The National Environmental Health Association (NEHA) represents more than 7,000 governmental, private, academic, and uniformed services sector environmental health professionals in the U.S., its territories, and internationally. This workforce represents the second largest constituent of the existing public health workforce, second only to nursing. We are the profession's strongest advocate for excellence in the practice of environmental health as we deliver on our mission to build, sustain, and empower an effective environmental health workforce.

Policy Statement on Raw Milk

Adopted: July 2023 Policy Sunset: July 2028

NEHA recognizes the nutritional value of milk, as well as the scientific evidence that raw milk or products made from raw milk can transmit pathogenic bacteria to the consumer. NEHA further recognizes the scientific and public health evidence that pasteurization of milk is proven to be a sound method of preventing diseases caused by raw milk and raw milk products. Altho ugh, cheese that is made from raw milk should not be consumed, the U.S. does allow raw cheese that has been aged for 60 days or more to be sold (Cheeses and Related Cheese Products, 2023).

NEHA specifically recommends the following:

- x Implement I egislation that requires pasteurization of all milk prior to sale or distribution to the final consumer, regardless of if a fee is charged.
- x Adopt current best practices in food safety by state, local, tribal, territorial, and federal government agencies, as well as industry food safety professionals, to identify, eliminate, and mitigate potential food safety hazards inherent to their operations.
- x Educate consumers about the dangers inherent in consuming unpasteurized milk or products made from raw milk.
- x Prevent arrangements such as cow shares, herd sharing, bartering, exchange, or any other action that would allow the consumer to obtain a portion of the production of raw, unpasteurized milk from a cow, sheep, or goat.
- x Require labeling on containers that warns the consumer that the product is raw milk and could cause illness since it has not been pasteurized.

NEHA has long supported preventive measur es to protect the safety of food for the public. NEHA acknowledges the importance of milk as a source of nutrition and is concerned about the safety of milk and milk products. The position of NEHA regarding raw milk is consistent with £ u · j S • £ H j nprewentive public health measures.

Analysis

The U.S. Public Health Service (USPHS) milk sanitation program states that no other food surpasses milk as a single source of obtaining essential nutrients needed for optimal health across all life stages. (U.S. ' ~ n > h j - u 9 • P n _ B • n j • P · h n j • ® > l H £S• cR•sH_[•H: rich food that provides essential nutrients such as protein, calcium, phosphorus, and vitamins A, D, B12, riboflavin (B2), niacin (B3), and pantothenic acid (B5) (National Dairy Council, 2021).

In its raw state, milk contains a diverse bacterial population, some of which might be pathogenic, including but not limited to Salmonella spp., Staphylococcus aureus, Listeria spp., E. coli, Campylobacter spp., Brucella spp., Yersinia enterocolitica, Shigella spp., and Cryptosporidium parvum (Gopfert et al., 2021; Quiqley et al., 2013). These bacteria are present in raw milk from all dairy animals, including cows, goats, and sheep. The process of pasteurization has been used for more than 100 years to destroy pathogenic bacteria that are present in raw milk (Schmidt & Davidson, 2008). The Food and Drug Administration (FDA, 2022), World Health Organization (WHO, 2001), and Centers for Disease Control and Prevention (o)-1. (n.002 Tc7.2 (i)0.5 (oH Tw -1(-1. 2 (oHe)2 (t al))TJ 15.262 0 s1 1 15.989 84)-7.9 84)-7.7 (u).8 (o)-

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- x The Orange County Health Care Agency reported that three people became ill with campylobacteriosis after consuming raw goat milk from a farm. As a result, one individual was hospitalized (Outbreak Database, 2023c).
- x The Tennessee Department of Health reported that two people became ill with cryptosporidiosis after consuming raw milk from a share program for dairy cows (Outbreak Database, 2023d).
- x State and local public health officials and laboratory and agriculture agencies in Virginia reported that 14 people became ill after consuming raw milk from a herd share program. The vast majority of people that became ill were children. Of the cases, four H j H l H · ñ _ £ Đ · u j 9 H · h ⁻ u B ñ l B ñ jnű j·nu€ · Hej®•B H : ñ ⁻ u Õ H coli and three individuals developed hemolytic uremic syndrome (Ferrell, 2017).
- x Local and public health officials in Colorado reported that 17 people became ill after consuming raw milk from a herd share program. A total of 12 individuals were confirmed to have had Campylobacter jejuni. Two milk samples obtained from the herd share program and from an ill shareholder yielded positive results for the outbreak strain (Burakoff et al., 2018).
- x State and local public health officials and agriculture agencies in Michigan reported that four people became ill with E.coli O157:H7 after consuming raw milk from a herd share program. As a result, two individuals were hospitalized. (Outbreak Database, 2023e).
- x Washington health and agriculture agencies reported that three people became ill with Salmonella after consuming raw milk from a retail store. All three individuals were hospitalized (Outbreak Database, 2023f).
- x State and local public health officials in Tennessee reported that 15 children people became ill with E. coli O157:H7 after consuming raw mi lk from a local farm. Of the cases, 9 children were hospitalized with 7 children developing hemolytic uremic syndrome (Knox County Health Department, 2018).
- x The Washington Department of Health issued an alert informing uj£·h → £•u9•ñj•u·⁻→ ñ[•u9•jujn€ •®BH:ñ•⁻uÕHjn ~→ u → Hj:•E. coli from the consumption of raw milk from a licensed creamery. Laboratory results concluded that one child <5 years and one person in their 70s got ill (Outbreak Database, 2023g).
- x The National Outbreak Reporting System database reports there were 13 foodborne outbreaks associated with raw milk in the U.S. From these outbreaks, 131 people became ill and 5 people were hospita lized (CDC, 2023b).

Moreover, the occurrence of outbreaks due to raw milk has been found to positively correlate $D H^-B \bullet^-B \bullet_- : \tilde{n}_- \bullet \pounds^- \tilde{n}_- \bullet \pounds \bullet u \ 9 \bullet) \ \tilde{n} \ D \bullet h \ H_-[\bullet \pounds \tilde{n}_- \ \pounds \bullet D \ H^-B \ H \ j \bullet \tilde{n}_- \bullet \pounds^- \tilde{n}_- \ R \bullet U \ j \bullet \tilde{n}_- \bullet) \ \ddot{l} \ H_-D \bullet utbreaks reported to CDC during 1972–1992, Headrick et al. (1998) found that the rate of raw milk -associated outbreaks was higher in states in which the sale of raw milk was legal. CDC data support this observation in that 78% of single state outbreaks linked to raw milk$



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