

Campylobacteriosis Associated with Raw Milk in Wyoming, 2003-2008

Consumption of unpasteurized “raw” milk is the leading cause of outbreaks of campylobacteriosis in Wyoming. From 2003-2008, a total of eighteen Wyoming residents associated with three outbreaks of campylobacteriosis associated with consumption of raw milk.

An additional nine Wyoming residents were ill with *Campylobacter* infection acquired through the consumption of unpasteurized milk or raw milk cheese during the same time period but were found to be sporadic cases and not outbreak related.

Outbreak 1: Campylobacteriosis Associated with Raw Milk, Park County, 2004

In July 2004, the WDH Infectious Disease Epidemiology Program investigated a link between consumption of unpasteurized milk from a local dairy in Park County and campylobacteriosis. Five confirmed cases and one suspect case of campylobacteriosis were found to be associated with drinking milk from a particular dairy. Patient interviews showed that all six persons had consumed raw milk from the dairy sometime in late June or early July. One person was hospitalized and all recovered. Other possible links between the ill persons were investigated, but no other associations were noted. Milk samples from the dairy and from one ill person’s refrigerated milk were analyzed, but none revealed the presence of *Campylobacter*. Wyoming Department of Agriculture regulations prohibit the sale or distribution of raw milk, and after inspecting the dairy, a Cease and Desist order was issued to the dairy prohibiting the distribution of raw milk to employees or the public. No other related cases were reported.

Outbreak 2: Campylobacteriosis Associated with Raw Milk, Park County, 2005

In March 2005, the WDH Infectious Disease Epidemiology Program investigated a link between campylobacteriosis and consumption of milk from another local dairy in Park County. Two confirmed cases of campylobacteriosis from separate households became ill in early March and reported exposure to raw milk from the same dairy prior to their illness. Milk samples were collected and tested negative for the presence of *Campylobacter*. Other possible links between the ill persons were investigated, but no other associations were noted. The Wyoming Department of Agriculture investigated and took the appropriate corrective actions. This was the second cluster of campylobacteriosis cases reporting raw milk exposures in less than a year. Both clusters occurred in the same county but involved different dairies.

Outbreak 3: Campylobacteriosis Cluster Associated with Raw Milk, Uinta County, 2005

A confirmed case of *Campylobacter jejuni* was reported in a male child in Uinta County. Follow-up with his physician revealed additional family members that were ill including members of his immediate family and cousins. Interviews with the case patient's mother revealed that 10 other family members that live on the same ranch were ill with illness consistent with campylobacteriosis. Potential exposures were identified to be either consumption of untreated spring water or consumption of unpasteurized milk from the family's dairy cow. Further follow-up showed that those family members who had consumed the unpasteurized milk were ill and those who had not consumed unpasteurized milk were not ill; while all family members, both ill and non-ill, regularly consumed the untreated spring water. WDH offered testing of the milk and water source and also offered the family educational materials on health risks associated with consuming unpasteurized milk. The family declined both testing and education.

Other Illnesses and Consumption of Unpasteurized Milk

From 2003 to 2008, the WDH Infectious Disease Epidemiology Program did not identify outbreaks of other illnesses (shiga toxin-producing *E. coli*, *Salmonella*, *Listeria*, or *Shigella*) associated with consumption of unpasteurized milk or unpasteurized milk products. However, consumption of unpasteurized milk products has commonly been found to be associated with outbreaks of all of these diseases.