

Testimony in Support of House Bill 1449 – FAVORABLE WITH AMENDMENTS

Public Health – Milk Products – Direct-to-Consumer Sale of Raw Milk for Human Consumption
Before the Health and Government Operations Committee: March 10, 2025

The Public Health Law Clinic submits this testimony in support of House Bill 1449, with amendments. Although Maryland prohibits the sale of raw milk for human consumption, many people continue to purchase it illicitly.¹ House Bill 1449 seeks to legalize the sale of raw milk while imposing risk-mitigating sales restrictions, including (1) veterinarian certification that the cattle producing the milk are in good health and free from communicable disease, (2) regular pathogen testing, (3) a warning label, and (4) requiring milk to be cooled to forty degrees Fahrenheit within two hours of milking. By allowing the sale of raw milk under these conditions, House Bill 1449 would make this product safer to consume and reduce the associated risk of foodborne illness. However, because the retail sale of raw milk creates a significantly greater risk of foodborne illness than on-farm sales, and limiting the sale of raw milk to farms would benefit small and mid-sized Maryland farmers, House Bill 1449 should be amended to prohibit the sale of raw milk in retail stores. Additionally, because the current Avian Flu outbreak in dairy cattle poses an ongoing risk to the consumption of raw milk, House Bill 1449 should be amended to delay the effective date until October 1, 2026.

Consuming Raw Milk Carries a Risk of Foodborne Illness

Studies indicate between 13 and 30 percent of raw milk samples contain at least one type of pathogen, such as *Campylobacter*, *Salmonella*, or *Listeria*.² Consuming food contaminated with these pathogens can cause foodborne illness, which may produce symptoms, including diarrhea, stomach cramping, vomiting, paralysis, kidney failure, or even death.³ Despite advancements in modern medicine, foodborne illness continues to burden the U.S. The Centers for Disease Control (CDC) estimates foodborne illness is responsible for hospitalizing 53,300 Americans and killing 931 each year.⁴ Foodborne illness outbreaks disproportionately impact vulnerable populations including children under five, adults older than sixty-five, and pregnant individuals.⁵

¹ MD HEALTH CODE § 21-434; BALTIMORE FOOD SHED, *Raw Milk in Maryland*, <https://www.baltimorefoodshed.com/raw-milk-in-maryland/> (Oct. 23, 2020); U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *Raw Milk*, <https://www.cdc.gov/food-safety/foods/raw-milk.html> (last visited Mar. 3, 2025); Whitney R. Morgan, *The Prohibition of Mooshine: A Consumer Protection Analysis of Raw Milk in Interstate Commerce*, 117 W. VA. L. REV. 385, 413-14 (2014).

² John A. Lucey, *Raw Milk Consumption*, 27 NUTRITION TODAY 189, 190 (2015).

³ U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *Raw Milk*, <https://www.cdc.gov/food-safety/foods/raw-milk.html#:~:text=Symptoms%20of%20foodborne%20illness%20from,%2C%20stroke%2C%20or%20even%20death> (last visited Mar. 3, 2025).

⁴ U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *Burden of Foodborne Illnesses*, <https://www.cdc.gov/foodborneburden/burden/index.html> (last updated Mar. 3, 2025).

⁵ U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *Raw Milk*, <https://www.cdc.gov/food-safety/foods/raw-milk.html#:~:text=milk%2Dborne%20illnesses> (last visited Mar. 3, 2025).

In 1864, Louis Pasteur invented pasteurization, a method of “heating liquids at high temperatures for short amounts of time” to kill harmful microbes.⁶ Although pasteurization was not initially designed for milk, it was soon discovered that pasteurizing milk combats disease without causing harm or interfering with the integrity of the milk.⁷ As a result, many cities, states, and eventually the Food and Drug Administration (FDA) mandated the pasteurization of milk.⁸

The pasteurization of dairy has significantly improved public health. Pasteurization reduced the proportion of foodborne illness attributed to dairy from 25% to less than 1% and reduced the percentage of tuberculosis cases attributed to dairy from 10% to 2%.⁹ Similarly, the pasteurization of dairy played a significant role in reducing the infant mortality rate from approximately 180 to 5 per 1,000 births.¹⁰

