

Giardiasis

Agent: *Giardia intestinalis* (parasite)

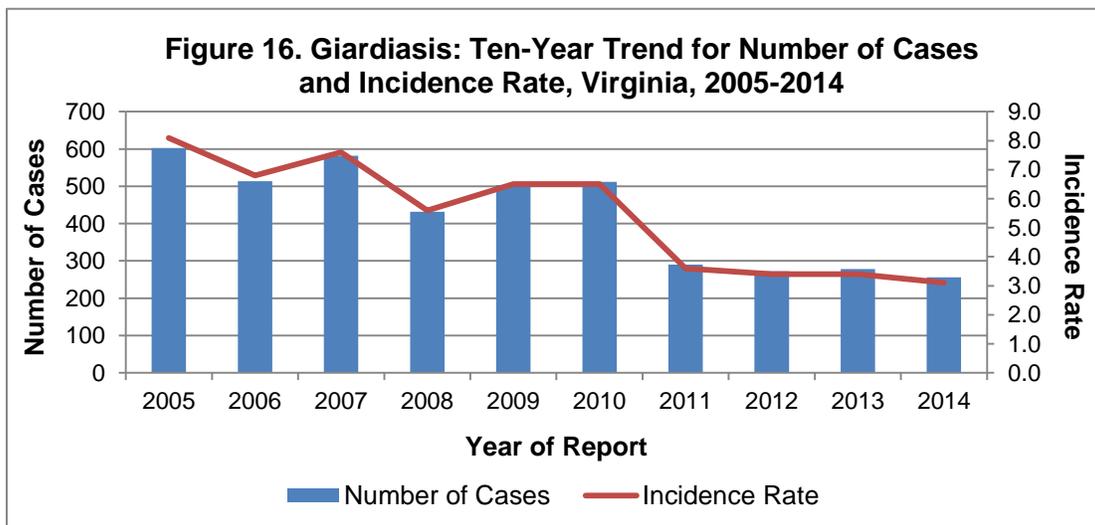
Mode of Transmission: Person-to-person transmission by hand-to-mouth transfer of cysts from the feces of an infected person. Localized outbreaks are more often due to ingestion of cysts in fecally-contaminated drinking and recreational water (e.g., lakes, rivers, springs, ponds, and streams) than from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

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

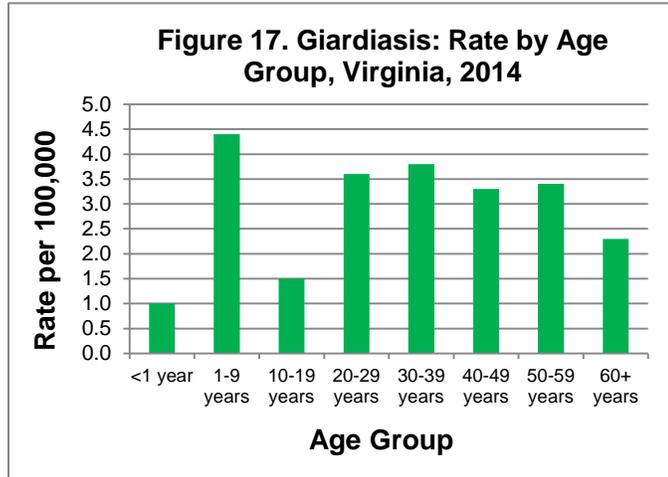
Prevention: Hands should be washed carefully after using the bathroom, after changing diapers or cleaning a child who has used the bathroom, after handling animals or their feces, and before preparing and eating food. Recreational water or untreated water from shallow wells, lakes, rivers, springs, ponds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

Giardiasis: 2014 Data Summary	
Number of Cases:	256
5-Year Average Number of Cases:	371.0
% Change from 5-Year Average:	-31%
Incidence Rate per 100,000:	3.1

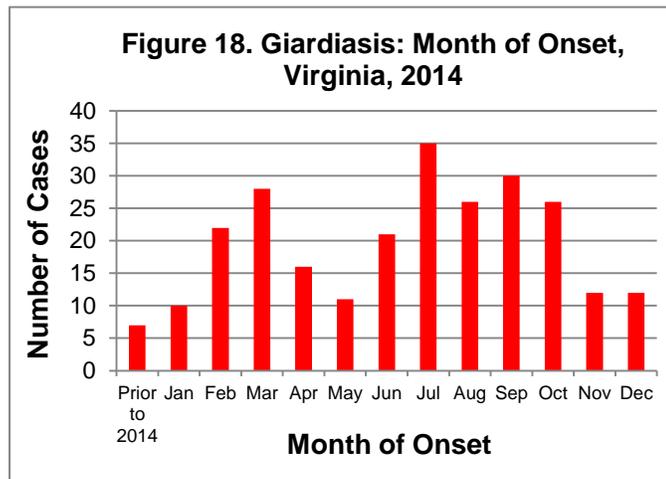
In 2014, 256 cases of giardiasis were reported in Virginia. This represents an 8% decrease from the 278 cases reported in 2013, and a 31% decrease from the 5-year average of 371.0 cases per year. Similar to national data, giardiasis cases have decreased over the last ten years with a dramatic decrease observed in 2011 (Figure 16). The lower number of reported cases from 2011-2014 can be attributed to a change in the surveillance case definition. Prior to 2011, a case could be counted based on a positive laboratory result for *Giardia* alone. Beginning in 2011, documentation of clinically compatible illness was required in addition to a positive laboratory result for a case to be counted for public health surveillance purposes.



By age, the highest incidence rate (4.4 per 100,000) occurred in the 1-9 year age group, which is consistent with national data (Figure 17). Incident rates were lowest among infants (1.0 per 100,000) and persons 10-19 years of age. The remaining age groups had similar incidence rates ranging from 2.3 to 3.8 per 100,000. Race was not reported for 51% of giardiasis cases in 2014. Among cases with a known race, incidence was higher in the “other” race population (2.3 per 100,000) compared to the white population (1.6 per 100,000) and black population (1.1 per 100,000). A higher incidence rate was seen among males (4.1 per 100,000) than females (2.1 per 100,000).



Like the previous year, the northern region experienced the largest number of cases (132 cases) and the highest incidence rate (5.5 per 100,000). Frequency of reports of giardiasis were similar for the remaining regions, with reported cases ranging from 25 to 44 per region, and incidence rates ranging from 1.4 per 100,000 in the eastern region to 3.4 per 100,000 in the northwest region. Rates by locality can be seen in the map below. Cases occurred throughout the year, with a higher proportion of cases reported during the warmer months of the third quarter (Figure 18). Similar to national data, the months of July, August, and September accounted for 36% of cases.



While the source of exposure for sporadic cases cannot usually be determined, 98 (38%) of the persons with giardiasis in 2014 reported travel prior to illness onset, 82 (32%) reported contact with an animal, 46 (18%) reported recreational water exposure, 32 (12%) knew of similarly ill persons, and 18 (7%) reported consuming untreated water.

Giardiasis Incidence Rate by Locality Virginia, 2014

