

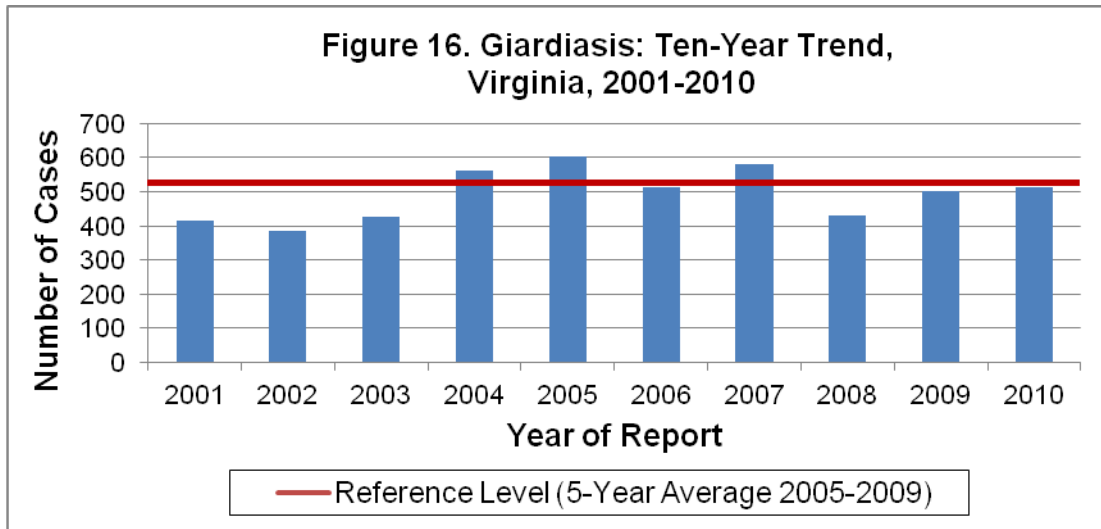
Giardiasis

Agent: *Giardia lamblia* (parasite)

Mode of Transmission: Person-to-person transmission by hand-to-mouth transfer of cysts from the feces of an infected person. Localized outbreaks are more often due to ingestion of cysts in fecally-contaminated drinking and recreational water (e.g., lakes, rivers, springs, ponds, and streams) than from fecally-contaminated food.

Signs/Symptoms: Symptoms may include diarrhea, abdominal pain, bloating, nausea and vomiting. A person may be asymptomatic or develop chronic illness.

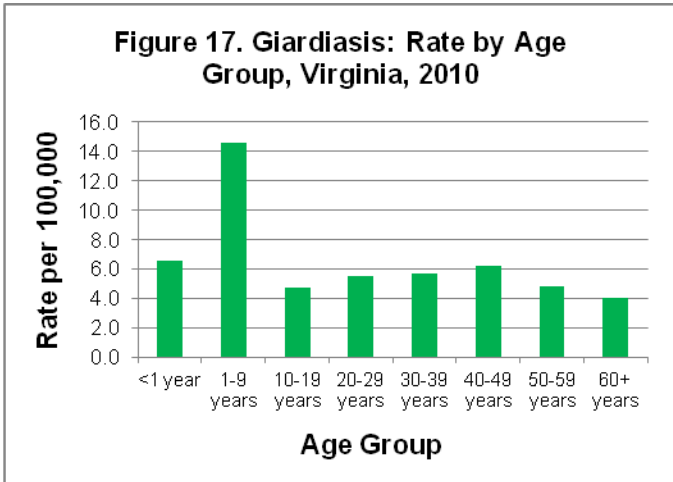
Prevention: Hands should be washed carefully after using the bathroom, after changing diapers or cleaning a child who has used the bathroom, after handling animals or their feces, and before preparing and eating food. Recreational water or untreated water from shallow wells, lakes, rivers, springs, ponds or streams should not be consumed. Persons with diarrhea should not swim at recreational water venues.



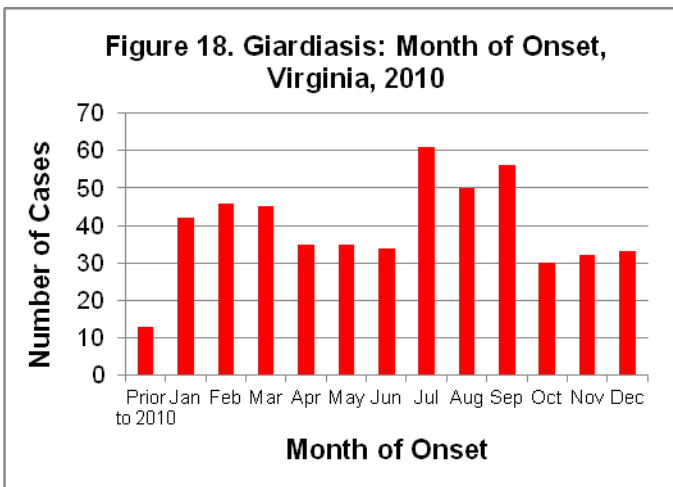
During 2010, 512 cases of giardiasis were reported in Virginia. This is a 2% increase from the 503 cases reported in 2009, but is 3% lower than the five-year average of 526.6 cases per year (Figure 16). An investigation conducted by VDH in 2007 indicated that the increase in cases observed during 2004 through 2007 was at least partly attributed to infections identified through screening of refugees who had recently arrived in the United States. Among all giardiasis cases reported in 2010, 175 (34%) were documented as being acquired outside the country.

The 1-9 year age group had the highest number of reported cases, accounting for 27% of all cases of giardiasis in 2010 (Figure 17). The incidence rate in the 1-9 year age group (14.6 cases per 100,000) was more than twice the rate of any other age group (4.0 to 6.6 per 100,000) (Figure 16). This elevated incidence of giardiasis in the 1-9 year age group is a consistent pattern in Virginia and is also observed nationally. Of the 137 reported cases of giardiasis in children less than ten years of age, 80 (58%) were among refugees or were acquired outside the country.

Race was not reported for 63% of giardiasis cases reported in 2010, but among those with information on race, rates were higher among the “other” race population (3.1 per 100,000) than among the black or white populations (2.0 and 2.5 per 100,000, respectively). A higher rate was seen in the male population (7.1 per 100,000) than in the female population (5.8 per 100,000).



The highest incidence rate was seen in the northern region (10.2 per 100,000) and the lowest rate occurred in the Southwest region (2.8 per 100,000), with rates of 4.8 to 7.6 per 100,000 in the other regions. By illness onset date, the largest proportion of cases (33%) occurred in the third quarter of the year, and the smallest proportion (18%) occurred during the fourth quarter (Figure 18). One outbreak involving six persons was attributed to *Giardia* during 2010.



The outbreak occurred in April and included food handlers in a restaurant.