In Infectious Diseases, MMWR in Review

**MMWR in Review: C. jejuni infections linked to raw milk**

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**Editor's note:** This article summarizes key points from a Centers for Disease Control and Prevention (CDC) report published in Morbidity and Mortality Weekly Report (MMWR). The Comment section may include information that did not appear in the original publication. To subscribe to MMWR, visit www.cdc.gov/MMWR.


In May 2014, the Utah Public Health Laboratory notified the Utah Department of Health about specimens from three people with diarrhea caused by *Campylobacter jejuni* that had indistinguishable pulsed-field gel electrophoresis (PFGE) patterns. All three people consumed raw (unpasteurized and non-homogenized) milk from the same dairy farm.

An estimated 3% of the U.S. population drinks raw milk.

Farms in Utah can sell raw milk to consumers if they have a permit from the Utah Department of Agriculture and Food (UDAF) and pass inspections by testing monthly milk samples for somatic cell and coliform counts, both of which are indicators of raw milk contamination.

This dairy farm previously had acceptable levels. Enhanced testing of raw milk samples using PFGE after the three people became ill revealed *C. jejuni.* The UDAF suspended the dairy farm's permit for three months until follow-up cultures were negative. Subsequently, more people were infected after consuming raw milk from the dairy, and the UDAF permanently revoked the permit.

Ninety-nine cases of *C. jejuni* infections were identified in association with this dairy farm from May 9 to Nov. 6, 2014. Ten people were hospitalized, and one died from multisystem organ failure due to gastroenteritis and underlying medical conditions.

Forty-four patients were under 19 years of age, and all had a diarrheal illness consistent with campylobacteriosis. The majority reported consuming raw milk. However, 41 reported no known raw milk consumption, and 21 of the 41 reported eating queso fresco, a Mexican-style cheese.

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*Campylobacter* organisms are common in the dairy environment and may contaminate milk through poorly sanitized milking equipment, contamination during repair of milking machines, fecal matter contamination, wild bird droppings and silent mastitis of cows.

*C. jejuni* with the same PFGE pattern was isolated from the dairy farm's raw milk bulk tank. *Campylobacter* is a fastidious and fragile organism that is difficult to culture from milk.

The dairy farm submitted raw milk samples to the UDAF every four weeks. These samples provided acceptable results before and during the outbreak investigations. Routine somatic cell and colony count testing of raw milk do not ensure safety. Therefore, it is important to educate consumers of the dangers associated with consuming raw milk and milk products, even products that have been tested.

An estimated 3% of the U.S. population drinks raw milk. Infants, young children, the elderly, pregnant women and people with weakened immune systems are at greatest risk of becoming ill from consuming raw milk, but healthy people of any age also may become ill or die from ingesting contaminated raw milk.

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**Resources**

- [AAP policy statement “Consumption of Raw or Unpasteurized Milk and Milk Products by Pregnant Women and Children”](#)
- [2015 Red Book section on unpasteurized milk and milk products](#)