

Campylobacteriosis

2008 Case Total	486	2008 Rate	13.3 per 100,000
2007 Case Total	530	2007 Rate	15.4 per 100,000

Campylobacteriosis is a diarrheal illness caused by *Campylobacter* species and is characterized by an acute onset of diarrhea, sometimes bloody, abdominal cramps, fever, malaise, nausea, and sometimes vomiting. In 2008, 486 cases of campylobacteriosis were reported in Oklahoma, an 8% decrease from the 530 cases reported in 2007. Of the 486 cases reported, 57 (12%) were identified during investigations conducted by county health department public health nurses as an ill contact to a confirmed case. Since 2000, the annual incidence rate (IR) of campylobacteriosis has steadily increased, ranging from 8.9 to 16.8 cases per 100,000 peaking in 2004 with 591 cases (refer to graph). A seasonal trend for campylobacteriosis was seen with the highest number of cases occurring during the months of June through September (N=259, 53%).

The highest rate of cases occurred in Beaver County (IR=133.4 per 100,000, N=7) with 5 of the cases occurring within one family. Other counties with high rates included Adair County (IR=45.9, N=10) and Jackson County (IR=43.6, N=11). Of the cases reported in 2008, 17 (3.5%) reported travel outside of the United States during the incubation period of their illness, 40 (8.2%) reported drinking water from a private well, 39 (8%) reported visiting, working, or living on a farm, 23 (4.7%) reported contact with cattle, and 18 (3.7%) reported consuming unpasteurized (raw) milk. Ninety-five (19.5%) cases were associated with a high-risk setting (childcare setting, school, long term care facilities, food service, etc.). No outbreaks due to *Campylobacter* were identified in Oklahoma in 2008.

The age range of cases was from 10 days to 87 years with a median of 28 years of age. When the cases are grouped by age, the highest IR is in children less than ten years of age (29.3 per 100,000). The incidence rate per 100,000 population for males was higher (15.7) than females (10.9) in 2008. Cases who report Hispanic or Latino ethnicity have a higher IR (16.2 per 100,000) than those cases who were not Hispanic or Latino (10.5 per 100,000). In cases that reported one race, the highest IR was for Native Hawaiian or other Pacific Islander (25.9 per 100,000) although only one case was reported in 2008. Individuals who reported their race as White had the second highest IR (13.2) followed by American Indians or Alaskan Natives (12.4), African Americans (4.1) and Asians (IR = 1.6). Eighty-one (17%) cases were hospitalized for campylobacteriosis, with no deaths due to this disease in 2008. The OSDH PHL received 303 isolates to confirm *Campylobacter* and serotype serogroup identification in 2008 representing 62% of the reported cases. Of these isolates, 64% were identified as *Campylobacter jejuni*, 18% as *C. jejuni* var. *doylei*, 6.3% as *C. coli*, and 12% were non-viable.

Campylobacteriosis Incidence Rate by Year, Oklahoma, 2005 -2008