There has Been a Rise in the Sale and Consumption of “Black Market” Raw Milk

Despite the positive impact that the pasteurization of milk has had on public health, there has been a notable surge nationally in the sale and consumption of raw dairy in recent years, with weekly raw milk sales increasing between 21% and 65% from 2023 to 2024.¹¹ This trend is driven by claims that raw dairy is more nutritious and contains healing properties not offered in pasteurized dairy, the food freedom movement, skepticism towards food regulation, and a desire to support small, local farms.¹² Although the FDA proved there are no health benefits and only risks to consuming raw instead of pasteurized milk, the demand for raw dairy continues to grow.¹³

⁶ VA. DEPT. HEALTH, *Pasteurization*, <https://www.vdh.virginia.gov/environmental-health/food-safety-in-virginia/milk-safety/pasteurization/#:~:text=This%20process%20was%20named%20%E2%80%9Cpasteurization,%3D%20all%20bacteria%20are%20destroyed> (last updated Feb. 24, 2017).

⁷ U.S. Food & Drug Admin., *Raw Milk Misconceptions and the Danger of Raw Milk Consumption*, <https://www.fda.gov/food/buy-store-serve-safe-food/raw-milk-misconceptions-and-danger-raw-milk-consumption> (last updated Mar. 5, 2024).

⁸ S.A. Rankin et al., *A 100-Year Review: A Century of Dairy Processing Advancements—Pasteurization, Cleaning and Sanitation, and Sanitary Equipment Design*, 100 J. DAIRY SCI. 9903, 9915 (2017).

⁹ John A. Lucey, *Raw Milk Consumption*, 27 NUTRITION TODAY 189, 190 (2015).

¹⁰ Russell W. Currier & John A. Widness, *A Brief History of Milk Hygiene and Its Impact on Infant Mortality from 1875 to 1925 and Implication for Today: A Review*, 81 J. FOOD PROTECTION 1713, 1713, 1716 (2018).

¹¹ JoNel Aleccia, *Raw Milk Sales Spike Despite CDC’s Warnings of Risk Associated with Bird Flu*, PBS NEWS (May 14, 2024), <https://www.pbs.org/newshour/health/raw-milk-sales-spike-despite-cdcs-warnings-of-risk-associated-with-bird-flu>.

¹² Liz Flora, *Raw Milk: The Influencer Wellness Fad with a Side of Bird Flu*, BOF (Dec. 9, 2024), <https://www.businessoffashion.com/articles/professional/raw-milk-the-influence-wellness-fad-with-a-side-of-bird-flu/>; Jennifer Brown, *Colorado’s Long Battle Over Raw Milk is Reenergized by the “Food Freedom” Movement*, CO. SUN (last updated Sept. 11, 2023); Keren Landman, *Why Do Americans Keep Drinking Raw Milk?*, VOX (May 16, 2024), <https://www.vox.com/24158356/raw-milk-pasteurization-h5n1-bird-flu-sales-consumption-government-trust>.

¹³ U.S. Food & Drug Admin., *Raw Milk Misconceptions and the Danger of Raw Milk Consumption*, <https://www.fda.gov/food/buy-store-serve-safe-food/raw-milk-misconceptions-and-danger-raw-milk-consumption> (last updated Mar. 5, 2024); Laura Doan, *Influencers Promote Raw Milk Despite FDA Health Warnings as Bird Flu Spreads in Dairy Cows*, CBS NEWS (May 15, 2024), <https://www.cbsnews.com/news/bird-flu-raw-milk-influencers-fda-warning/#:~:text=Since%20the%20bird%20flu%20virus,fraction%20of%20overall%20milk%20sales>.

Maryland is not immune to this trend despite that the sale of raw milk for human consumption is prohibited. Consumers frequently purchase “black market” raw milk in nearby states where it is legal, online, or by purchasing raw milk intended to be sold for pet consumption.¹⁴ Baltimore Food Shed posted a list of all the different places and ways to buy raw milk in Maryland, most of which are local farms that sell raw milk for pet consumption.¹⁵

Black market raw milk poses a higher risk of foodborne illness than legally regulated raw milk for several reasons. First, the conditions under which people purchase raw milk often lead to unsafe food conditions. For example, individuals who travel across state lines to buy raw milk may experience a long commute, increasing the likelihood that pathogens will multiply if the milk is not kept at a safe temperature.¹⁶ This event occurred in 2012 when several Maryland residents contracted *Campylobacteriosis* from driving to Pennsylvania to buy raw milk.¹⁷ Similar dangers can arise when raw milk is shipped illegally. In 2014, raw milk illegally shipped from Pennsylvania caused a multistate *Listeriosis* outbreak, resulting in the death of one Florida consumer. The investigation took two years to identify the source of the outbreak, highlighting that black market raw milk delays outbreak identification and recall efforts, thus prolonging public health risks.¹⁸

Second, black market raw milk is less likely to comply with food safety restrictions that reduce the risk of foodborne illness, such as regular animal and pathogen testing as proposed in House Bill 1449.¹⁹ For instance, Maryland permits the sale of raw dairy for pet consumption but does not impose risk-mitigating regulations beyond a warning label.²⁰ Thus, when Maryland residents consume raw milk intended for pet consumption, they face higher risk of foodborne illness than if they consumed raw milk intended for human consumption and subject to stringent safety regulations.

