

Raw Milk Fact Sheet

Milking Process: 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. Due to the naturally occurring contaminants of the milking process: urine, fecal, infection, disease, insects and rodents, humans, and environmental matter such as soil matter can easily contaminate the milk. Although the solids are filtered, the contamination from the solids will remain in the milk. Typically, in pasteurization is where those contaminants are reduced to a safe level/eliminated entirely. While other foods may be contaminated with the very same organisms in most cases there is a process to reduce or eliminate those organisms by a sanitization wash or in the cooking process. There is a difference in milking one cow at a time and 100s of cattle at a time and being able to avoid contamination.

Potentially Hazardous Food: Raw Milk/Pasteurized Milk is considered a potentially hazardous food/time - temperature control for safety food. Cow milk's pH ranges from 6.4 to 6.8 and a water activity of .95 or higher. With a significant amount of nutrition through proteins. The characteristics make it very favorable for the growth of organisms many being pathogenic.

Foodborne Illness is Real: Outbreaks linked to raw milk are more common in States where raw milk sales are legal. While many cases of food borne illness go unreported in most cases with raw milk a significant onset of illness will occur requiring medical treatment. There are heartbreaking testimonies from families throughout the United States that have been grossly affected by the consumption of raw milk. 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. Information on farm type and size was taken from the implicated dairy's website, state reports, and articles when available.

Outbreaks from Foodborne Pathogens in Unpasteurized (Raw) Milk and Raw Milk Cheeses, United States 1998-present

- 136 total outbreaks
 - 102 fluid milk: 27 cow, 4 goats, 71 unspecified milk type
 - 28 cheese: 2 aged, 3 homemade, 18 Mexican-style queso fresco, 1 goat chevre, 1 curds, 3 unspecified
 - 6 multiple raw dairy products (fluid milk, cheese, and/or colostrum)
- 2,468 total illnesses, 2 deaths
 - 1,803 fluid milk-related illnesses, no deaths: 477 cows, 63 goats, 1,263 unspecified
 - 608 cheese-related illnesses: 46 aged, 80 homemade, 349 Mexican-style queso fresco (2 deaths), 5 goat chevre, 63 curds, 58 unspecified cheese type
 - 57 multiple raw dairy products-related illnesses (fluid milk, cheese, and/or colostrum)

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Why doesn't everyone get sick: 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.

Position statements by Professional Organizations and Agencies: Noted academic institutions and professional, industry, veterinary, government, and medical organizations have published their position statements on raw (unpasteurized) milk. Each organization expresses concerns about human illness associated with the consumption of raw milk. Notable medical associations and excerpts from their positions are included below.

American Academy of Pediatrics (AAP)

- “Children...should never drink raw milk or consume products made from raw milk, such as cheese or yogurt”

American Association of Public Health Veterinarians (AAPHV)

- Recommend against the sale of raw milk

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...”