agreement. However, a person may not resell raw milk or raw milk products obtained under a shared animal ownership agreement."

Page 2, after line 10, insert:

"**SECTION 8.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Notification of commissioner.**

1. If during a calendar year the owner of a dairy farm licensed to sell grade A or manufacturing grade milk in this state enters or continues to participate in a shared animal ownership agreement, the owner shall notify the agriculture commissioner.
2. The notification must be in writing and must be submitted within thirty days after the conclusion of each calendar year.

**SECTION 9.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Requirements.**

A person that transfers an animal's raw milk production in accordance with a shared animal ownership agreement does not violate this chapter provided:

1. The milk is transferred at the dairy farm where the milk-producing animal is located or delivered to another location in accordance with a shared animal ownership agreement;
2. The individual receiving the milk has entered a shared animal ownership agreement with the owner of the dairy farm and is receiving the milk on the individual's own behalf or on behalf of another who has entered a shared animal ownership agreement with the owner of the dairy farm;
3. The shared animal ownership agreement contains a prominent statement warning that:
  - a. The milk is not pasteurized;
  - b. Potential pathogens may be present in the milk; and
  - c. There are potential health concerns associated with the consumption of raw milk or raw milk products.
4. Annually, the owner of the dairy farm provides to individuals who have entered shared animal ownership agreements with the owner:



- a. The standards used to ensure the health of the milk-producing animals that are part of the shared animal ownership agreement;
- b. The standards used to ensure the production of milk;
- c. The results of any tests performed on the milk-producing animals, together with an explanation of the test results; and
- d. The results of any tests performed on the milk from the milk-producing animals, together with an explanation of the test results.

**SECTION 10.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Shared animal ownership agreement - Prohibition.**

A person may not publish any statement that asserts or implies the approval or endorsement by the commissioner of shared animal ownership agreements and the acquisition of raw milk under such agreements.

**SECTION 11.** A new section to chapter 4-30 of the North Dakota Century Code is created and enacted as follows:

**Commissioner - Rulemaking authority - Limitation.**

Notwithstanding chapter 28-32, the commissioner may not adopt any rule that restricts, limits, or imposes additional requirements on any individual transferring or obtaining raw milk in accordance with the terms of a shared animal ownership agreement.

**SECTION 12. LEGISLATIVE MANAGEMENT STUDY - RAW MILK.** The legislative management shall consider studying the availability of raw or unpasteurized milk, for human consumption, in this state. The study should examine the nature and extent of governmental oversight with respect to the safety of the milk, the health of the animals used to produce the milk, and the conditions under which the product is produced, and transferred or obtained. The legislative management shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixty-fourth legislative assembly."

Renumber accordingly