Cryptosporidiosis

Agent: Cryptosporidium parvum (parasite)
Mode of Transmission: Occurs via the fecal-oral route and can include person-to-person, animal-to-person, foodborne and waterborne transmission. Cryptosporidium oocytes can remain infectious for 2-6 months after being excreted from infected individuals. The oocytes are very resistant to chemicals used to purify drinking water.
Signs/Symptoms: Profuse watery diarrhea with cramping and abdominal pain. The diarrhea may be preceded by anorexia and vomiting in children. Asymptomatic infections are common.
Prevention: Preventive measures include careful hand hygiene 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. People with diarrhea should not enter public recreational water. Water purification methods, including boiling water or filtration, should be considered when drinking water from natural streams, lakes, springs or any unknown source.

Eighty-six cases of cryptosporidiosis were reported in Virginia during 2009. This is a 6% increase from the 81 cases reported in 2008 and a 12% increase from the five-year average of 77 cases per year (Figure 10). The 86 cases reported in 2009 contribute to an overall upward trend in reported cryptosporidiosis cases seen throughout the past decade in Virginia, and mirror an upward trend in reported cases seen nationally.

In 2009, the highest incidence rates occurred in the 1-9 year age group (2.9 per 100,000), followed by the 60 year and older age group (1.8 cases per 100,000). The other age groups had rates between 0.8 and 1.1 per 100,000. Race was not reported for 31% of cases, but among those with information on race, the white, black and “other” race populations had similar rates of infection (0.8, 0.6 and 0.5 per 100,000, respectively). The rate of infection among males was slightly higher than that among females (1.3 compared with 0.9 per 100,000), reversing the pattern seen in 2008.
By region, the highest rate was reported from the northwest region (1.9 per 100,000). The other regions had rates between 0.6 and 1.3 per 100,000. A seasonal trend was observed, with the fewest cases (15%) seen during the winter months of December through February and a peak (31%) in August and September (Figure 11). One or more risk factors were identified in 87% of the reported cases. The most frequently reported risk factor was contact with animals (35 cases, 41%), followed by consumption of untreated water (30 cases, 35%). Other noted risk factors included 20 cases (23%) with a recent history of travel, and 15 cases (17%) with an exposure to recreational waters. Among cases reported in 2009, no deaths were attributed to cryptosporidiosis.