

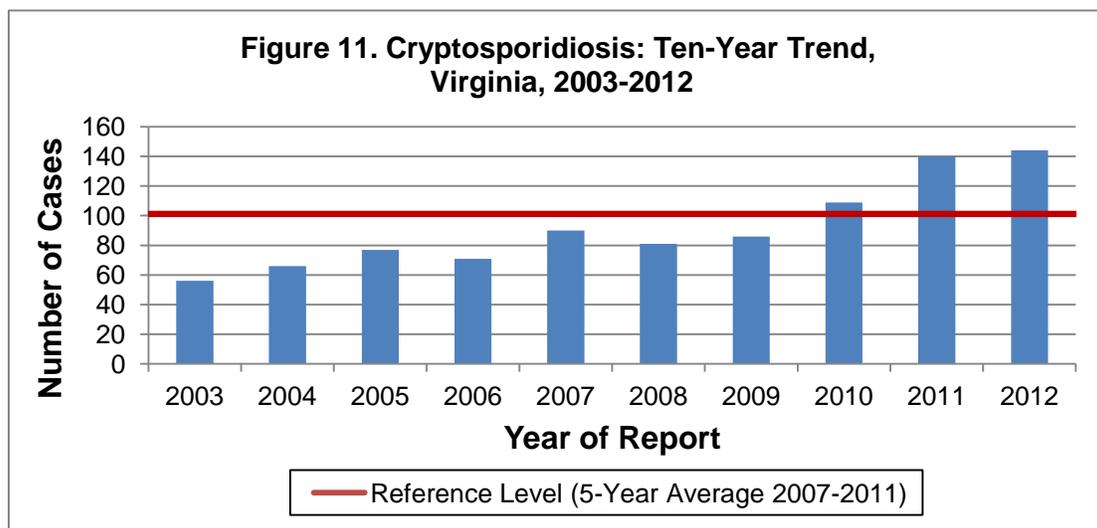
## Cryptosporidiosis

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. Animals such as cattle, sheep, and goats have tested positive for the parasite and are an important reservoir, contributing to both direct transmission and contamination of water supplies. *Cryptosporidium* oocytes may be excreted from infected individuals for up to several months after diarrhea has resolved. Oocytes can remain infectious for 2-6 months after being excreted. The oocytes are very resistant to chemicals used to purify drinking water and disinfect recreational water (e.g., chlorine in pools).

Signs/Symptoms: Profuse watery diarrhea with nausea, cramping, and abdominal pain. The diarrhea may be preceded by anorexia and vomiting in children. Intestinal infections are typically self-limiting. Immunocompromised persons have a higher risk of poor outcomes, including death. 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.



In 2012, there were 144 cases of cryptosporidiosis reported in Virginia. This is similar to the 140 cases reported in 2011, and represents an increase of 42% over the five-year average of 101.2 cases per year (Figure 11). The general upward trend in reported cryptosporidiosis cases during the past decade in Virginia mirrors a national pattern.

In 2012, the highest incidence rates were observed in the 60 year and older age group (2.8 per 100,000). The other age groups had incidence rates from 1.1 to 2.2 cases per 100,000. Race was not reported for 26% of cases in 2012. Among cases with race information available, the rate was highest among the white population (1.5 cases per

100,000), followed by the black population (1.1 cases per 100,000) and the “other” race group (0.5 cases per 100,000). The rate of infection was slightly higher in females than males (1.9 and 1.6 per 100,000, respectively).

By health planning region, the highest rate was reported from the northern region (2.5 per 100,000). The other regions had incidence rates ranging from 0.9 to 2.0 per 100,000, with both the central and northwest regions having the lowest rate.

Nationally, a higher number of illnesses is typically seen during the summer months and is consistent with increased recreational water exposure, including public pools. This seasonal pattern was not observed in Virginia in 2012. Instead, there was substantial month-to-month variation, with the highest number of cases occurring in January (Figure 12). Among Virginia cases in 2012, the most frequently reported risk factor was contact with animals (44 cases, 31%). Other frequently reported risk factors included travel prior to illness onset (23%), recreational water exposure (14%), and immunodeficiency (7%).

