

The Association of Montana Public Health Officials, The Montana Environmental Health Association and the Montana Public Health Association oppose HB 574 for the following reasons:

Raw Milk and Disease

- Raw milk and other raw products made from raw milk contribute to significantly more outbreaks than pasteurized milk and milk products. CDC estimates that the risk of an outbreak from raw milk is 150 times greater than the risk from pasteurized milk. Although only 1-3% of the US population is believed to drink raw milk, more than half of all dairy outbreaks can be attributed to raw milk/products.
- Since 1998, a total of 119 outbreaks, 2,147 illnesses, and 2 deaths have been attributed to consumption of raw milk, raw colostrum and raw milk products. Outbreaks are associated with raw cows' milk and raw goat's milk, as well as cheese made from raw milk.
- Proportionally, pasteurized milk/products account for far fewer outbreaks. Since 1998, a total of 26 outbreaks have occurred even though pasteurized milk accounts for 97-99% of all milk consumed in the United States.
- Top pathogens implicated in raw milk outbreaks in the United States include *Campylobacter*, *E. coli* O157:H7, *Salmonella*, *Listeria monocytogenes*, and *Brucella*. However many other pathogens have been identified in raw milk, including causes of shigellosis, toxoplasmosis, yersiniosis, Q fever, and bovine tuberculosis. *Mycobacterium paratuberculosis*—the organism responsible for Johne's and suspected etiological agent of Crohn's disease in humans—has also been found in raw milk.
- Young people under 20 years old represent approximately 60% of raw milk illnesses during outbreaks reported to CDC. Raw milk is also more likely to cause hospitalization from the most dangerous foodborne pathogens such as *E. coli* O157:H7. In contrast, *E. coli* O157 outbreaks have not been attributed to pasteurized milk in the US.

Position statements by Professional Organizations and Agencies

- American Medical Association (AMA) "The AMA reaffirms its policy that all milk sold for human consumption should be required to be pasteurized"
- American Veterinary Medical Association (AVMA) "Because apparently healthy cows and goats can shed in their milk organisms which are pathogenic to human beings and may cause diseases...only pasteurized milk and milk products should be sold. Furthermore, the AVMA supports laws requiring pasteurization of all milk to be sold..."
- Food and Drug Administration (FDA) "In light of research showing no meaningful difference in the nutritional value of pasteurized and unpasteurized milk, FDA and CDC have also concluded that the health risks associated with the consumption of raw milk far outweigh any benefits derived from its consumption...The U.S. Food and Drug Administration...strongly advises against the consumption of raw milk."
- American Academy of Pediatrics (AAP) "Children...should never drink raw milk or consume products made from raw milk, such as cheese or yogurt"

Medical and Public Health/Livestock response costs

There is limited information available concerning the total costs of a raw milk outbreak. We do know that *E. coli* O157 can cause death and often causes kidney damage. An *E. coli* O157 outbreak in Connecticut in 2008 linked to raw milk sold. The average medical cost for a hospitalized case patient was \$72,904. The average cost per case-patient incurred by government investigative and response activities was \$3,491. Other *E. Coli* individual costs from raw milk outbreaks have been documented up to \$550,000.

Amendments necessary to insure adequate information and public protection

1. Farms should be required to have insurance coverage sufficient to cover reasonable damages to their customers. A one million dollar liability policy would not be unreasonable.
2. Warning signs on products and at point-of-purchase should be mandatory. An example:



Unpasteurized milk, also known as raw milk, is a raw agricultural product and may contain harmful bacteria (not limited to E. coli, Campylobacter, Listeria, and Salmonella) and can lead to serious injury and even death. Pregnant women, infants, children, the elderly, and persons with lowered resistance to disease (immune compromised) have higher risk for harm, which may include bloody diarrhea, vomiting, fever, dehydration, Hemolytic Uremic Syndrome, Guillian-Barre Syndrome, Reactive Arthritis, Irritable Bowel Syndrome, miscarriage, or death.

3. 11 states that allow raw milk sales have a coliform standard of $< 10/\text{mL}$ (AZ, CA, ME, NH, NV, OR,, PA, SC, UT,VT, WA) New section 2 of HB 574 would allow up to 25 per milliliter (there are 3785 milliliters in a gallon). The coliform standard in the bill should be lowered to <10 .
4. New section 1 of house bill 574 defines a small herd as “ fewer than 15 lactating cows, 30 lactating goats, or 30 lactating sheep, except that the dairy herd may include other cows, goats, or sheep that are not lactating or are producing milk for purposes other than human consumption.” This represents a large amount of raw milk. Lactating cows will produce about 6.5 gallons of milk per day. 15 cows represents about 100 gallons of milk per day. Larger herd size represents more risk because the milk is usually comingled for cold storage. On infected cow contaminates all of the milk. The smaller the herd size, the lower the risk of a large outbreak. For example Oregon allows sales of raw milk only from farms with no more than two producing cows, nine producing sheep and/or 9 producing goats. The allowed herd size in this bill should be lowered to not more than 5 cows or 15 goats or sheep.

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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author details the various methods used to collect and analyze the data. This includes both primary and secondary research techniques. The primary research involved direct observation and interviews with key stakeholders. The secondary research focused on reviewing existing literature and industry reports.

The third section presents the findings of the study. It highlights several key trends and patterns observed in the data. These findings are supported by statistical analysis and are presented in a clear and concise manner.

The fourth section discusses the implications of the findings. It explores how the results can be used to inform decision-making and to identify areas for improvement. The author also addresses the limitations of the study and suggests directions for future research.

Finally, the document concludes with a summary of the key points. It reiterates the importance of the research and the value of the findings. The author expresses gratitude to the participants and the funding organization.

The document is a comprehensive report that provides a detailed overview of the research process and the results. It is a valuable resource for anyone interested in the field.