Given that Maryland does not prevent the consumption of raw milk by prohibiting its sale for human consumption, House Bill 1449 is a public health measure. The Bill would decrease the risk of foodborne illness attributed to raw dairy consumption by reducing black market sales of raw milk and imposing safety regulations on these products making them safer for human consumption.

¹⁴ Whitney R. Morgan, *The Prohibition of Mooshine: A Consumer Protection Analysis of Raw Milk in Interstate Commerce*, 117 W. VA. L. REV. 385, 399-402 (2014); Nicholas Florko, *My Rendezvous with the Raw Milk Black Market: Quick, Easy, and Unchecked by the FDA*, STAT (May 15, 2024).

¹⁵ BALTIMORE FOOD SHED, *Raw Milk in Maryland*, <https://www.baltimorefoodshed.com/raw-milk-in-maryland/> (Oct. 23, 2020).

¹⁶ U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *Raw Milk*, <https://www.cdc.gov/food-safety/foods/raw-milk.html#:~:text=milk%2Dborne%20illnesses> (last visited Mar. 3, 2025).

¹⁷ MD DEPT. HEALTH, *DHMH Confirms Presence of Campylobacter in Raw Milk from Pennsylvania Farm* (Feb. 1, 2012).

¹⁸ U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *2016 Outbreak of Listeria Infections Linked to Raw Milk Produced by Miller’s Organic Farm in Pennsylvania*, https://archive.cdc.gov/www_cdc_gov/listeria/outbreaks/raw-milk-03-16/index.html (last updated Dec. 14, 2016).

¹⁹ Whitney R. Morgan, *The Prohibition of Mooshine: A Consumer Protection Analysis of Raw Milk in Interstate Commerce*, 117 W. VA. L. REV. 385, 413-14 (2014).

²⁰ COMAR 15.18.09.04.

The House Bill 1449 Permit Qualifications Would Reduce the Risk of Foodborne Illness from Raw Milk

Because Maryland residents continue to purchase unpasteurized milk despite its illegal status and health risks, it is necessary to restrict the sale of raw milk to make it safer to consume. House Bill 1449 requires raw milk producers to obtain a permit from the Secretary of Health, the qualifications of which include (1) a confirmation from a veterinarian that the herd is in good health and free from communicable disease, (2) regular pathogen testing of the milk, (3) a warning label on raw milk packages, and (4) for the milk to be cooled to forty degrees Fahrenheit within two hours of milking. These restrictions have been proven to decrease the risk of foodborne illness. Requiring producers to obtain a permit before selling raw milk “provide[s] a log of producers to track consumption and outbreaks,” mandatory warning labels improve consumer awareness of product risks, periodic animal and milk testing prevents foodborne outbreaks, and cooling raw milk to forty degrees Fahrenheit or less within two hours slows bacteria growth.²¹ Because these tools decrease the risk of foodborne illness, uniformly implementing these sales restrictions would reduce the incidence of disease associated with raw dairy consumption.

Amendment 1: Prohibit the Sale of Raw Milk in Retail Stores

Restricting raw milk sales to on-farm only significantly reduces the incidence of related foodborne illnesses. A study that analyzed all foodborne illness outbreaks linked to raw milk from 1998-2018 found that states where the retail sale of raw milk is legal have a 3.6 times greater number of outbreaks compared to states where the sale was only allowed on farms.²² This danger is evident from the severity of recent foodborne illness outbreaks. One *Salmonella* outbreak linked to raw milk sold in California retail stores in 2023 sickened at least 165 people, 40% of which were children younger than five. The outbreak caused twenty-two people to seek emergency care, with one infected nine-year-old child spending three days in the hospital. The widespread impact of the epidemic deemed it “the largest recorded outbreak connected to unpasteurized milk in more than two decades.”²³ Thus, amending House Bill 1449 to restrict the sale of raw milk to on-farm only would significantly reduce the incidence and risk of related foodborne illness while still minimizing the black market and increasing access for those who prefer to consume raw milk.

