

S.70 Testimony prepared by Jennifer T. Hull DVM
House Agriculture Committee
April 10, 2014

I am Jennifer T. Hull DVM, an accredited veterinarian in Vermont and member of the Vermont Veterinary Medical Association (VVMA). I am one of the owners of Northwest Veterinary Associates, a dairy cattle exclusive veterinary practice, located in St. Albans, VT. I live on a fourth generation dairy farm with my husband, where we milk 85 registered Holsteins. This gives me the opportunity to testify today as a veterinarian as well as a dairy farmer.

I greatly urge you to not allow this bill to pass as written. The sale and consumption of unpasteurized milk can be dangerous, and is a major cause for concern in regards to food safety and public health. There are many organisms found in raw milk that can make humans ill, and even cause death. These include Brucella, Campylobacter, Listeria, Mycobacterium Bovis (cause of Tuberculosis), Salmonella, E. Coli, Shigella Yersinia, parasites such as Giardia, and viruses such as Norovirus. Mild illnesses can range from diarrhea, stomach cramping and vomiting. More serious illnesses such as paralysis, abortion, kidney failure, and death can occur. Children are affected much more frequently, due to their developing immune systems, as well as anyone with a suppressed immune system. Even young healthy adults can fall ill, as I did back in 2010. I succumbed to Campylobacter and ended up in the hospital. It was a terrible illness, and I do not ever again wish to be exposed to the bacteria that made me so ill!

From 1998-2011 there were 148 reported outbreaks resulting in 2,384 illnesses, 284 hospitalizations, and 2 deaths. A large percentage of those that fell ill were children. It is also important to remember that raw milk illness is likely underreported. Major outbreaks are usually all that are publicized, and those are just the tip of the iceberg. Many individuals will fall ill after consuming raw milk and attribute it to a flu virus, or do not make the effort to report it to the proper departments.

It is important to remember these organisms can be found in the milk of healthy appearing cows, and be present no matter how clean the farm tries to keep the cows and milking equipment. We take great pride on our farm to keep the cows clean and healthy, and to harvest the milk in a very sanitary environment. That being said, we do not take the risk of selling or drinking raw milk from our dairy. Pasteurization is a safe and incredibly effective technology that exists to make our food product safe. Milk is healthy, but the presence of bacteria is a natural occurrence. Just think of the many ways the bacteria can end up in the raw milk. As clean as one tries to be, cow manure can end up in the milk, bacteria is and will be found on the skin of the cows' udder, and healthy appearing cows can be shedding organisms directly in the milk. Raw milk will look to be normal appearing because these organisms are microscopic and cannot be seen with the naked eye. There is no way for the consumer to tell what organisms are present in the raw milk prior to drinking it.

One of my biggest concerns with S.70 is that those selling less than 12.6 gallons a day do not have to routinely test the milk for pathogens. I strongly feel all producers selling raw milk should be required to test the milk routinely, regardless of the amount sold per day. One single serving could be enough to make a person fall ill or end up hospitalized. As S.70 is written, those selling between 12.6-40 gallons a day only have to test the milk twice a month. Every day a cow can shed different pathogens or contaminate the milk with organisms. Just because the milk tested yesterday did not have harmful pathogens present, does not mean that the milk being produced today is also safe. Even if the milk was cultured and tested daily, the milk could still contain viruses or parasites, as those do not show up on the bacterial count tests. The only way to ensure milk sold is free of pathogens, is to have the milk pasteurized. I am quite surprised that a society so concerned with safe food would be willing to sell and drink such an unpredictable and untested product, when the technology to make a safe product is available and affordable.

As a veterinarian, I am also concerned with producers' lack of compliance when it comes to following the bill as already written. As far as I know in our entire practice area, there is only one herd who has complied with the raw milk regulations by having their entire herd vaccinated for rabies and tested for Brucellosis and Tuberculosis. These are all very real and serious diseases. Rabies vaccination for cattle is not required by law unless raw milk is being sold from the farm. The vaccines are expensive, and the majority of our commercial clients selling pasteurized milk no longer vaccinate cattle. When pasteurization occurs, the rabies virus if present, would be destroyed. Unfortunately this is not the case when raw milk is sold from a rabid cow. There are been incidents like the one in 2005 in Oklahoma where a cow died from rabies and the milk from the animal had been sold and consumed by many individuals. The herd was not vaccinated for rabies, even though raw milk was being sold to consumers. Although there was minimal risk that those who consumed the milk would become ill with rabies, this disease is fatal to humans. Luckily post-exposure prophylaxis treatment (PEP) can be effective against the virus, and due to the number of raw milk drinkers that were potentially exposed, a public health alert was issued by the Health Department and 62 individuals began PEP treatment. This cost for PEP treatment was between \$2,500-4,000 per person! This expensive treatment is not always covered under insurance, so this was a very expensive outbreak for many families. There needs to be some sort of enforcement of these rules and regulations to make the raw milk as safe as possible if producers are not complying with the regulations. Rabies vaccination is crucial, as well as testing cattle for Tuberculosis and Brucellosis. With 50 confirmed cases of Rabies in various species here in Vermont in 2013, this a very real concern in our state.

As the number of dairy farms in our state continues to dwindle, it is important that those farms we do have left continue to survive as operating dairies. Insurance companies often don't cover the dairy farmer/farm if they sell raw milk. The insurance companies recognize the risk and do not insure the producer. Half of those producers that responded to the Rural Vermont's 2013-2014 Raw Milk Report Survey stated that they have no insurance covering their raw milk operation. Those that have insurance state that their rates have gone up since insuring the raw milk operation. That is frightening for the farm/dairy industry because if an outbreak were to occur, the cost of treatment and/or potential lawsuits could put dairy farms out of business. Those that sell the raw milk are willing to risk peoples' lives to make more profit per gallon of milk produced. Here at our farm, we would rather sell a safe pasteurized product to the public, knowing that we will not cause harm to those who drink our milk.

The dairy industry as a whole wants to continue to increase the fluid milk sales and promote milk as a healthy product. By having producers sell raw milk, I strongly feel that it is a huge risk for the entire dairy industry. When people fall ill from drinking raw milk, it is a black eye for the dairy industry that works hard to provide a safe food product. Pasteurization does not change the nutritional components of milk, and there are no adverse effects to the product when pasteurization occurs. There is no scientific evidence that raw milk is any more beneficial than pasteurized milk, but there is plenty of evidence that raw milk is a risk to human health. As a veterinarian, and dairy producer, I strongly urge you to examine all of the facts about raw milk and how it negatively impacts food safety, human health, and the dairy industry as a whole.

Please feel free to contact me with any further questions you may have.

Respectfully,

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REFERENCES for S.70 testimony 3/8/2014

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