

# SHIGELLOSIS

**Shigella Quick Fact: *Shigella* can spread easily in household or childcare settings.**

## OVERVIEW

Shigellosis is a bacterial infection affecting the intestinal tract. Most cases are seen in the summer and early fall and occur as single cases or in association with outbreaks. *Shigella* case numbers can vary from year to year, in a cyclical pattern over 5-6 years. Common symptoms include fever and bloody diarrhea.

**Mode of Transmission:** Mainly by fecal-oral transmission from an ill person or carrier. *Shigella* is spread either directly by physical contact or indirectly in food and water contaminated by feces of an infected person. The infectious dose is very small (10 or more organisms). Secondary attack rates in households can be as high as 40%.

## SURVEILLANCE

- All Georgia physicians, laboratories and other health care providers are required by law to report both lab-confirmed and clinical diagnoses of cases of Shigellosis.
- Active Surveillance for Shigellosis is conducted through FoodNet. For more information, please visit:
  - <http://health.state.ga.us/eip/>
  - <http://www.cdc.gov/foodnet/>

## INCIDENCE

In 2008, 1183 cases of Shigellosis were reported, for a rate of 12.2 per 100,000 population (Figure 1). Many of the counties that have higher incidence rates experienced outbreaks in 2008 (Figure 2).

Figure 1.

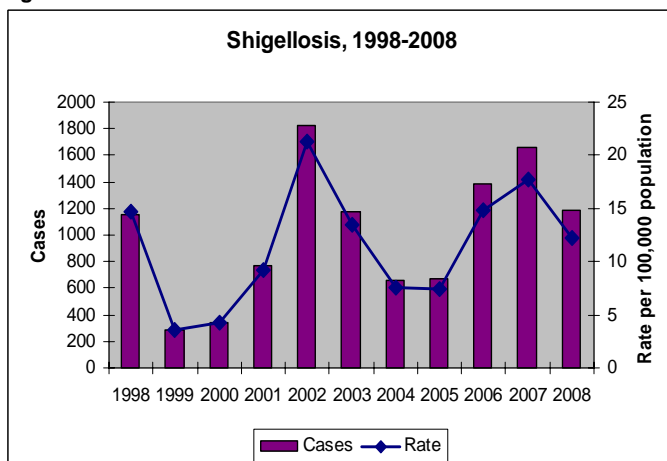
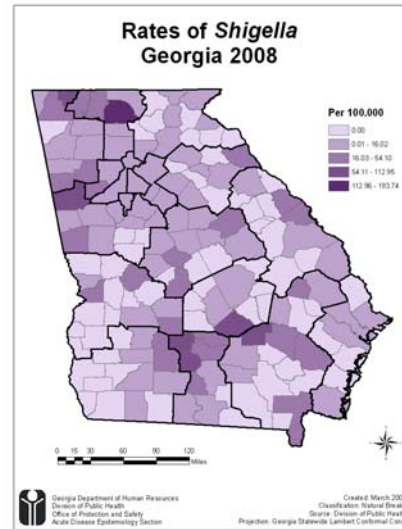


Figure 2



## DEMOGRAPHICS

- In 2008, of the reported cases with known race and ethnicity, 54% of cases were White, 32% of cases were Black, 12% of cases were Hispanic, and 2% of cases were other race/ethnicities (Figure 3).
- Shigella* rates are higher among children in age groups one to less than five, and five to less than ten years old, as compared to other age groups (Figure 4).

Figure 3.

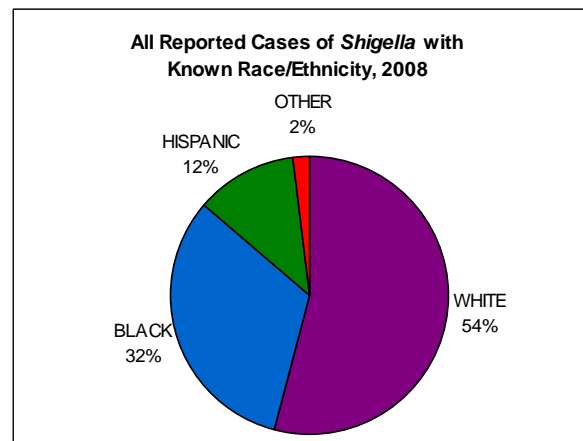
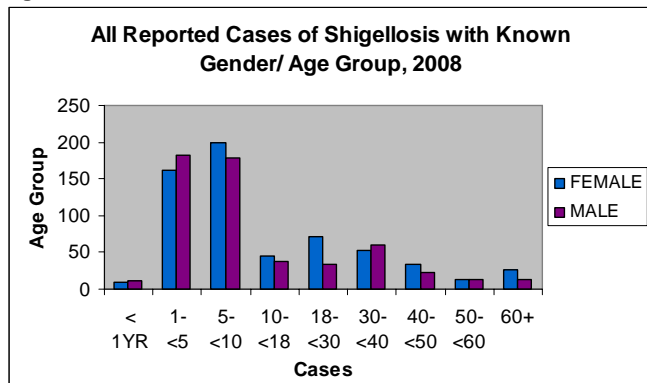


Figure 4.



## IMPACT

### Hospitalizations

Of the total 1,184 cases of *Shigella* in 2008, 182 (15%) individuals were hospitalized, while an additional 179 (15%) were seen in the Emergency Room.

### Persons at Risk

Anyone can become infected with shigellosis. Those at increased risk include young children in day care centers, persons in custodial institutions, the elderly, the immunocompromised, travelers to developing countries, and men who have sex with men (MSM).

### Routes of Transmission

*Shigella* bacteria are found in the intestinal tract and stools of infected people. The bacteria are spread by direct contact with an infected person or by consuming contaminated food or water. The spread of *Shigella* often occurs:

- Among toddlers who are not toilet trained;
- Infected food handlers may contaminate food by forgetting to wash their hands with soap and water after using the toilet;
- Water may become contaminated if sewage runs into it, or if someone with shigellosis swims in it.

### Exclusion Criteria

Since *Shigella* are in the feces, only people with active diarrhea who are unable to control their bowel habits (infants, young children, etc.) should be isolated or placed together only with other children with active diarrhea. Most infected people may return to work or school when their stools become formed provided that they carefully wash their hands after toilet visits.

**\*\*Food handlers, health care workers and children in day care centers must obtain the approval of the local or state health department before returning to their jobs, schools, and day care centers.**

## PREVENTION

- Carefully and frequently wash hands with soap and water;
- Keep young children with shigellosis who are still in diapers away from uninfected children;
- Do not prepare food for others if you are carrying the *Shigella* bacterium;
- Avoid consuming inadequately treated water, particularly from lakes, streams, rivers, and ponds.
- In developing countries, drink only treated or boiled water, and eat only cooked hot foods or fruits you peel yourself.

For more information:

<http://health.state.ga.us/epi/foodborne>