Shigellosis

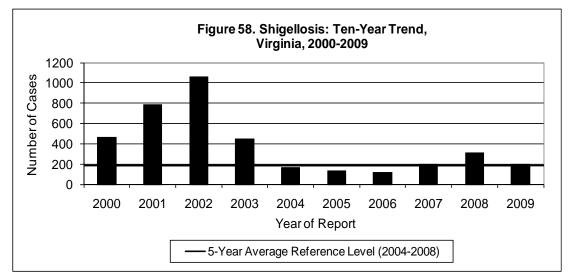
Agent: Shigella (bacteria)

<u>Mode of Transmission</u>: 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 sexual contact may spread the disease.

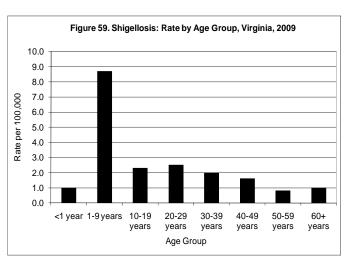
<u>Signs/Symptoms</u>: Diarrhea ranging from watery and loose to mucoid with or without blood, fever and sometimes nausea, vomiting, abdominal cramps and painful straining while defecating. Mild and asymptomatic infections can also occur.

<u>Prevention</u>: 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.

During 2009, 198 cases of shigellosis were reported in Virginia. This represents a 36% decrease from the 310 cases reported in 2008, and a 6% increase from the five-year average of 186.2 cases per year (Figure 58).

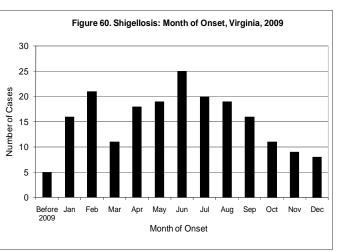


The 1-9 year age group had the highest number of cases with 80 reported infections, and the highest incidence at 8.7 per 100,000. The other age groups had rates between 0.8 and 2.5 per 100,000 (Figure 59). Race data were missing for 55% of reported cases. Among cases with race information, the incidence rate in the black population (2.7 per 100,000) was more than three times the rate in the



white population (0.8 per 100,000). This racial disparity was also seen nationally. The CDC summary data for 2008 reported the rate for the black population was more than double the rate for the white population. In Virginia, the incidence rate was the same for males and females (2.5 per 100,000).

By region, the northwest region had the highest incidence rate (3.7 per 100,000). This was followed by the northern and central regions, each with 2.9 per 100,000. By onset date, the largest proportion of cases (31%) occurred in the second quarter of the year, and the smallest proportion (14%) occurred during the fourth quarter (Figure 60). Two shigellosis outbreaks were identified during 2009, and both occurred in daycare settings in the



central region. The number of cases per outbreak ranged from two to eighteen, and both outbreaks had onset during the second quarter. Among cases reported in 2009, one death was attributed to shigellosis in a female from the 30-39 year age group.