

Campylobacteriosis

Agent: *Campylobacter* species (bacteria)

Mode of Transmission: Ingestion of undercooked meat, particularly poultry; ingestion of contaminated food, water, or raw milk; and direct contact with fecal material from infected animals or people.

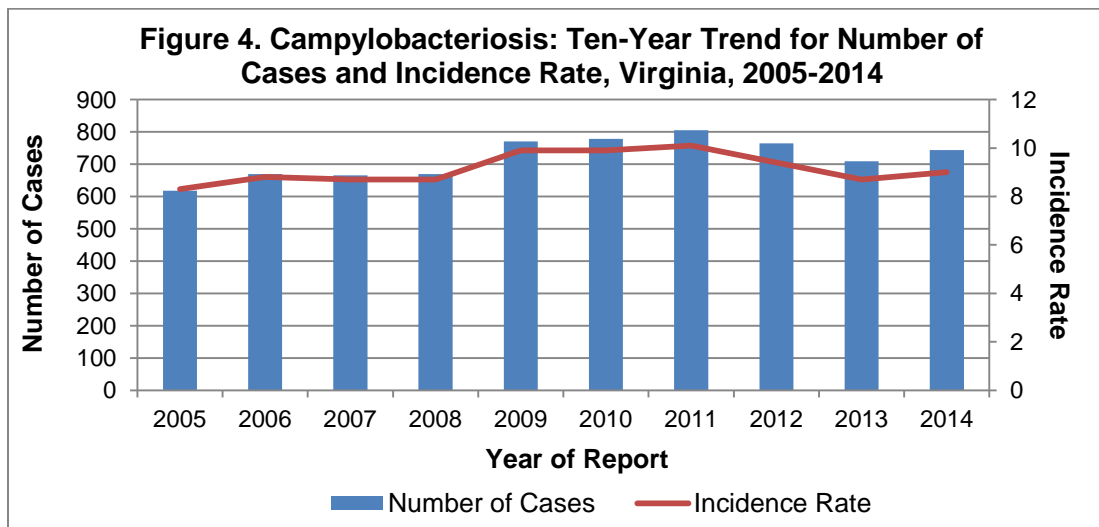
Signs/Symptoms: Include diarrhea (frequently with bloody stools), abdominal pain, malaise, fever, nausea, or vomiting. In neonates and young infants, bloody diarrhea without fever may be the only manifestation of illness. Many infections are asymptomatic. Rarely, complications can develop, including reactive arthritis, febrile convulsions, or Guillain-Barré Syndrome; bacteremia can occur in children.

Prevention: Hands should be washed carefully after using the bathroom, after changing diapers or cleaning a child who has used the bathroom, after handling animals or their feces, and before preparing and eating food. Pasteurization of milk and chlorination of water supplies are also important. All foods containing eggs and meats, particularly poultry, should be cooked thoroughly.

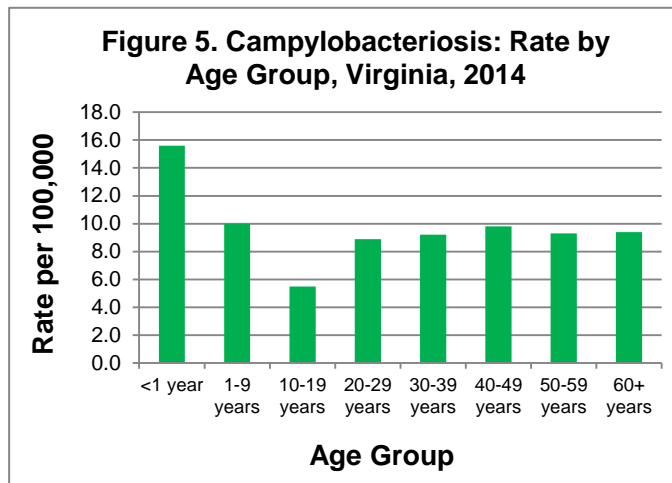
Other important information: In 2012, a change was implemented to the case definition for campylobacteriosis, requiring a positive lab culture for case confirmation. The use of non-culture based testing methods is increasing and may contribute to a future decline in confirmed campylobacteriosis cases.

Campylobacteriosis: 2014 Data Summary	
Number of Cases:	744
5-Year Average Number of Cases:	765.2
% Change from 5-Year Average:	-3%
Incidence Rate per 100,000:	9.0

In 2014, 744 cases of campylobacteriosis were reported in Virginia. This represents a 5% increase from the 709 cases reported in 2013, and a 3% decrease from the five-year average of 765.2 cases per year (Figure 4).



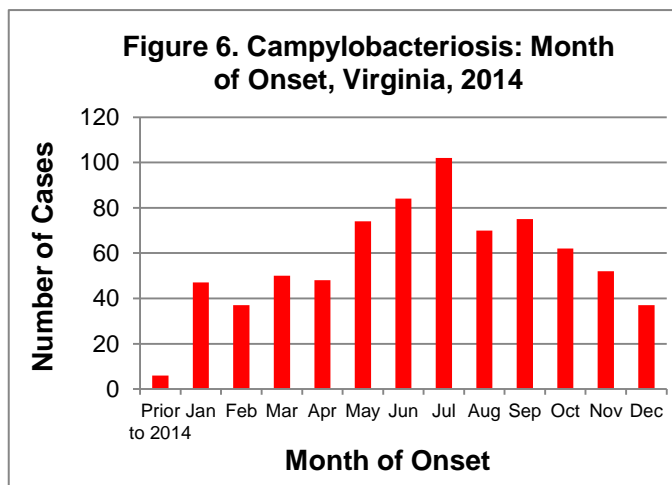
In Virginia, the highest incidence rates of *Campylobacter* infection are typically seen in children less than one year of age. In 2014, incidence was again highest among this age group (15.6 per 100,000), while rates among other age groups ranged from 5.5 per 100,000 (10-19 years) to 10.0 per 100,000 (1-9 years) (Figure 5).



Race information was not reported for 51% of cases. For cases with a known race, incidence was highest among the white population (5.5 per 100,000), followed by the “other” race population (2.3 per 100,000), and the black population (1.7 per 100,000). Historically in Virginia, incidence is higher in males; this remained unchanged in 2014, with a rate of 10.7 per 100,000 among males and 7.3 per 100,000 among females.

Regionally, the highest incidence rate occurred in the northern region (11.5 per 100,000) and the lowest rate occurred in the eastern region (5.7 per 100,000). Rates in the remaining regions ranged from 10.4 to 7.2 per 100,000. The occurrence of campylobacteriosis varied widely by locality with the highest rates tending to be reported from adjacent localities (see map below).

While cases were reported in every month of the year, more cases were seen during the warmer months, peaking in July with 102 cases (Figure 6). One outbreak of *Campylobacter* infection was reported during 2014. This outbreak occurred in the central region among three school classmates. Exposure to cattle and raw milk were reported as possible risk factors. No deaths attributed to campylobacteriosis were reported among Virginia residents in 2014.



Campylobacteriosis Incidence Rate by Locality Virginia, 2014

