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 may 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 in the case definition for campylobacteriosis. This change requires a positive lab culture for case confirmation. Given the increasing popularity of non-culture based testing methods, fewer cases of campylobacteriosis may be confirmed in the future.

There were 764 cases of campylobacteriosis reported in Virginia in 2012. This is a 5% decrease from the 805 cases reported in 2011, and a 4% increase from the five-year average of 737.4 cases per year (Figure 4).

Nationally, rates of Campylobacter infection are highest in children younger than four years of age. In Virginia, the highest rates are consistently seen in the less than one year age group (Figure 5). This remained true in 2012, with the highest incidence rate (15.8 per 100,000) in this age group, followed by 11.5 per 100,000 in the 1-9 year age group. The lowest rate was observed in the 10-19 year age group (5.5 per 100,000).
Race information was missing for 49% of reported cases. For cases with race information available, incidence in the white population (5.7 per 100,000) was more than twice the rate in the “other” race population (2.7 per 100,000), and almost three times the rate in the black population (2.0 per 100,000). The incidence rate among males was higher than among females (10.3 and 8.3 per 100,000, respectively).

By region, the highest incidence of campylobacteriosis occurred in the northwest region (11.4 per 100,000), followed closely by the southwest (10.5 per 100,000) and northern regions (10.3 per 100,000). Rates were lowest in the central and eastern regions (8.8 and 6.7 per 100,000, respectively).

While cases occurred throughout the year, onsets occurred more often in the warmer months, with 64% of cases occurring from April to September (Figure 6). The only Campylobacter outbreak reported during 2012 occurred among a group of travelers returning from Mexico. Among Virginia residents, one death attributable to campylobacteriosis was reported in 2012. The death occurred in an adult male from the eastern region.