

Shigellosis

Agent: *Shigella* (bacteria)

Mode of Transmission: Primarily person-to-person transmission when the bacteria are passed from the stool of an infected person to another person through direct contact. Additionally, contact with a contaminated inanimate object, ingestion of contaminated food or water, and certain types of sexual contact may spread the disease.

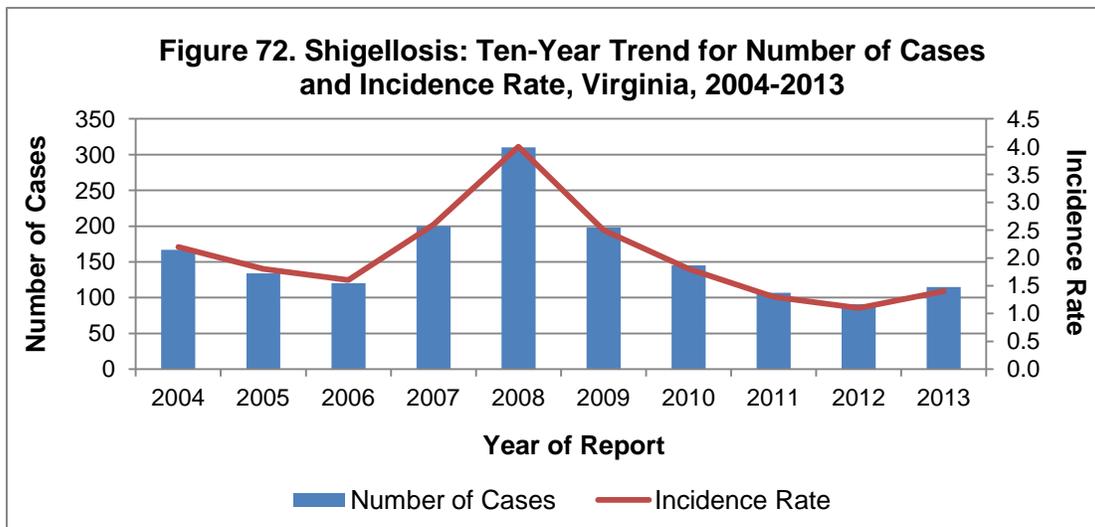
Signs/Symptoms: Diarrhea ranging from watery and loose to mucoid with or without blood; fever; and sometimes nausea, vomiting, abdominal cramps and painful straining while defecating. Mild and asymptomatic infections can also occur.

Prevention: Proper hand hygiene is essential to limit transmission. Additional control measures include improved sanitation, chlorination of drinking water, proper cooking and storage of food, the exclusion of infected persons as food handlers, and measures to decrease contamination of food by houseflies.

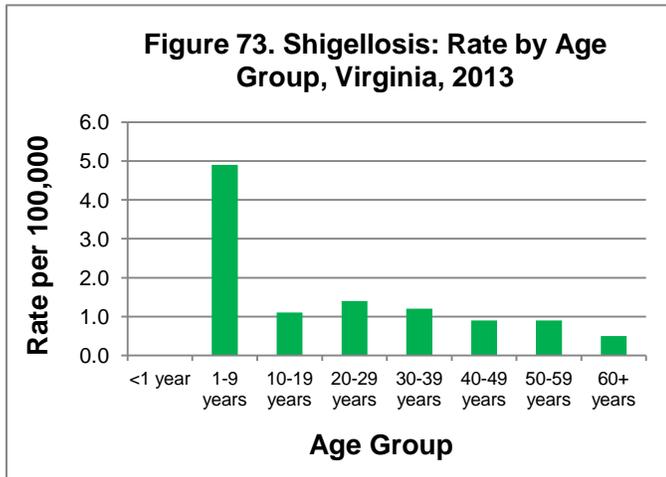
Other Important Information: *Shigella sonnei*, (also known as "Group D" *Shigella*), accounts for over two-thirds of shigellosis in the United States, while *Shigella flexneri* (also known as "group B" *Shigella*) accounts for almost all the rest.

Shigellosis: 2013 Data Summary	
Number of Cases:	115
5-Year Average Number of Cases:	170.2
% Change from 5-Year Average:	-32%
Incidence Rate per 100,000:	1.4

During 2013, 115 cases of shigellosis were reported in Virginia. This represents a 26% increase from the 91 cases reported in 2012, and a 32% decrease from the five-year average of 170.2 cases per year (Figure 72).



Historically in Virginia, the 1-9 year age group has had the highest number of cases and the highest incidence rate. This remained true in 2013, with 45 cases and an incidence rate of 4.9 per 100,000 (Figure 73). The high rate in this age group is expected because toddlers, age 2 to 4 years, are more likely to be exposed to shigellosis in child care and home settings where other young children may not routinely wash their hands after using the toilet. As in 2012,

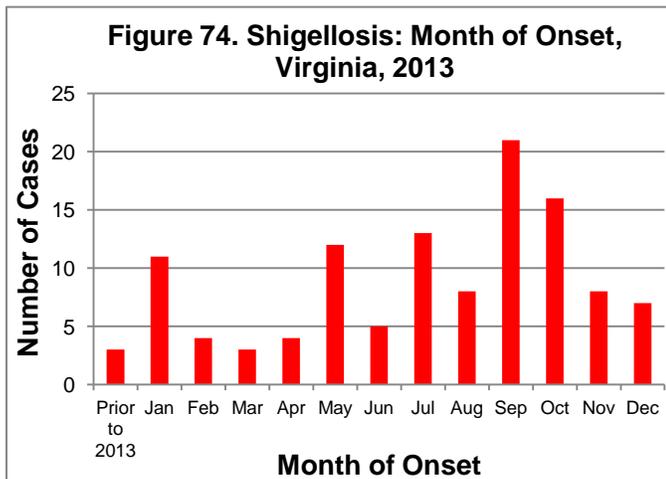


no cases were reported in children less than one year of age. Incidence among the other age groups ranged from 0.5 to 1.4 per 100,000, similar to what was seen in 2012.

Race data were missing for 57% of reported shigellosis cases. Among those with race information, incidence was highest in the black population (0.9 per 100,000), followed closely by the “other” and white populations (0.7 and 0.5 per 100,000, respectively). The incidence of shigellosis was similar among males and females (1.5 and 1.3 per 100,000, respectively).

Geographically, the northern region had the highest incidence rate (2.6 per 100,000), followed by the eastern region (1.6 per 100,000). The northwest, southwest, and central regions had incidence rates ranging from 0.6 to 0.7 per 100,000. Incidence by locality varied greatly across the state, with most cities and counties reporting no cases (see map below)

Onset dates typically peak during summer and fall months. In 2013, there were additional peaks in January and May (Figure 74). A cluster of five cases of shigellosis within a family contributed to the May peak. No reported outbreaks or deaths were attributed to *Shigella* infection in 2013.



Shigellosis Incidence Rate by Locality Virginia, 2013

