

Shigellosis

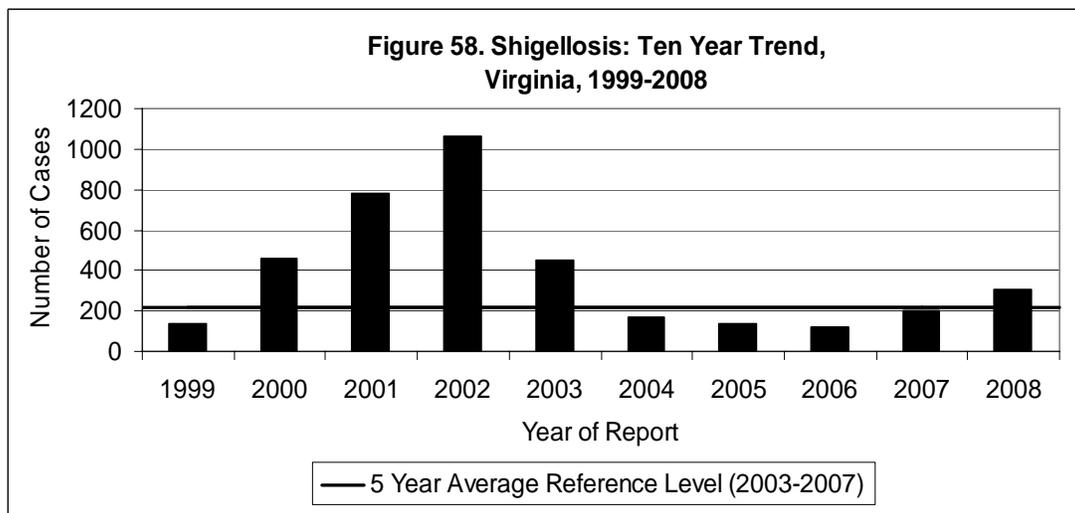
Agent: *Shigella* (bacteria)

Mode of Transmission: The primary mode is fecal-oral via person-to-person contact. Additionally, contact with a contaminated inanimate object, ingestion of contaminated food or water and sexual contact may spread the disease.

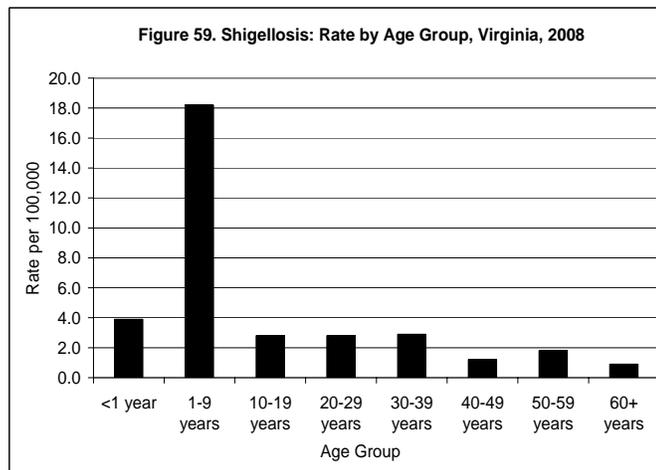
Signs/Symptoms: Characterized by diarrhea ranging from watery and loose to mucoid with or without blood, fever and sometimes nausea, vomiting, abdominal cramps and painful straining at stool or urination. Mild and asymptomatic infections can occur.

Prevention: Strict attention to 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.

During 2008, 310 cases of shigellosis were reported in Virginia. This is a 55% increase from the 200 cases reported in 2007, and a 45% increase from the five year average of 214.4 cases per year (Figure 58).

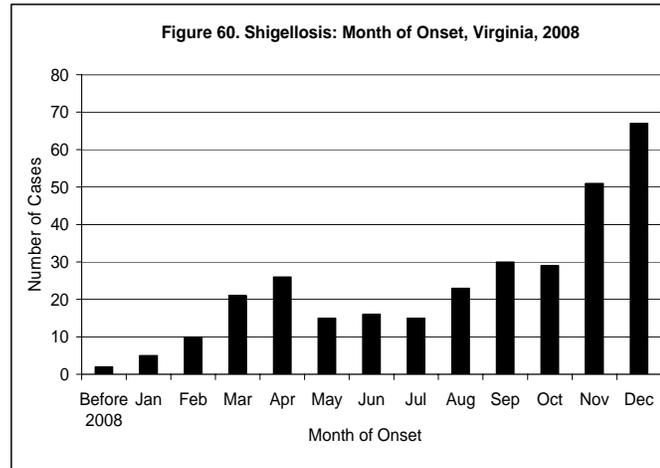


The 1-9 year age group had the highest number of cases with 165 reported infections. The highest incidence rate was also in the 1-9 age group (18.2 per 100,000), followed by the <1 year age group with a rate of 3.9 per 100,000. The other age groups had rates between 0.9 and 2.9 per 100,000 (Figure 59). Race data were missing for 37% of reported cases. Among cases that included race information, the incidence rate in



the black population (7.9 per 100,000) was more than six times the rate in the white population (1.2 per 100,000), and more than nine times the rate of the “other” population (0.9 per 100,000). This racial disparity was also seen nationally. The CDC summary data for 2007 reported the rate for the black population was more than four times the rate for the white population. Females had a slightly higher incidence rate than males (4.3 and 3.5 per 100,000, respectively).

Among regions, the central region had the highest incidence rate (9.5 per 100,000). This was followed by the eastern and northern regions with 4.5 and 4.4 per 100,000, respectively. The other regions had rates below 2.5 per 100,000. A seasonal trend was observed, with 64% of cases occurring from August through December (Figure 60). Five shigellosis outbreaks were identified during the year. All occurred in a daycare setting or school. Three of the five outbreaks



were reported from the central region and contributed to that region having the highest incidence in the state. The number of cases per outbreak ranged from six to fifty-three and the occurrence of each outbreak was a factor in the increases seen in March-April, August-October, and November-December. Among cases reported in 2008, one death was attributed to shigellosis and occurred in a male child.