

## **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; however, many other animals, including cats and dogs, can be infected and transmit disease. *Cryptosporidium* oocysts may be excreted from infected individuals for up to several months after diarrhea has resolved. Oocysts can remain infectious for 2-6 months after being excreted. The oocysts are very resistant to chemicals used to purify drinking water and disinfect recreational water (e.g., chlorine in pools).

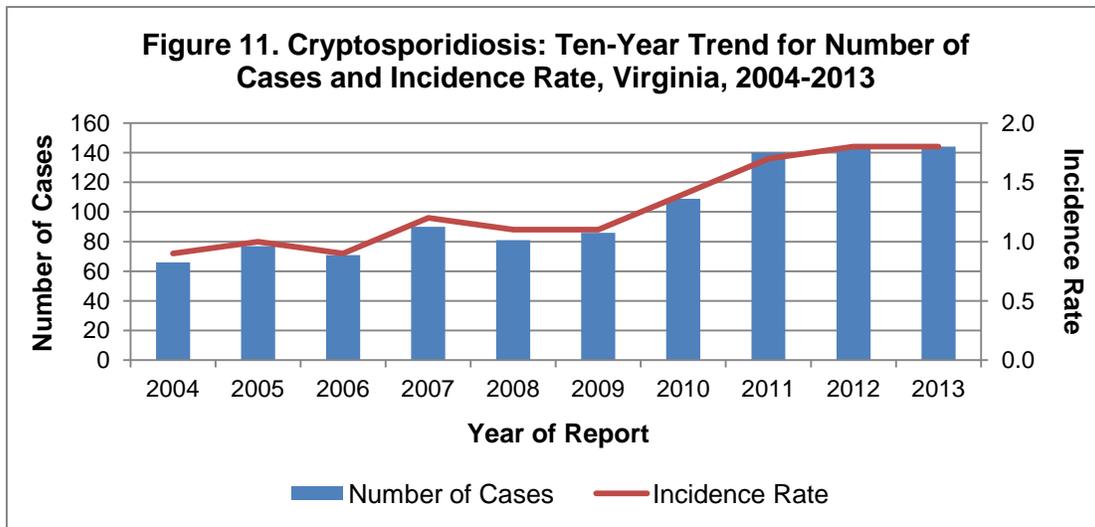
Signs/Symptoms: Profuse watery diarrhea with nausea, cramping, and abdominal pain. The diarrhea may be preceded by anorexia and vomiting in children. Illness is typically self-limiting. Immunocompromised persons have a higher risk of severe disease, which can lead to poor outcomes, including death. Asymptomatic 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.

<b>Cryptosporidiosis: 2013 Data Summary</b>	
Number of Cases:	144
5-Year Average Number of Cases:	112.0
% Change from 5-Year Average:	+29%
Incidence Rate per 100,000:	1.8

In 2013, there were 144 cases of cryptosporidiosis reported in Virginia. This is the same number of cases reported in 2012, and represents an increase of 29% over the five-year average of 112 cases per year (Figure 11). The general upward trend in reported cryptosporidiosis cases during the past decade in Virginia mirrors a national pattern.

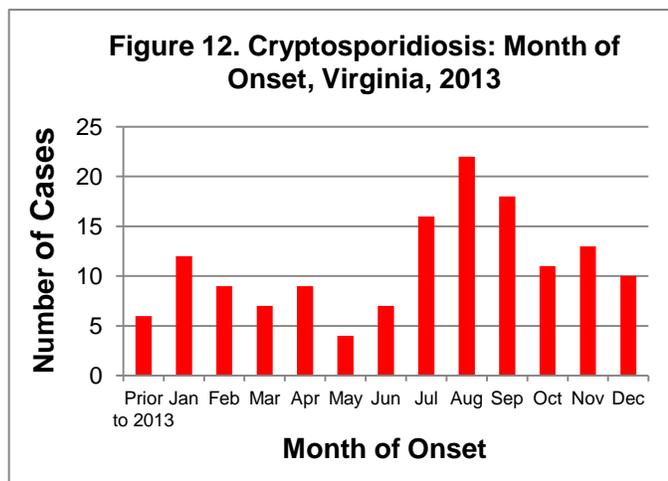
In 2013, the highest incidence rates were observed in the 20-29 year old and 60 year and older age groups, each with a rate of 2.2 cases per 100,000. This represents a 21% decrease in incidence among the 60 year and older age group, which had the highest rate in 2012. The other age groups had incidence rates ranging from 1.2 to 2.0 cases per 100,000.



Race was not reported for 28% of cases in 2013. Among cases with race information available, the rate was highest among the white population (1.4 cases per 100,000), followed by the black population (1.1 cases per 100,000) and the “other” race group (1.0 cases per 100,000). During 2013, the rate of infection was slightly higher in males than females (2.0 and 1.5 cases per 100,000, respectively).

By health planning region, the highest rate was reported from the northern region (2.9 cases per 100,000). The other regions had incidence rates ranging from 0.6 to 1.9 cases per 100,000, with the central region having the lowest rate, as depicted in the map below.

Nationally, a higher number of illnesses are typically seen during the summer and early fall months, which is consistent with increased recreational water exposure, including public pools. This seasonal pattern was observed in Virginia during 2013 (Figure 12).



Among Virginia cases in 2013, the most frequently reported risk factor was travel prior to illness onset (38 cases, 26%). Other frequently reported risk factors included contact with animals (22%), recreational water exposure (11%), and immunodeficiency (10%). A single outbreak of cryptosporidiosis was reported in Virginia during 2013. The outbreak was a waterborne outbreak linked to a camp in the northwest region that resulted in 19 cases. Because none of the ill persons were residents of Virginia, these 19 cases are not included in Virginia’s 2013 cryptosporidiosis case count. No deaths attributable to cryptosporidiosis were reported in 2013.