Eliminating retail sales would also support small and mid-sized farmers in Maryland who have struggled under the industry consolidation. The increased consumer demand to purchase raw dairy from local farms provides a niche market for small and midsized dairy farmers to

²¹ Katelyn Atwood, *Raw Milk: The CDC’s Call for Regulation and Current State Statutes*, 14 ENV’T LIT. & TOXIC TORTS COM. NEWSLTR. 1, 1 (2013); Megan Loder, *A Raw Deal: Why Texas Should Relax and Let Dairies Bring Their Milk into Town*, 15 TEX. TECH. ADMIN. L. J. 231, 246-47 (2013); ILL. DEPT. PUB. HEALTH, *Raw Milk and Your Health*, <https://dph.illinois.gov/topics-services/diseases-and-conditions/respiratory-disease/diseases/influenza/h5n1/raw-milk.html> (last visited Mar. 1, 2025); Whitney R. Morgan, *The Prohibition of Mooshine: A Consumer Protection Analysis of Raw Milk in Interstate Commerce*, 117 W. VA. L. REV. 385, 427 (2014).

²² Lia Koski et al., *Foodborne Illness Outbreaks Linked to Unpasteurized Milk and Relationship to Changes in State Laws – United States, 1998-2018*, 150 EPIDEMIOLOGY & INFECTION 1, 6 (2022).

²³ Alice Callahan, *Raw Milk is Booming. A Salmonella Outbreak Highlights its Risks*, NEW YORK TIMES (July 19, 2024).

thrive.²⁴ Additionally, producing raw dairy is more profitable for small and mid-sized farmers since they would benefit from the high market price of raw dairy without the associated costs of pasteurization.²⁵ Accordingly, restricting the sale of raw milk to on-farm sales would decrease the risk of foodborne illness while supporting small and mid-sized Maryland farms.

Amendment 2: Delay the Effective Date of House Bill 1449 until October 1, 2026

If passed, House Bill 1449 will take effect on October 1, 2025. The effective date should be delayed by one year because there is currently a multi-state outbreak of Avian Flu in dairy cows. Avian flu can cause eye infections, upper respiratory symptoms, pneumonia, or death. Because pasteurization is the most effective way to reduce the risk of contracting the Avian flu, House Bill 1449 should be delayed by a year to allow the epidemic to resolve before raw milk is widely available to drink in Maryland.²⁶

Conclusion

Although pasteurization is the most effective way to reduce the risk of foodborne illness from milk consumption, the demand for raw milk continues to grow. By legalizing raw milk and implementing safety restrictions on the sale of this product, House Bill 1449 would make raw milk safer to consume, ultimately improving public health. However, to further reduce the risk of illness, House Bill 1449 should prohibit the sale of raw milk in retail stores and delay the effective date until October 1, 2026. For these reasons, we request a favorable with amendments report on House Bill 1449.

This testimony is submitted on behalf of the Public Health Law Clinic at the University of Maryland Carey School of Law and not by the School of Law, the University of Maryland, Baltimore, or the University of Maryland System.

²⁴ Abby Rockefeller, *Could Raw Milk Reinvent the Future of Dairy?*, BARN RAISER (July 17, 2023), <https://barnraisingmedia.com/raw-milk-dairy-farms-drinkers-local-economies-big-ag/>; Sarah Mueller, *Raw Milk Could Save Delaware's Dairy Industry. But the Risks can be Life-Threatening*, WHYY PBS (Oct. 14, 2024), <https://whyy.org/articles/delaware-raw-milk-legislation-dairy-farmers/>; Alexia Kulwicz, *Viability of Small to Mid-Sized Agriculture*, 26 DRAKE J. AGRIC. L. 85 (2021).

²⁵ Christinia Tkacik, *The Dish: Raw Milk is Controversial. For one Local Creamery, It's the Future*, BALTIMORE BANNER (Feb. 19, 2025).

²⁶ U.S. CTR. FOR DISEASE CONTROL & PREVENTION, *Current Situation: Bird Flu in Dairy Cows*, <https://www.cdc.gov/bird-flu/situation-summary/mammals.html> (last visited Mar. 2, 2025); U.S. FOOD & DRUG ADMIN., *Investigation of Avian Influenza A (H5N1) Virus in Dairy Cattle*, <https://www.fda.gov/food/alerts-advisories-safety-information/investigation-avian-influenza-h5n1-virus-dairy-cattle> (last updated Jan. 17, 2025).